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## SOME REFLECTIONS ON THE INFORMAL LOGIC INITIATIVE<sup>1</sup>

**Abstract:** In this paper, I undertake to present clearly just what informal logic (“*logika nieformalna*”) is and how it relates to formal logic, and to logic as such. To do that, I start by explaining how the Informal Logic Initiative (ILI) began in North America in the 70s. That will lead to a discussion of what is meant by “informal logic” and how it stands related to cognates such as formal logic, critical thinking, and argumentation. In Section 3, I discuss what I take to be basic theses about argumentation that have emerged from the informal logic perspective. In Section 4, I discuss some achievements of informal logic, and in Section 5, I discuss several interesting recent developments and in Section 6, I discuss the possible future developments. I conclude with some remarks on the importance of the Informal Logic Initiative in Section 7.

**Keywords:** informal logic, formal logic, logic, argument, argumentation theory, critical thinking, pragmatics, deductivism.

### 1. Introduction

In this paper, I want to undertake to present clearly just what informal logic (“*logika nieformalna*”) is and how it relates to formal logic, and to logic as such. To do that, I start by explaining how the Informal Logic Initiative (ILI) began in North America in the 70s.<sup>2</sup> That will lead to a discussion of what is meant by “informal logic” and how it stands related to

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<sup>1</sup> This paper is based, in part, on a presentation to the Humanities Research Group at the University of Windsor in March, 2006. I have also made use of part of my paper “Making Sense of ‘Informal Logic’” published in *Informal Logic* in 2006 (26, p. 3), and also my book, *Manifest Rationality* (2000). I am grateful to Marcin Koszowy for discussion of many of the issues and for explaining the Polish context. I am also grateful to Michael Baumtrog (the Bommer) for his help in preparing this paper for submission.

<sup>2</sup> In this paper, I will be discussing developments in North America. From exchanges with Marcin Koszowy, I have learned that the situation as regards the logical culture in Poland is different in certain respects (see Appendix A) from that in North America. Given Poland’s illustrious place in the history of logic (Kneale & Kneale, *The Development of Logic* (1962), and McCall, *Polish Logic* (1967)), it is not surprising that informal logic has been somewhat slower to emerge there.

cognates such as formal logic, critical thinking, and argumentation. Then in Section 3, I discuss what I take to be basic theses about argumentation that have emerged from the informal logic perspective. In Section 4, I discuss some achievements of informal logic, and in Section 5, I discuss several interesting recent developments and in Section 6, I discuss the future. I conclude with some remarks on the importance of the Informal Logic Initiative.

## 2. Origins of the Informal Logic Initiative

When I was hired in 1966 to help update logic instruction at the University of Windsor (Ontario, Canada), I found students being introduced to what was called symbolic logic (or mathematical logic), which is a species of formal deductive logic (FDL).<sup>3</sup> For the first couple of years that I taught the course, I used Copi's *Symbolic Logic*, a text that traffics in largely artificial arguments, like the following:

If Argentina joins the alliance then either Brazil or Chile will boycott it. If Brazil boycotts the alliance, then Chile will boycott it also. Therefore if Argentina joins the alliance, then Chile will also.

None (or very few) in the real world argue in this mannerly fashion. So it does not acquaint students with the types of argument they will encounter outside the logic classroom. Its transfer value is marginal. A second limitation of FDL is as a tool for evaluating real arguments. In the Copi approach, students are taught various techniques for determining whether or not an argument is valid. "Valid" here means that the conclusion of the argument follows necessarily from the premises. The classic example of such an argument is "All men are mortal, Socrates is a man; therefore, Socrates is mortal." It turns out that whether an argument is valid is a function of its logical form. In the tradition of FDL, a good argument is a sound argument; and a sound argument is defined as one that has true premises and instantiates a valid logical form. I will shortly argue, that this position makes FDL ill-quipped to handle real arguments.

My experience in teaching that course was that student response to this approach was one of polite toleration, and for some mystification: they found it hard to connect with this approach. They said things like: "How does this

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<sup>3</sup> I introduced the abbreviation FDL – formal deductive logic – in my (1987). For a critique of my views, see Woods (2004).

apply to the arguments I have to deal with outside of the logic classroom?" I reported this fact to the Head of the Department, Peter Wilkinson, who said to me: "Then why don't you design a better course?" I resolved to do so. Just about that time, a representative from the McGraw-Hill Book Company put a sample copy of Howard Kahane's text – *Logic and Contemporary Rhetoric* – into my hands. I remember reading the following statement in his Preface:

Today's students demand a marriage of theory and practice. That is why so many of them judge introductory courses on logic, fallacy, and even rhetoric not relevant to their interests.

In class a few years back, while I was going over the (to me) fascinating intricacies of the predicate logic quantifier rules, a student asked in disgust how anything he'd learned all semester long had any bearing whatever on President Johnson's decision to escalate again in Vietnam. I mumbled something about bad logic on Johnson's part, and then stated that *Introduction to Logic* was not that kind of course. His reply was to ask what courses did take up such matters, and I had to admit that so far as I knew none did.

He wanted what most students today want, a course relevant to everyday reasoning, a course relevant to the arguments they hear and read about race, pollution, poverty, sex, atomic warfare, the population explosion, and all the other problems faced by the human race in the second half of the twentieth century (1971, p. vii).

Kahane's words reflected my own experience, so I decided to develop a new course (which I called "Applied Logic") that would teach students argument analysis using Kahane's text which featured the fallacy approach. In his text, he had attempted to breathe life into that longstanding tradition that goes back to Aristotle which, according to Hamblin (1970) had become (to use his terms) "worn out, threadbare and dogmatic."<sup>4</sup>

I taught the course for the first time in 1970–71, and found that it was well-received by the students. The next year my colleague, J. Anthony Blair, and I each taught sections, and we continued in that way throughout the early 70s, comparing notes on how the course was developing, discussing problems in the teaching, preparing supplementary material, exercises, and tests. We gradually became unhappy with Kahane's text, for two reasons. *First*, it was an American text, and our students were sensitive to this matter. One student said: "Why should we be expected to critique arguments

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<sup>4</sup> Hamblin's assessment is not altogether accurate. See my "Hamblin on the Standard Treatment" in (1996).

about Wally Hickel and others? Don't our own Canadian politicians make arguments that could be featured on issues that concern us?" This was at the time when there was growing sensitivity to American influence in Canada.<sup>5</sup> We thought that our students' complaints were legitimate and that there was a genuine need for a "Canadian" text. *Second*, we were not satisfied by what seemed to us Kahane's sometimes loose treatment of some of the fallacies. For example, his description of the begging the question as "failure to support the very question at issue" (1971, p. 44) could equally describe either irrelevant reason or hasty conclusion. We thought the presentation of the fallacies needed to be improved, and we set about doing that by providing conditions for the occurrence of each fallacy. We also stressed the point that when a charge of fallacy is made, it must be supported by an argument. From the beginning, Blair and I insisted that the fallacy approach not be treated like a game of "pin the tail on the donkey" or spot the fallacy.

Blair and I set about the task of developing our own text. We used drafts in our classes, which helped us to discover where there were problems, we then made modifications, and finally submitted a manuscript to McGraw-Hill Ryerson, who, after an initial delay, accepted it for publication. By the time it appeared in 1977, we had become aware of a number of similar texts that were also appearing. Among them were: Stephen Thomas, *Practical Reasoning in Natural Language* (1973); Michael Scriven, *Reasoning* (1976); Ronald Munson, *The Way of Words: An Informal Logic* (1977). It seemed to us that a Geist of some sort was manifesting and decided that to host a conference that would bring together people who had an interest in this newly emerging development. In June 1978, we hosted the First International Symposium on Informal Logic, with papers by Michael Scriven, John Woods, Douglas Walton, and others (see Blair & Johnson 1980). That conference confirmed our belief that we were onto something and that we were not alone; we had allies. The conference also gave birth to the *Informal Logic Newsletter* first published in 1979 which in 1984 became the journal, *Informal Logic*, with the support of the University of Windsor. We continue to co-edit the journal, now sharing editorship with our colleagues, Hans V. Hansen and Christopher Tindale.<sup>6</sup>

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<sup>5</sup> "Living next to you," Trudeau told an American audience in a speech to the National Press Club in 1969, "is like sleeping with an elephant; no matter how friendly and even-tempered is the beast, one is affected by every twitch and grunt."

<sup>6</sup> In 2008, *Informal Logic* became an open access online publication. URL: [www.informallogic.ca](http://www.informallogic.ca).

*Informal logic and critical thinking.* The next important development in our initiative took place in 1981 when we made contact with the critical thinking movement. Michael Scriven had put Blair in touch with Richard Paul who was hosting a conference on critical thinking in May 1981 at Sonoma State University which we both attended. There we found that we had like mind-minded colleagues in universities across North America and in other areas – e.g., in education, in psychology. From then through the mid-90s, the annual Sonoma conference served as a gathering place for the exchange and development of ideas about critical thinking and informal logic at both the theoretical and pedagogical levels. Our second conference on informal logic at the University of Windsor in 1983 gave birth to the Association for Informal Logic and Critical Thinking (AILACT) which continues to this day to promote interest in informal logic by sponsoring yearly conferences and by its recently initiated essay prize competition.

An important question brought about by the alliance between these two initiatives is the conceptual one of the relationship between informal logic and critical thinking. Let me here set forth my view of that relationship. Critical thinking is, in the first instance, a kind of activity, or mental practice, whereas informal logic is a kind of inquiry or theory. Critical thinking thus also designates an educational ideal that emerged with great force in the 80s in North America as part of an ongoing critique of education as regards the thinking skills not being taught (Siegel 1988). The precise definition of “critical thinking” remains a matter of dispute (Johnson 1992, Johnson 2008) but most would agree that in order to think critically, a person must be able to process arguments, because one has to grapple with reasons for and reasons against. That is where the connection to informal logic occurs. But critical thinking requires additional abilities not supplied by informal logic: the ability to obtain and assess information, to clarify meaning. Many believe that in addition to certain skills, critical thinking requires certain dispositions (Ennis 1987) – like the disposition to seek the truth, or being open-minded. Most will also acknowledge that it is not possible to think critically without knowledge and information – and these needs cannot be supplied by logic of any sort. Unfortunately, too many conflate critical thinking with other cognitive goods, like problem solving and decision-making (see Johnson 1992, pp. 42–43). These issues are one dimension of what I have called The Network Problem (Johnson 2000, pp. 21–22). In my judgement, a theory of reasoning is required for their proper settlement (p. 23).

*Informal logic and argumentation theory.* The next important development in the Informal Logic Initiative occurred 1983 when Blair made

a connection with Frans van Eemeren and Rob Grootendorst, two Dutch linguists who had developed the Pragma-Dialectical approach to argumentation (1984). Through that connection, we learned that the Informal Logic Initiative was part of worldwide network of researchers, all interested in the study of argumentation – what was called argumentation theory. That term has come to denote a multi-disciplinary approach to the study of argumentation. Many have argued that any decent theory of argumentation must take into account logical, rhetorical and dialectical perspectives (Wenzel 1990), with which many agree (but see Blair 2003) and to which one could easily add linguistic, psychological and other perspectives. Thus we came to understand that informal logic is one approach, among many, within the broader inquiry known as argumentation theory.

*Why Informal Logic?* That’s a rough sketch of how our project was launched and how it developed. Now: Why did we call it “informal logic”? As I mentioned above, at the start, that was not how we referred to the work we were engaged in. Throughout the 70s, we referred to our approach to the teaching of logic as “applied logic” (which to many would have meant applied “formal” logic). Two considerations persuaded us that this was not a good choice as a descriptor.

*First*, what we were teaching students was not how to apply formal logic. We were interested in equipping students to handle the sorts of arguments they would be encountering in their lives as citizens in a democratic society, weighing pros and cons of arguments, strengths and weaknesses, dealing with controversial issues where a conclusive resolution seems unlikely. In our inquiry, we were motivated in the first instance by pedagogical concerns. We became convinced that traditional (formal deductive) logic did not provide a proper account of the goodness of arguments, and that it did not prepare students for assessing and constructing and criticizing the arguments that mattered in their life-world (to borrow a phrase from Habermas). This is no surprise to anyone who knows the history of modern logic which was developed by Frege and brought to a programmatic articulation by Russell and Whitehead in their *Principia Mathematica*, 1910–1913. The purpose of this logic was not to provide a theory of argument but rather to solve pressing problems in the foundations of mathematics in the late 19<sup>th</sup> century (the so-called paradoxes and antinomies). This logic (heavily symbolic and mathematical) was later “downloaded” into logic textbooks, like Copi’s *Symbolic Logic* and *Introduction to Logic*) as a theory of argument – pressed into a service for which it was, to my way of thinking, never intended.

*Second*, following Kahane, our approach used the so-called “informal fallacies”, such as *ad hominem* and hasty conclusion. These mistakes in ar-

gumentation are not the result of using improper logical form but rather stem from some “informal” consideration. The term “informal logic” connected with that aspect of our initiative.

*Informal Logic defined.* Though we gave various characterizations of informal logic in various papers (1980; 1985), we did not attempt a definition until 1987. In a paper written for the 1988 World Congress of Philosophy (published in *Informal Logic*), Blair and I put forward a definition of informal logic: viz., “a branch of logic whose task is to develop non-formal standards, criteria, procedures for the analysis, interpretation, evaluation, criticism and construction of argumentation in everyday discourse” (Johnson & Blair 1987, p. 147). Since that time we have made one modification; we broaden this now to include the sort of argument that occurs not just in everyday discourse but also disciplined inquiry – what Weinstein calls “stylized arguments ... *within the various special disciplines*” (1990, p. 121). Herewith some comments on that definition.

First, it should be noted that the term “informal logic” is a loose descriptor of an inquiry that others have defined or understood in other ways. See Johnson (2007) for a discussion of this point.

Second, the “in” of informal was originally conceived to signal a kind of negation of formal (deductive) logic. At the start of the initiative, there was an underlying dissatisfaction with, if not downright hostility to, formal logic.<sup>7</sup> There were questions about its ability to illuminate natural language arguments, “arguments on the hoof” (as Woods would later refer to them), and many thought that the validity requirement was too stringent. Many took the view that there could be perfectly good arguments that were not valid – inductive arguments, appeals to authority, for example. And many believed that there were pitfalls in argumentation that were not illuminated by traditional approaches to logic, like the *ad hominem* fallacy.

Third, an obvious point is that “informal” must take its meaning by way of contrast to “formal.” Yet this point was not made for some time, hence the nature of informal logic remained somewhat opaque, even to those of us involved in it. To clarify it is helpful to have recourse to Barth and Krabbe (1982, p. 14f.) where they distinguish three senses of the term “form.”<sup>8</sup>

By “form<sub>1</sub>,” Barth and Krabbe mean the sense of the term that derives from the Platonic idea of form, where form denotes the ultimate metaphy-

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<sup>7</sup> The source of dissatisfaction can be traced to Bar Hillel (1969). See Johnson and Blair (1980, p. 27, n. 10). For a spirited roasting of formal logic, see Scriven (1980, pp. 147–48).

<sup>8</sup> The discussion here is based on the discussion in *Manifest Rationality*, pp. 119–120.

sical unit. Barth and Krabbe claim that most traditional logic is formal in this sense. That is, syllogistic logic is a logic of terms where the terms could naturally be understood as place-holders for Platonic (or Aristotelian) forms. In this first sense of “form,” almost all logic is informal (not-formal). Certainly neither predicate logic nor propositional logic can be construed as term logics. However, this way of understanding informal logic would be much too broad to be useful.

By “form<sub>2</sub>,” Barth and Krabbe mean the form of sentences and statements as these are seen in modern logic. In this sense, one could say that the syntax of the language to which a statement belongs is very precisely formulated or “formalized;” or that the validity concept is defined in terms of the logical form of the sentences which make up the argument. In this sense of “formal,” most modern and contemporary logic is “formal.” That is, such logics are formal in the sense that they canonize the notion of logical form, and the notion of validity plays the central role normatively. In this second sense of form, informal logic is not-formal, because it abandons the notion of logical form as the key to understanding structure and likewise abandons validity as constitutive for the purposes of the evaluation of argument(ation). When Govier (1987) discusses informal logic, it is this second sense of “formal” that stands in the background.

By “form<sub>3</sub>,” Barth and Krabbe mean to refer to “procedures which are somehow regulated or regimented, which take place according to some set of rules.” Barth and Krabbe say that “we do not defend formality<sub>3</sub> of all kinds and under all circumstances.” Rather “we defend the thesis that verbal dialectics must have a certain form (i.e., must proceed according to certain rules) in order that one can speak of the discussion as being won or lost” (p. 19). In this third sense of “form,” informal logic can itself also be formal. There is nothing in the Informal Logic Initiative that stands opposed to the idea that argumentative discourse should be subject to norms, rules, criteria, standards and/or procedures.<sup>9</sup> What we opposed is that the idea that the criteria for *evaluating all arguments* are to be obtained by reflection on logical form.

Fourth, almost from the beginning, many have expressed dissatisfaction with the name “informal logic,” partly, one suspects, because in English the term “informal” has the connotation of looseness. For some, (Hintikka 1989, p. 13) “informal logic” is a “solecism” because logic must be formal (see my 2000, pp. 255–260 for fuller treatment of that point). Walton, for instance, in

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<sup>9</sup> Thus, informal logic is inform<sub>2</sub>al but not inform<sub>3</sub>al.

the Preface to the 2<sup>nd</sup> Edition of his *Informal Logic* (2008) wonders whether “semi-formal logic” might not be a better name.<sup>10</sup>

*Logic, formal and informal:* How, then, does informal logic differ from formal logic? Walton’s 1990 article, “What is Reasoning? What is an Argument?” is of interest, both for his conception of informal logic, and for its characterization of the relationship between formal and informal logic. Walton writes:

Formal logic has to do with the forms of argument (syntax) and truth values (semantics)... Informal logic (or more broadly, argumentation, as a field) has to do with the uses of argumentation in a context of dialogue, an essentially pragmatic undertaking (pp. 418–419).

For Walton, informal logic is “pragmatic,” meaning that it is concerned with *the uses* of argument. For Walton this points to the need to situate argument within the context of dialogue, and his later work shows how informal logic can make use of dialogical approaches. The entry on “informal logic” Walton wrote for *The Cambridge Dictionary of Philosophy* says: “Informal logic, also called practical logic, the use of logic to identify, analyze and evaluate arguments as they occur in contexts of discourse in everyday conversations” (Walton 1995, p. 376).

In my (1999), I provided my own account of the relationship between the two logics, premised on drawing a distinction between terms that are often conflated: implication (entailment), inference and argument. If we take “logic” to designate the normative theory of reasoning, then there are as many logics as there are forms of reasoning – viz., epistemic logic, deontic logic, modal logic. Informal logic is logic, because it is focused on one important kind of reasoning–argument–and because it is normative: it seeks to establish the norms for good argument. In my view, informal logic differs from formal logic not only in its *methodology* but also in its *focal point*. That is, the social, communicative practice of argumentation in which arguments occur can and should be distinguished from both deductive implication (and entailment) which is, in my view, the proper focus of formal deductive logic. And it must also be distinguished from the study of inference, which I take to be the subject of inductive logic.<sup>11</sup> Informal logic is concerned with the

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<sup>10</sup> I cannot here devote proper attention to the issue of the name of the inquiry. I can only say that I think the choice of a name is important (as opposed to those who say that it does not matter what you call it). In a future paper, I will present my argument for the proposition that the name “Informal Logic” should be retained.

<sup>11</sup> For more on this approach, see (2000), pp. 24–25.

logic of argumentation, with determining the cogency of the support that reasons provide for the conclusions they are supposed to back up. And because arguments in real life are always situated in some context, it is natural to associate informal logic with pragmatics.<sup>12</sup> Thus understood, there is no opposition between formal and informal logic, for they have different subject matters.

Walton takes a similar position. In his discussion of the relationship between formal and informal logic, he writes:

Hence the strongly opposed current distinction between informal and formal logic is really an illusion, to a great extent. It is better to distinguish between the syntactic/semantic study of reasoning, on the one hand, and the pragmatic study of reasoning in arguments on the other hand. The two studies, if they are to be useful to serve the primary goal of logic, should be regarded as inherently interdependent, and not opposed, as the current conventional wisdom seems to have it (Walton 1990, p. 419).

What Walton means is that, when properly understood, these two logics are not in competition but rather are complementary. (The claim that they are “inherently interdependent” needs elaboration.) To spell out their complementary nature, Walton invoked the traditional distinction between syntax, semantic and pragmatic, assigning to formal logic the syntactical and semantical aspects of the study of argumentation, and to informal logic the pragmatic aspects. Thus it appears that for Walton, informal logic is to be distinguished from formal logic not only by methodology but also by its focal point – argumentation in ordinary and natural contexts – a point with which I agree.

Walton’s 1990 article is important because it provides an additional frame through which to view the development of informal logic using the traditional distinction (due to Morris) of semiotics into semantics, syntax, and pragmatics. *Syntax* is taken as the study of language in a formal and structural mode, symbols and their relationship to each other. *Semantics* is taken as the study of language when we seek to provide an interpretation and extra-linguistic meaning for those symbols. *Pragmatics* is taken to be the study of symbols in relationship to the users of those symbols. It is clear that informal logic is more closely related to pragmatics. The tasks

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<sup>12</sup> Many who are broadly sympathetic with the Informal Logic Initiative would prefer the term “normative pragmatics” (Goodwin 2001), a term also used by Brandom (1994, pp. 192–93) and by pragma-dialecticians (van Eemeren and Grootendorst (1992, p. 5) For more on this matter, see Blair 2006, pp. 11–13.

of reconstructing an argument, of supplying missing premises, of clarifying meaning – all of these tasks fall within the domain of pragmatics rather than syntax or semantics.

It is clear from the above that informal logic has a different conception of argument from that used in formal logic, which conceives argument as a set of propositions, one of which is supported by the others. In the Informal Logic Initiative, we have been especially interested in teaching students about the use of argument to *persuade rationally*. But there are a great many uses to which argument can be put (see Blair 2004b). In my view, one of the merits of the informal logic approach to argument has been to stimulate inquiry into the very idea of argument (about which much has been written) and to do so from a vantage point that is situated between the highly abstract and de-contextualized approach taken by formal logics, and the more contextualized, nuanced approaches taken by those who are immersed in rhetoric and communication theory.

I now move to a discussion of some central insights about argument developed in the Informal Logic Initiative.

### **3. Informal Logic as a Theory of Argument**

The premise on which the Informal Logic Initiative was developed was that existing logical theory did not provide a satisfactory normative account of the requirements for a good argument. The soundness criterion – valid form plus true premises – is neither necessary nor sufficient. There are good arguments that are not sound arguments, viz., good inductive arguments; and there are sound arguments that are not good arguments: any circular argument with a true premise.<sup>13</sup>

To develop an account of good argument that was not dependent on the notions of logical form (so informal (non-formal) in that sense), validity, and soundness, we worked from the following four formative and, I think, non-controversial insights.

#### **I: Arguments fall into a continuum from strong to weak.**

Under the traditional view taken by logicians, arguments are either sound or unsound. Accordingly, appraisal is bipolar: An argument is either

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<sup>13</sup> For more on the position discussed here, see Govier (1987), Johnson (2000), Hitchcock (2004).

good or not good. In *Logical Self-Defense*, we took the view that arguments tend to fall along a spectrum: “Rarely is an argument so good that it cannot profit from criticism, and seldom is an argument so bad that it cannot be improved by criticism. Most arguments fall into the middle of the spectrum” (Johnson and Blair 1993, p. 43). We came to understand that arguments have degrees of goodness... that goodness is not an all or nothing affair. While it might be nice to have a knockdown argument, these are few and far between. A “pretty good argument” may be good enough, for the purposes at hand. This fairly obvious truth has important implications for how we go about the whole process of argument evaluation and criticism because it means that adequate norms for argument must allow for this truth.

## **II: Often there are good arguments on both sides of an issue, and often there are more than two sides to an issue.**

Hamblin states: “There are often good arguments for a given conclusion and also good arguments against it” (1970, p. 232). Hamblin’s point is evident from the history of thought, most particularly the history of philosophy. There are good arguments for idealism [Plato] and against it [Aristotle]; for phenomenalism [Berkeley, Ayer] and against it [Hume, Wittgenstein]; for skepticism [Descartes, Montaigne] and against it [Moore, Wittgenstein]. Nor is Hamblin alone in making this observation. Henry W. Johnstone Jr. made a similar point with special reference to philosophical argumentation:

...Assume that there are valid philosophical arguments, understanding “valid” in any way you choose. Suppose a position P is supported by such arguments. Then, as the most cursory reading of the history of philosophy shows, there must also be arguments against P answering to the same criteria of validity... No position in the history of philosophy is so strong that we should want to say that only the arguments favoring it are valid; and none so weak that we should want to say that only the arguments opposing it are valid (Johnstone Jr. 1978, p. 79).

Though Johnstone Jr. is using this reasoning in a *reductio* to support the view that validity is a problematic notion with respect to philosophical argumentation, the point he makes supports the point being addressed here. An adequate account of goodness for arguments must accommodate this insight. Formal logic cannot do so; there cannot be a sound argument for  $p$  and a sound argument for not- $p$ . Therefore formal logic cannot accommodate this insight and cannot therefore provide an adequate account of goodness for argument.

One problem with the pro- and con- approach (viz., the idea that there are “two sides to every issue”) is that it is simplistic. Take an issue like the existence of God on which there are at least three sides: the theist, the atheist and the agnostic. (For a wonderful treatment of this point, see Govier 1988.)

**III: A good argument must satisfy the criteria of relevance, sufficiency, and acceptability. The premises of the argument must be relevant to the conclusion, sufficient to support the conclusion and acceptable to the audience to whom they are directed.**

Three points follow. First, each of these concepts admits of degrees of satisfaction; a premise can be “more or less relevant” to the conclusion;<sup>14</sup> the premise set can be “more or less” sufficient to support the conclusion; a premise can be “more or less” acceptable. In this respect, these criteria differ from the on/off, all or nothing criterion of validity that underlies the FDL approach.

Second, some account must be given of these fundamental concepts: relevance, sufficiency and acceptability. Some (Hitchcock 1998) have claimed that the Informal Logic Initiative is compromised by the absence of supporting theory and make the point that compared with FDL, informal logic is, in this crucial area, short on supporting theory. In response to this, I would argue that we do have some fairly well-established theories of acceptability (Tindale 1999, Freeman 2005). There have been many attempts to develop a theory of relevance (Walton 1984, Blair 1989, Hitchcock 1992, Gabbay and Woods 2003), though none of them has been entirely successful. Sufficiency is the criterion which has received the least attention (Blair 2006). Third, in this discussion of criteria for the evaluation of the premises of arguments, some will wonder what has happened to truth? Do informal logicians not require that the premises of a good argument be true? I deal with this issue later in this paper.

**IV: A good argument must anticipate and respond to appropriate objections; it must handle the appropriate dialectical material.**<sup>15</sup>

An often-expressed view is that a strong argument is one that can withstand serious objections (Johnstone Jr. 1978). Perelman puts it this way:

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<sup>14</sup> There is debate about whether relevance is susceptible of degrees.

<sup>15</sup> This idea contains the seed of what I later called the dialectical tier (Johnson 2000).

The strength of an argument depends upon the adherence of the listeners to the premises of the argument; upon the pertinence of the premises; upon the close or distant relationship they may have with the defended thesis; upon the objections; and upon the manner in which they can be refuted (1982, p. 140).

But thus far little work had been done to unpack and develop this idea: What makes an objection a serious objection? How does one refute an objection? How exactly does the argument “withstand” an objection? Clearly, the argument, once encoded in text, cannot *do* anything; it is *the arguer* who must fashion a reply to the objection to show that it is not serious enough to undermine the argument. But what constraints govern this dimension of the argumentative process? Here our work is still in its infancy (Johnson 2008).

Those then are the tenets that characterize this theorist’s understanding of how Informal Logic approaches argumentation.

#### 4. Some Achievements of Informal Logic

Let me now discuss some achievements that are at least partly the result of what I am calling the Informal Logic Initiative. There will not be enough space to allow me to go into chapter and verse regarding all the details.

*Improved teaching of logic.* The first goal of the Informal Logic Initiative was to improve the way in which logic was taught to undergraduates in colleges and universities in North America (and elsewhere). If one looks at how introductory logic was being taught in the late 60s (Johnson and Blair, 1980) and then reviews the wide variety of approaches and textbooks that exist today, it is apparent that there have been huge changes, for which the Informal Logic Initiative is at least partly responsible.

For example, on the matter of how to understand and display the structure of an argument, numerous quite different approaches have been developed. Thomas (1973) – following in the steps of Beardsley (1960) – introduced the distinction between different types of argument: divergent, convergent – and an approach to laying out the structure of an argument that did not depend on the notion of logical form. Scriven (1976) introduced the method known as tree diagramming. Johnson and Blair (1977) features a natural language method of representing the structure of the argument. Freeman (1988) combines the tree diagramming method with a Toulmin-type approach. More sophisticated still are the methods developed by Horn to track how argumentation develops around a specific issue; see also Yoshimi (2005). Finally, we need to mention computer-driven approaches for representing the

structure of argument, the most prominent being Araucaria developed by Walton and Reed [<http://araucaria.computing.dundee.ac.uk>] and Carneades [<http://carneades.berlios.de>].

New introductory logic texts continue to appear on an annual basis – perhaps the most popular of which has been *Hurley's A Concise Introduction to Logic* (2007, 9e), while old texts are updated to reflect advances in theory. Thus Johnson and Blair (2e) introduced changes to their treatment of faulty analogy to reflect Govier's introduction of the idea of a *a priori* analogy. Govier herself whose *A Practical Study of Argument* has been a very successful text, wrote: "I have benefited from studying other texts in this field, and from my participation in conferences on argumentation held at the University of Windsor, Brock University and the University of Amsterdam, from writing and reading papers in the journal *Informal Logic* and from discussions with students and colleague over many years" (Govier 2001, p. xi). Tindale's *Fallacies and Argument Appraisal* (2007) shows the influence of recent theoretical developments at every turn.

Success in revamping the approach to logic teaching in university and community colleges has been, however, far from universal. Many universities continue to offer introductory logic courses that are essentially courses designed to introduce students to FDL, and there is often some confusion about the aims of such courses (Blair 2006, Johnson and Blair 2009).

*The revitalization of the fallacy tradition.* In his famous 1970 book, *Fallacies*, Hamblin criticized fallacy theory as it had developed in the textbook tradition. That critique functioned as a summons. Among those who answered the call were Douglas Walton and John Woods, two Canadian philosopher/logicians, who in the 70s co-authored a series of papers in which they showed that the individual fallacies were susceptible of better treatment than the sort of worn dogmatic and debased approach that Hamblin had complained of. A collection of their papers can be found in Woods and Walton (2007): *Fallacies: Selected Papers 1972–1982*. Their pioneering work persuaded many that the fallacies were a topic for inquiry and research. Since that time, there has been ongoing interest in the fallacy tradition (see Hansen and Pinto 1995), though having said this, it must be noted that alongside of this development runs a resistance movement that takes the form of questioning whether there really are fallacies (McPeck 1981, Finocchiaro 1981, Willard 1990, Hitchcock 2007). In spite of continued and often justified criticism of how they have been presented historically, fallacies continue to be an object of both of practical and pedagogical interest, as well as historical and theoretical reflection, for informal logicians and argumentation theorists. The work of Douglas Walton is worth regarding here. He has

written a number of monographs on the individual fallacies, among them *Begging the Question* (1991), *Slippery Slope Arguments* (1992), *Appeal to Expert Opinion* (1997), *Ad Hominem Arguments* (1998), *Appeal to Popular Opinion* (1999). These monographs are important because not only do they synthesize the work that had been done by Walton, Woods and others, but also because they opened the eyes of many outside informal logic to the intellectual merits of the fallacy tradition.

*Breaking the hegemony of deductivism & the inductive-deductive dichotomy.* An important component of traditional logic is deductivism: the view that has sometimes been expressed by the claim that “all argument/inference is either deductive or defective.” Informal logic challenges that view as not an adequate position for arguments. For more on this, see my (2007). A second related development consists in a modification of deductivism to allow for another kind of argument-inductive. This entrenched doctrine was one of the first focal points of the fledgling informal logic movement. The *Informal Logic Newsletter* featured an article by Weddle (1979: “Inductive, Deductive”) that sparked a spirited discussion. (See Hansen 1990, p. 183 for the sequence of articles that followed.) Later Govier (1987) took explicit aim at deductivism. Most theorists are now of the opinion that while there is a distinction between the deductive and the inductive, that distinction is not exhaustive – that there exists some other form of inference, or link between the premises and conclusion. Scriven (1986) called it probative inference, Govier (1987), following Wellman (1970), called it conductive; Rescher (1977) called it plausible reasoning. Walton treats such matters under the rubric of defeasible inference (1996, 2002, 2004). The quest for an account of this third type of inference is ongoing.<sup>16</sup> (But see Blair – this issue – and Johnson (2007) for cautionary notes).

*The development of a number of theoretical perspectives on argument.* When we began our break with the traditional approach to how arguments are conceptualized and how they are evaluated, we started down the path that comes to be called informal logic. But gradually it became apparent that there are a number of alternatives and approaches to the study of argumentation. There are what are called *dialogical (dialectical) approaches* which look at argument as a dialogue, an exchange between two interlocutors. One of the most successful – Pragma-dialectics – aims at developing a list of rules (The Ten Commandments) to guide what the authors call

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<sup>16</sup> Here I assume that the “it” refers to the same “thing;” that there is some specific form of inference or connection that can be thought of an alternative to induction and deduction. But it is far from clear what that alternative is.

a Critical Discussion. There are also *rhetorical approaches* (Tindale 1999) that focus on the role of the audience in argumentation. (For a discussion of the logical, rhetorical, dialectical perspectives and the basis for this distinction, see Wenzel 1990, Tindale 1999 and Johnson forthcoming.)

From both a practical/pedagogical and theoretical perspective, then, we are in a much better position now with respect to our understanding of argument than we were in 1970. While not all of these developments can be attributed to the Informal Logic Initiative, Informal Logic has certainly helped to bring fresh insights to bear on the study of argumentation.

## 5. Some Recent Developments

I turn next to a discussion of some recent developments in the Informal Logic Initiative.

*Extensions of the concept of argument to include other modes and types of argument.* Once we depart from the traditional idea of argument as a series of propositions – the view strongly associated with FDL – there is a tendency to want to expand the construct (Willard 1991), to increase the range of what can be termed “argument.” Thus, Groarke (1996, 2002) and Blair 1996) have argued that pictures and images can be construed as arguments. Gilbert (1997) has argued that gestures and movements can be construed as arguments and has called attention to what he calls emotional arguments. Others still have argued such artifacts as buildings, music, and dance can be construed as argument. The logical conclusion of this direction is perhaps manifest in the title: *Everything’s an Argument* (Lunsford & Ruskiewicz 2003) which, however, the authors quickly admit is an overstatement.

On the one hand, this burgeoning interest in extending the range of application of the term “argument” is refreshing and exciting. At the same time, we should avoid the situation described so well by Gilbert & Sullivan in *Patience*: “When everyone is somebody, then no-one’s anybody.” When everything is argument, the purpose and the utility of having a *distinct category* may be compromised. My own view is that we need to draw a line of demarcation between argument and other forms of communication, and we need to distinguish argument from other related uses of the practice of giving reasons, such as negotiation, conflict resolution, mediation, etc. (See my 2000, pp. 24–26).

*Continued exploration of the role of warrants.* For many (Hitchcock 2000, Freeman 2005, Pinto 2006) the idea of a warrant holds great promise

in helping to understand how the reasoning in argument works. The notion of warrant has a history in both epistemology and theory of argument. Toulmin (1958) “introduced” the term to assist his reconceptualization of argument, moving away from the what he called “the analytic paradigm” (sometimes he calls it “the geometrical ideal”). In Toulmin’s work, the idea of a warrant is part of a new proposal for how the structure of arguments is to be understood in which a warrant functions to link the grounds with the conclusion. Blair (2008) believes that exploring how warrants function will help us see more clearly the distinct contribution that informal logic can make.

*The notion of dialectical obligations.* If the aim of an argument is rational persuasion among reasonable people with some interest, aptitude and openness to being rationally persuaded, then an argument does not have to be conclusive in order to achieve that purpose. It does, however, have to be dialectically appropriate, and more studies are needed of how this is achieved. In our 1987 paper, Blair and I referred to “the dialectical obligations of the arguer” which we saw as the duty of the arguer to defend against possible objections (1996, p. 100). As I reflected further on this important idea, it became clear to me that this vital dimension of our argumentative practice – namely, anticipating and responding to objections – had not been incorporated into our theorizing. In my *Manifest Rationality* (2000), I attempted to develop this insight, urging that our conceptualization of argument needed to be revised so as to make room for this important dimension that I called the dialectical tier. My current project is to explore the idea that an argument inhabits a dialectical environment – to attempt to understand just what constitutes that environment, and to argue that the strength of one’s argument has to do with how one negotiates one’s way through that environment. That means understanding what arguer’s responsibilities are in dealing with objections, criticisms (which I distinguish from objections), and alternative positions.

*The relationship of theory and practice.* The whole development of informal logic illustrates an interesting twist on the conventional story about the relation between theory and practice. Massey asserted, somewhat dogmatically, that “textbooks are parasitic on theory, and properly so” (1981, p. 490).<sup>17</sup> This is one view – fairly widespread – about the rela-

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<sup>17</sup> Textbooks have been the subject of criticism from various quarters. Hamblin (1970) thoroughly castigates the textbook tradition but he does not subject it to balanced and fair evaluation (see Johnson 1989). Massey (1981) berated informal logic textbooks for being obsessed with classification. But see my response (1989). Weinstein (1990) has

tionship between theory and practice, but in our experience informal logic has developed in just the opposite way. We began by attempting to improve the methods of and approaches to teaching logic in order to improve the ability of our students to engage in the practice. That effort brought us face to face with an enormous number of questions and concerns (like that of the adequacy of the inductive-deductive distinction) that were not dealt with by any theory of argument that we knew of and required better theoretical purchase. That theoretical gap prompted many of us to work on developing the necessary theoretical apparatus to deal with the issue. In this instance, then, theory has tended grow out of practice; i.e., out of reflection on what is necessary to teach students how to handle arguments. Being of the opinion that FDL was not viable as a theory of argument, we were forced to develop alternatives, with help from the fallacy tradition and other quarters.<sup>18</sup>

## **6. Looking to the Future**

What does the future hold? What are some of the new developments that may affect the Informal Logic Initiative? I am happy to say that the future looks rife with possibilities. Here I shall mention three.

*Influence of new media and technology.* The future of informal logic is directly dependent on the status of the cultural practice of argumentation, so one important question is: how will argumentation fare in the evolving media environment – the digital environment? The practice of argumentation originated and flourished in a media environment dominated by the spoken and written word. These older forms of communication, while still with us, are jockeying for position and attention with the new media – particularly cyberspace, the new environment created by the computer revolution. New technologies (text messaging, cells, ipods) create new forms

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frequently accused informal logicians of being obsessed with selling textbooks, a charge that is contradicted by the important role textbooks have played in the development of the Informal Logic Initiative: Kahane (1971). Thomas (1973) and Scriven (1976) all contained important theoretical innovations. A point to bear in mind is that innovation in texts was necessary when appropriate other opportunities were lacking. And those who disparage texts might remember what Kuhn has to say about how a textbook can serve as a paradigm (Kuhn 1968).

<sup>18</sup> Recently, discussion has turned to whether it is necessary always to look to the development of a theory to answer our needs. Are there not other ways to secure our argumentative practices? (See Pinto 2001, Chapter 13). The question of the relationship between theory and practice has been on the table for some time. See Toulmin (1958), Johnson (2000), Pinto (2001), Kvernbeck (2007).

of communication (chatrooms, blogs, text messages).<sup>19</sup> Some believe that these new forms of communication will create new audiences for the practice of argumentation. There do seem to be some distinct advantages for argumentation with the new media and technology. Fact checking (an important step in evaluating arguments) has become easier. To find out what so-and-so's position is, we can now "Google it." There are websites devoted to fact checking ([www.factcheck.org](http://www.factcheck.org)) – and at least one devoted to checking arguments.<sup>20</sup> We know the effect that bloggers have had on the political process – so it may well be that blogging will have the effect of increasing time spent in arguing, thrashing things out, challenging, raising objections. If the practice of argumentation is to thrive in this new digital environment, then, it will need support from work done in informal logic, formal logic having little to say about these things. One advocate of the Informal Logic Initiative who has been quick to see how the work of informal logicians has an important role in the new electronic environment is Douglas Walton. His work on argument mapping and diagramming and argumentation schemes has already been put to important use in the new environment.

*Understanding the past: a decent history of logic.* It is always important to understand the past and where we have come from. But most histories of logic (Bocheński 1961, Kneale and Kneale 1962) have, quite naturally, tended to view logic from the perspective of traditional formal logic and have little to say about our subject. So we need our own histories of our subject matter. There is one such – *Historical Foundations of Informal Logic* (Walton & Brinton, 1997) – but more work is needed, as Walton himself acknowledges (2004, p. 277).

*The truth issue.* The whole issue of truth has come to the fore in the public sphere, viz., the recent admittance of truthiness<sup>21</sup> to the lexicon, and Frankfurt's *On Bullshit*. Why, then, one might ask, have some argumentation theorists dismissed truth from the criteria to be used in evaluating arguments? Some, especially those who practice the formal approach, may

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<sup>19</sup> The telegram – which played a significant role in communications in the first half of the 20<sup>th</sup> century – is, according to a news report, a thing of the past. Western Union has discontinued them, a casualty of the new technologies: email and text messaging.

<sup>20</sup> For fact checking as regards political issues, there is [www.factcheck.org](http://www.factcheck.org). For argument checking, there is <http://www.amherst.edu/askphilosophers>.

<sup>21</sup> Truthiness is said to be the quality by which a person purports to know something emotionally or instinctively, without regard to evidence or to what the person might conclude from intellectual examination. The term was coined and popularized by Stephen Colbert after he used it during the first episode of his satirical television program, *The Colbert Report*.

find that fact surprising, since one of the most natural ways to criticize an argument is to challenge the truth of the premises. In part, this happened because colleagues in rhetoric and communication persuaded many involved in the Informal Logic Initiative that informal logicians had not been sufficiently sensitive to the role that audience plays in the enterprise. Even if the premises are true, if the audience won't accept them, then the goal of rational persuasion cannot be achieved. So it was argued that truth is not a sufficient condition for premise adequacy. There are also arguments that it is not necessary. Many were influenced by Hamblin's argumentation in *Fallacies* (1970) in which he argues for dialectical criteria as the appropriate measure of premise adequacy and argues against alethic (truth-based ones). However, I have argued that we need both criteria (truth and acceptability) available for the appraisal of arguments (2000, pp. 336–340). But there are difficulties with this view – not the least of which is providing an account of truth that gets the job done, while not being open to the longstanding objections to the truth requirement.

## 7. Conclusion

One of the first lessons we learned from feminist critiques of informal logic is that an argument is not a battle, the aim being to attack successfully and conquer the enemy; argument is not warfare (Ayim 1988). We inherited some of this militaristic way of thinking from our experience with traditional logic: the very title of our text, *Logical Self-Defense*, already suggests that argument is like an attack where you must be prepared to fight back. Gradually, we came to understand argument rather as an instrument in the search for the truth, or – if you are nervous about that formulation – as an instrument that helps us to arrive at a better view, a more rational position. Argument is a co-operative enterprise, not an adversarial one. However, to engage in this practice has not only the potential benefits alluded to but also risks – because to seek to *persuade* in this way presupposes that you are open to *being persuaded* that your argument is not a good one. Real argumentation (as opposed to indoctrination or advocacy parading itself as argument) expects criticism, expects to learn from criticism, and is therefore vulnerable to it. Without this risk, argument becomes indistinguishable from propaganda, indoctrination and advocacy – all of which have their uses, and their limits.

In these times when politicians and other leaders seek the guidance of spin doctors and media-gurus and propagandists seek to put the best

possible face on their message, to make “the optics” palatable, the practice of argumentation – which lies at the heart of our logical culture – has a crucial role to play in providing an alternative approach to what some have called the persuasion game. Those committed to the Informal Logic Initiative and the study of argumentation have something important to contribute to that alternative approach.

## Appendix A: The Logical Culture in Poland

The proposal [referring here to my proposal on a topic for this paper] harmonizes well with the idea of comparing two traditions of logical studies. I recently addressed a similar problem concerning the relationship between informal logic and logic. Major representatives of the Lvov–Warsaw School (e.g. Kazimierz Ajdukiewicz) as well as Stanisław Kamiński distinguish a narrow and a broad understanding of the term “logic”. In most contexts, logic in a narrow sense denotes formal deductive logic. For example, Kamiński claims that logic in a narrow sense denotes formal logic understood as a formal theory of sentences (propositions) and relationships between them. In later considerations he claims that there exists also another and broader concept of logic that embraces also semiotics, methodology of science, and argumentation theory. He does not however claim that formal logic includes the above-mentioned disciplines. Kamiński does not explain, whether systems of non-classical logic (e.g. modal logic, deontic logic or epistemic logic) should be understood as logic in a narrow sense of this term, or only in a broad one.

I think that if modal, deontic and epistemic logics are considered as formal systems, they should be treated as logic in a narrow sense. However, Ajdukiewicz or Kamiński are interested in justifying the claim that the term “logic” in one of its senses means something more than just formal logic. By using the distinction between *logic in a narrow sense* and *logic in a broad sense* I aimed to show that the tradition of Polish logic uses the concept of logic which: (a) is not restricted to formal deductive logic; and (b) encompasses not only formal-logical skills, but also skills which can be described as using tools elaborated in semiotics (e.g. universal tools of analyzing and evaluating utterances formed in various languages) and in the general methodology of science (e.g. tools for developing and evaluating definitions, classifications, questions occurring in scientific inquiry).

This broad concept of logic is maybe the most clearly expressed in the program of pragmatic logic developed by Ajdukiewicz (first published

in 1965, two years after his death; English translation: *Pragmatic Logic*, Trans. O. Wojtasiewicz, Dordrecht: D. Reidel 1974). Historical examples of such a broad understanding of logic can be found in *Port Royal Logic* of Antoine Arnauld and Pierre Nicole or in *The System of Logic. Ratiocinative and Inductive* of John Stuart Mill.

Thus, the term “logic” in a broad sense encompasses: (1) formal logic, (2) semiotics (understood as a formal theory of language) and (3) methodology of science. Some methodologists of science (e.g. S. Kamiński) claim that logic in a broad sense includes also (4) argumentation theory (this idea comes at least from Aristotle). In a narrow sense “logic” means only formal logic. In my opinion (2) and (3) share in fact a subject-matter with informal logic.

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