ISSA Proceedings 1998 – The Identity Crisis Of Informal Logic

Informal logic is an area of serious scholarly study that has achieved a somewhat grudging acceptance in philosophy only recently, and is till not seen as a leading subject of research. It is not clear exactly where it belongs in the curriculum, or even whether it really a kind of logic, in the same sense as formal logic. It could fit in better as a branch of philosophy of language or epistemology, in some ways, because it is addressed to stuying argumentation in natural language texts of discourse, and it typically has the task of dealing with inconclusive arguments based on opinions that are subject to doubts. Nearly all philosophy departments teach informal logic, under some heading, at the introductory level, and these classes are often the biggest in the department. But offer courses in it beyond the introductory level.

But some would say that these large introductory courses are not courses in informal logic, and in fact, they tend to be called by other names, like "critical thinking" or "practical reasoning". Informal logic seems to be in a kind of limbo. Some would say it is not the same subject as critical thinking, while others would see no difference between the two subjects. Informal logic seems, in some ways, more like an academic subject, or even a theory, with a particular point of view or agenda. It seems to represent a group that rose in opposition to formal logic, or at least to the dominance of formal logic in the philosophy curriculum. But on the other hand, informal logic has always had a strong pedagogical orientation and motivation, arising from a felt need about what students ought to be taught to deal with the kinds of arguments they will encounter in everyday thinking about matters of real importance. Perhaps because it has grown out of instructional needs at the introductory or elementary levels of the teaching curriculum, it has not got the academic respect accorded to the more established traditional fields of philosophy.

Perhaps for these reasons, there is considerable ambivalence and uncertainty, even within the exponents of informal logic themselves, on how the subject should be titled and defined, on how it ought to be presented, and where it should fit into the philosophy curriculum.

1. The Identity Crisis

The twelve slected papers from the *Third International Symposium on Informal Logic* held at the University of Windsor in 1989, published in Johnson and Blair (1994), pose some interesting, and so far unanswered, questions about the status of informal logic as a discipline. What exactly is informal logic? What are its central methods and fundamental assumptions? How is it different from formal logic, critical thinking and argumentation theory? Does it have place in the logic curriculum, and what exactly is that place? The last question is a puzzle, because although informal logic is widely taught at the introductory level, and there is a growing scholarly literature, there is no graduate level instruction in it – or very little, compared to other fields in philosophy. Johnson and Blair (1994, p. 3) write that they know of only one philosophy doctoral program where it is possible to take courses in informal logic or argumentation, while in contrast, it is widely possible to take graduate courses in argumentation in speech communication departments. Another problem is that the widely used introductory textbooks do not seem to be based on, or even very often to acknowledge, the scholarly literature in informal logic, to the degree that you think would be normal and healthy in a field.

A review of the volume by Robert Binkley (1997, p. 259) cites an "identity crisis of informal logic", arisimg from the question of whether this new subject should be thought of as a branch of logic, or a distinct discipline in its own right. This identity crisis is implicit even in doubts about the exact terminology that should be used to label the new subject. Should it be called "argumentation" or "critical thinking", without the term 'logic' being used at all? Or should it be called "applied logic" or "practical logic", if the word 'logic' is appropriate? The very phrase "informal logic" looks like an oxymoron, if logic is defined as a field that uses exact, i.e. formalistic methods. 'Informal logic' is a confrontational phrase that seems particularly off-putting, especially now that so many in the field of computer science have taken up with argumentation as a much-needed component in computer programming, most notably in the area of logic and computation in artificial intelligence (Gabbay and Ohlbach, 1996), where some degree of formalization is helpful. The term 'practical reasoning' has recently been advocated in computer science as the right label for this new discipline (Gabbay and Ohlbach, 1996), but this term is already well known to philosophers as referring to Aristotelian phronesis, or goal-directed, knowledge based reasoning by and agent, that culminates in an action. So even the name of the

field, or the term used to stand for it, is a problem.

Johnson and Blair (1994) indicate that informal logic arose out of the 1970's project of reforming the "baby logic" courses in the universities. According to their account, this change had two components – a move from artificial language (the precise syntax and semantics of formal logic), to natural language, and the move from argument as a property of statements to argumentation as a social activity involving an exchange between two parties – a sender and a receiver of information. But as Binkley questions (1997, p. 260), "does this twofold change add up to a new discipline?" The problem is that such an account, by itself, does not make clear the advantages to be gained in moving from the old style of logic instruction, and is not full enough to enable someone to grasp the precise positive purpose of the new field, and the need for it.

2. Contextual Method of Informal Logic

How informal logic (or whatever we call it) needs to be seen is as a method of evaluating arguments (and other moves made in argumentation) that is practical, or pragmatic in nature, in that the purpose is to evaluate not just the reasoning in the argument – the set of premises and conclusions, and the links of inference within these sets) – but how that reasoning was used in a given case for some communicative purpose, in a given text of discourse. So conceived, informal logic is nor only pragmatic in nature, but also dialectical – it views an argument as a verbal exchange between two speech partners, in which they are reasoning together, or at least trying to reason together. In so doing, they are taking part in a conventional type of talk exchange (conversation, to use the term of Grice, 1975), in which they are supposed to follow the collaborative conventions appropriate for the type of conversation they are supposedly taking part in. So when informal logic is used to analyze or evaluate an argument used in a given case, what is the target of the exercise is to judge how that argument was used in some context of conversation to make some point, as far as can be judged from the given information on what the purpose of the speech exchange was supposed to be. Thus what is important is not just the truth-values of the propositions, but how the moves made go in a certain direction, and are relevant, to contribute to some conversational goal. Studies of the informal fallacies have show that, in fact, the fallacies are best modelled as failures to help move such a conversation forward, or even moves made to deceptively trick a speech partner into accepting something he shouldn't, moves that tend to interfere with the goals of the conversation being fulfilled.

This fuller account, of course, begins to sound radical to the old-fashioned view of logic, because contextual factors of how an argument was used in a given text of discourse, are, notoriously, questions of interpretation of natural language discourse. And of course, deconstructionists have already loudly declaimed, that such a process is inherently subjective, implying that no pragmatic and dialectical logic could ever be possible. Any talk about context and natural language discourse interpretation makes the old conservative guardians of formal logic very nervous. It even makes many students nervous, who want to know what the "right" answer is, and want to get it "right" on the exam, and be assured of that by using exact methods of calculation.

But this fuller account of the purpose and methods of informal (applied) logic, needs to go even further, in my view. Each argument selected for evaluation needs to seen as having occurred in a uniquely individual case, represented by the given text of discourse, and by the context of the case, as far as that can be inferred, or judged, from the given text of discourse. Each case is unique, so judgment is needed in applying the methods of informal logic to the particulars of the case that are given. Applying such a method is highly contextual, and assumptions (or presumptions) needs to be made, for example, about what type of conversation was supposedly involved. Such presumptions can be backed up or contraindicated by the textual and contextual evidence given in a case, but typically they cannot be absolutely verified as true or false. Of course, that shouldn't be a problem. It is true in any applied subject. But it is taken to be very worrisome in logic, a field that prides itself on exactness, where there is supposed to be no need for guessing or saying "maybe".

On my view then, informal logic is closely related to casuistry in ethics. But as we know, casuistry has been distrusted, and like sophistry, has had a bad name (Jonsen and Toulmin). So it is quite likely that many of the informal logic crowd will be cautious and reluctant to go as far as I have in saying that this field should be based on case studies. But I think this is where they need to go, to see the real purpose and usefulness of informal logic as an applied discipline.

3. Formalization and Informal Logic

Another bone of contention is whether formalization is useful or necessary in this new field, and what kind of formalization is the most useful. Freeman (1994), makes the point that argument diagramming is a central method. But he adds that informal logic also needs to take into account the dialectical or dialogical nature of argument. Many, including (Hamblin, 1970 ; 1971), (Mackenzie, 1981 ; 1990),

(Barth and Krabbe, 1982), (Hintikka, 1992), (Walton and Krabbe, 1995), would say that dialectical frameworks of argument use can, to some extent, or usefully, be formalized. Indeed, it seems to be the prevailing view that the foundations of informal logic are to be found in formalized systems of dialogue. If this view is justified, then there are even sharper questions about whether the field ought to be called "informal logic".

Part of the problem here, as Johnson and Blair (1994, p. 11) point out, is that there are many different meanings of the word 'formal'. In some of these senses, informal logic is not opposed to formal logic at all. So it is a good question whether what is called informal logic really is all that "informal". Perhaps then, the title 'informal logic' should be given up, as a generic name for this field, or should be seen as reresenting only a subfield within some larger subject. But if we don't call this area informal logic, what else should we call it?

I wish I had the best, or a definitive answer to this question. I have, from the beginning, been less than completely happy with the expression "informal logic" (at least partly for reasons indicated above), although I have accepted it provisionally, as matter of practice, because it is the term that conventionally signals a known area of interest and emphasis in philosophy. I like the term 'applied logic' better than 'informal logic'. But the problem with 'applied logic' is that it seems to suggest, or so I have been told, that there was some previously existing formal logic, or abstract theory, that has now come to be applied to something. But that is not really what happened, historically. What happened is that the need for an applied method of evaluating arguments led to a stepping beyond the traditional formal logic, and to making a move to a new kind of methodology that was not known or established yet. Also there is the question of whether even the term logic is appropriate within the phrase used to denote the new dsicipline, and that some term like 'argumentation' is better, because it does not contain the word 'logic' at all.

4. Argumentation Theory

But is 'argumentation', or 'argumentation theory' really the right expression to stand for the new field? These terms have been developed within the field of speech communication, notably by van Eemeren and Grootendorst (1984), and are also widely used in the field of rhetoric. But the goals of rhetoric and speech communication are surely quite different from those of logic, even though there is surely much more overlap and commonality of interest than there was with the traditional formal logic approach. For informal logic, the purpose should be to

evaluate arguments as correct or incorrect by some standards (usually called normative standards), even though argument identification and analysis are important preliminary tasks. In contrast, persuading an audience successfully, and teaching skills of effective communication, are central goals for speech communication and rhetoric (There are also questions here of whether there are two separate fields or not, and how they ought to be defined and distinguished). The problem then is that it is far from obvious that informal logic and argumentation theory are the same field, and have exactly the same goals. Argumentation and rhetoric seem to be quite a bit broader than, and also somewhat different from any kind of logic, or method of evaluating arguments are correct or incorrect. This question is subject to dispute, however. For according to the Amsterdam School of pragma-dialectics, evaluating arguments as correct or incorrect is a central goal of argumentation, seen as a normative, as well as an empirical discipline.

Despite these qualifications, however, it would not seem to be quite right to say that argumentation theory is exactly the same field as informal logic. It still seems that we need a term for the logical or analytical techniques and methods of argument evaluation that are characteristic of that part of argumentation study usually called informal logic, that concentrates on the use of normative standards and methods to evaluate the reasoning used in arguments presented in particular given cases. Central to this field is the study of argument diagrams, fallacies, definitions, missing premises, and so forth – the kinds of skills featured in the many textbooks on informal logic and critical thinking. These skills have a somewhat narrower focus that the broader concerns of argumentation study in speech communication, and represent a different kind of concern with arguments than that of rhetoric.

Johnson and Blair (1994, p. 15) express the relationship by saying, "informal logic may be seen as a branch of argumentation theory". But this way of expressing it seems to me not quite right. Argumentation theory is a theory, and what it is usually taken to be is the pragma-dialectical theory of the Amsterdam School, represented by (van Eemeren and Grootendorst, 1984). But the exact realtionship between this theory and the theory of formal dialectic, exemplified in the systems of dialogue logic developed by (Hamblin, 1970 ; 1971), (Rescher, 1977), (Mackenzie, 1981 ; 1990), (Barth and Krabbe, 1982), (Hintikka, 1992), and (Walton and Krabbe, 1995), has not yet been clarified. The system of rules for the critical discussion proposed by van Emeren and Gootendorst (1984 ; 1987 ; 1992)

was not expressed in a formalized way. Just how it is to be formalized, or whether it can be formalized, or whether it has some formal basis as a sytem of dialogue in the logical sense, are questions that have not yet been answered.

It seems then the exact place of what is called informal logic in all this developing framework to be used for argument evaluation is far from settled. As Johnson and Blair themselves put it (1994, p. 4), informal logic, at the moment, is a research program that lacks a "paradigm for focus". It is an area of research and techniques and interests that is fairly well defined as an ongoing activity that several groups of researchers with overlapping interests are taking part in. And it seems to be generally accepted by most in these groups (though by some more than others) that the Hamblin-style system of formal dialogues represents the underlying structure or set of structures that provide the underpinnings of the methods that are currently in use (along with the technique of argument diagramming that is being developed). But here we are on the verge of a more general kind of field called "dialectic" by Hamblin.

5. Ancient Roots of Dialectic

One way to get a different slant on informal logic is to look at the history of the subject. It may seem to many that it just appeared in the 1970's, out of a perceived pedagogical need, so to speak. But it does have history – a curious one, described in relation to fallacies in Hamblin (1970), and further in (Walton and Brinton, 1997). The roots of the subject go back to the sophists, but the first one who presented the subject in a systematic way was Aristotle. Essentially, what happened is that Aristotle founded the field of "analytics", or what we now call logic, as having two subfields – the formal logic, which was, for Aristotle, the theory of syllogisms, and the field of "dialectic", or practical logic, the methods of which were outlined in the *Topics,* and its last chapter, On *Sophistical Refutations*. For Aristotle, dialectic was the study of arguments used in controversies, based on premises that were widely accepted opinions (endoxa). The purpose of dialectic (although this is quite controversial) seemed to be to raise critical questions about commonly used arguments on matters of controversy of the day, and to judge the strengths and weaknesses of the arguments on both sides of a dispute. This kind of technique was familiar to the Greeks, as indicated in the Platonic dialogues, for example. But it fell into disuse. What happened was that the syllogistic logic was so popular, even dominant, in the history of logic right up until the twentieth century, that the idea of dialectic was lost (or placed well back on the sidelines, and not taken seriously as a

scholarly subject for research or further development). Logic became equated with formal logic.

On Aristotle's theory however, it was possible to make a distinction between rhetoric and dialectic. And it was possible to see dialectic as a kind of applied logic, or use of formal logic along with other tools, to evaluate arguments used in a given case where the context was one of a dispute or goal-directed conversational exchange. Aristotle even went so far as to distinguish different kinds of dialectical reasoning, or frameworks of conversational argument use. But there is considerable controversy among scholars about exactly what Aristotle meant by dialectic. The whole idea seemed alien and antiquated to modern preconceptions about logic. The kind of logical training or "mental gymnastic" the ancients appear to have taken seriously as a thinking skill has never (until quite recently) played any serious role as a part of logic.

One solution to the terminological problem of the identity crisis would be to revert to the ancient term 'dialectic' as the word for the field of applied or informal logic. The problem with this proposal is that this word is now associated in popular usage with the dialectical theory of historical development of Hegel and Marx. This idea is a far cry from the notion of dialectical reasoning of the Greeks, is in many ways quite antithetical to it (to borrow a Hegelian term), and is, in general, quite unsuitable to have any place in logic. The problem then is whether it is realistically possible to get this term back, as something to be taken seriously in logic, given its existing connotations outside logic. However, such a rehabilitation has already partly began to take place, due not only to Hamblin (1970), but to the merging field of computational dialectics. So it may be in the future that the old term 'dialectic' could come to be used to stand for what is now called informal logic.

6. Applied Epistemology

At present, however, it is unlikely that graduate or advanced level philosophy courses in "dialectic" will be offered. But there is another possibility. Informal logic could be offered at an advanced level under the present heading of epistemology. Something like this possibility is suggested by Mark Weinstein's paper in the volume, 'Informal Logic and Applied Epistemology' (Johnson and Blair, 1994). Weinstein (1994, p. 143) sees the reconfiguration of informal logic as a field through its integration with applied epistemology as a way of broadening the role of critical thinking so that the analysis of arguments used in scientific inquiry is also seen as an important part of the undertaking. One thing that could

happen, on this new way of viewing critical thinking, is that the techniques now studied under the heading of informal logic could be taught in an epistemology course under the heading of "applied epistemology".

One attraction of this move would be that epistemology, a subject that has never attracted much, if any serious attention outside philosophy departments, could be made much more appealing as a subject that could be seen as having an applied dimension. At the same time, it could be connected up with introductory level courses in informal logic, giving epistemology more of a central place in the curriculum, and a continuity with other material that is important to teach in service courses, and as a skills course that has important uses in philosophy as well.

The down side of this proposal is that traditional epistemology has been centrally based around the concepts of knowledge and belief. The term episteme itself refers to knowledge. But theorists of formal dialectic – including (Hamblin, 1970 ; 1971 ; 1987), (Cohen, 1977 ; 1992), van Eemeren and Grootendorst (1984), (Walton, 1995), and (Walton and Krabbe, 1995) – have advocated the view that evaluation of arguments in this area needs to be seen as based on acceptance (commitment). According to Hamblin (1970) an arguer's commitment commitments are the propositions she has gone on record as accepting in a dialogue. Commitments are seen as not being the same as beliefs. Indeed, what is worrisome in basing the dialectical study of argumentation on belief (or knowledge, if taken to presuppose belief) is psychologism, the idea that normatively evaluating an argument as correct or incorrect should be a function of the actual beliefs of the arguer. The general problem here is that there needs to be a fairly clear line of demarcation between psychology (and other empirical fields) as a study of how people actually think, and logic, as a field that evaluates how arguers ought to think, or anyhow what they ought to accept or not as correct arguments. At any rate, although the question of psychologism is very controversial, the advantage of following Hamblin's advice, and basing dialectic on acceptance rather than actual belief is that a lot of problems associated with psychologism are avoided.

The problem with classifying informal logic as applied epistemology is the heavy emphasis of traditional and current epistemology on the central notions of knowledge and belief, while the study of fallacies has shown that commitment-based argumentation is much more important for informal logic (even though the study of argumentation based on knowledge and/or belief) also has a place. So the

fit between the two subjects is not good, as things stand. However, in recent years there has been a shift in epistemology towards social epistemology and the study of defeasible reasoning. If epistemology were to be taken more in this direction, there would be more of a fit with informal logic.

But the thing is that, right now, epistemology has very little appeal outside philosophy, as a field that has any practical use, or that should be taught to wider audiences at universities. The advantages for informal logic of classifying itself as a type of epistemology are not clear, and do not seem to be there.

Critical thinking seems to have a lot of the same content as informal logic. In fact, it is not easy to distinguish between the two subjects. Critical thinking seems to be the educational wing of informal logic. It is a subject that is especially featured in education schools, and in technical colleges or two-year colleges where the teaching of practical skills is the emphasis. However, because of the growing popularity in universities of marketable skills, and the need for improving writing and literacy skills, critical thinking has been rapidly growing in acceptance as an area that will get big enrollments, and that is regarded with approval by administrators. Critical thinking is so marketable in fact, that introductory informal logic texts now almost all use the phrase in their titles. It has become the key word to signal recognition of this general field we have been calling informal logic or argumentation.

One possibility then is that "critical thinking" could become the generic term for the field, and informal logic could become a more specialized subfield in which aspects of logical reasoning (and perhaps the study of the fallacies) could become its more specialized subject matter. Then critical thinking would concern itself generally more with critical reading and writing skills. So critical thinking would have a logic component, which would be based around informal logic, as well as formal logic. But it would be based more centrally around language skills, and skills of comprehending argumentative texts of discourse, of asking critical questions in interpreting and and evaluating such discourse, and of learning writing skills for various purposes.

7. Resolving the Identity Crisis

Of all the various possibilities considered, the last one appears to me the most likely to occur (although not necessarily to the exclusion of the other possible developments). Critical thinking is a growth industry, and for good reasons. It represents a much needed skill in the present circumstances. What it lacks is a

coherent and theoretically well-developed central method, or set of techniques, based on serious research. The biggest problems are the lack of a serious and systematic connection between the present research in argumentation theory and informal logic and what is being taught in the introductory level courses in critical thinking, and the lack of courses in the area of informal logic being taught at the graduate level (especially in philosophy departments). So-called "baby logic" courses have grown and grown, and feature more and more "informal" content, but there has been no connection with graduate level courses or PhD. thesis work (or, at any rate, very little, so far).

So the identity crisis is not merely terminological in nature, or a question of what the subject, or subjects at issue ought to be called. It is a deeper one of informal logic being seen as "Mickey Mouse" by the conservative guardians of formal logic, and of any kind of logic as being viewed with suspicion by postmodernists. We seem to be stuck in a rut where acceptance of this field as a serious area of study by many who are the opinion leaders in philosophy is grudging at best. But the immediate future doesn't look hopeful either, as the postmodernist way of thinking would appear to be opposed to any kind of logic, and especially to an informal logic that might actually have some bite in criticizing obscure thinking, or errors of argumentation.

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