Argumentation, Education and Reasoning

ROBERT W. BINKLEY The University of Western Ontario

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Abstract: To find the place of Argumentation (argumentation theory) in education one must sort out its relationship to Logic. The key point is that the two stand in different relations to reasoning. Logic is the normative study of reasoning, and provides the standards for correct reasoning. Argumentation studies the activity of arguing, and is related to reasoning only in that arguing involves the attempt to get an audience to reason in a certain way; correctness is not essential.

Reasoning is here understood as the process of organizing one's thoughts into a structure here called a reckoning. This may be done privately by an individual, or several people may collaborate on a reasoning project, in which case there occurs the social activity of dialogue. Confusion between dialogue and arguing is a source of confusion between Logic and Argumentation.

Reasoning and dialogue on the one hand, and arguing on the other, are both worthwhile, and education in Logic and Argumentation can help people to do them better. But the educating should be done in a way that maintains the distinction between them.

1. Introduction

You will have noticed that for the title of my paper I have taken the title of our conference, "Argumentation and Education", and added a word—"Reasoning", and perhaps the best way to explain why I have done that is to confess openly here at the outset that I do not properly belong in the field of *Argumentation* at all; I have merely been swept up into it, and, like Dorothy newly arrived in Oz, wander about, gaping at the many marvels I encounter while searching for the Wizard.

In this way I have come to understand that by the word "Argumentation" (with a capital "A") we mean the study of *argument*, where "argument" is understood not in the logician's sense of a premise-conclusion combination, but rather in the sense of *arguing*, that is, the interpersonal activity that goes on when people argue.

I have also encountered an alternative terminology which uses "argumentation" (lower case "a") to refer to the arguing activity itself, and uses "argumentation *theory*" to name the study of it. But either way, I take it that it is argumentation theory, Argumentation with a capital "A", the relationship of which to Education is the subject of our conference.

I have further found Argumentation to be a branch of Rhetoric which, by one definition, is "the Art and Science of the effective use of language" (Brooks & Warren, 1970: 6), and this explains why Argumentation comes into undergraduate university Education (the only kind of Education I shall be discussing) as the subject of courses taught in academic units bearing the name of Rhetoric, or related names such as Speech or Communication or Composition.

Since my own university has no such academic unit, and offers no such courses, I have unfortunately been denied direct access to the Argumentation industry in Education, and have had to study it from a distance.

My own academic field and unit has been Philosophy, and this forms the Kansas background, so to speak, for my adventures in Oz. In some ways this is not at all a good background for the purpose, for as you know, whenever philosophers learn that something is mixed up with Rhetoric they will hear ancestral voices prophesying war, and will view the thing with a most pronounced and nervous suspicion. Plato in the *Gorgias* is perhaps the most prominent ancestor in this connection.

I will return to the ancestral voices below, but first I should point out that within Philosophy I have, among other things, worked in the area of Logic, both Formal and especially Informal, and this has relieved my philosopher's concern to some extent by drawing my attention to the close and complex interrelationships which have connected Logic and Rhetoric, including Argumentation, throughout their histories.

But in spite of these close relationships, and retaining at least some respect for the ancestors, I have concluded that Logic and Argumentation really are distinct disciplines; they study different objects, and serve different functions in Education. In a nutshell, my view is that while Argumentation studies the activity of arguing, and aims to teach students how to argue better, Logic studies the process of reasoning, and aims to teach students how to reason better. But to make this claim intelligible I need first of all to develop a suitable concept of reasoning, and that is why I have added that word to my title.

My plan, accordingly, is, first look a bit more closely at the ancestral warnings. Then I will sketch the outlines of this concept of reasoning. Along with it I shall propose a rather broad understanding of *Logic* as the normative science that sets the standards for correct and adequate reasoning. And to provide the proper comparison with arguing I will suggest a concept of *dialogue*, as the form of social interaction involved when people collaborate on a reasoning project.

Armed with these notions, I will then turn to Argumentation, and the activity which it studies. I will discover arguing to be very similar to dialogue in that it is a social activity involved with reasoning. But it is involved in its own special way, and I will find important differences between arguing and dialogue, difference which confirm the ancestral concerns. I will then conclude with a few observations about the relation of all this to undergraduate Education.

2. Philosophy and Rhetoric

Philosophy has traditionally wanted to distance itself from Rhetoric. I shall not here attempt any general survey of this long and tangled history, but instead, to suggest the general attitude, I shall just mention two typical and somewhat unflattering philosopher's views of Rhetoric. They can be put in the form of two analogies.

2.1 The donut shop

The first I call the analogy of the *donut shop*. It is to be found in Plato's *Gorgias*. (465 c-d) where, you will recall, Socrates employed the following analogy: Rhetoric, he said, stands to the Soul as Cookery to the Body. But both Rhetoric and Cookery are mere arts of flattery; they aim at pleasure rather than the true good. The corresponding arts aiming at the good are Justice in the case of the Soul and Medicine in the case of the Body. Therefore, as I construe it, to ask the philosopher to enter into Rhetoric, is like asking the nutritionally well-informed to abandon the health food store for the donut shop.

Enlarging upon this just a bit, and equating the Good and the True, as I believe in a Platonic spirit we may, we arrive at this view: Philosophy (and so Science), though often painful, pursue the Truth; Rhetoric provides only a cheap, easy and pleasant, but in the end unsatisfactory, imitation of that pursuit.

2.2 Packaging

The second analogy I call the analogy of *packaging*. Consider gift giving, for example: I wish for some reason to give someone a present, but often I do not just hand the thing over; instead, convention dictates that I wrap it up in pretty paper and ribbons. I deliver this package to the recipient who then unwraps it to get at the gift itself. In other cases, packaging may serve more utilitarian purposes, such as the safe transmission of the object through the postal system. Or again, it may serve ulterior purposes, as when commercial products are packaged so as to seem bigger and better than they really are.

The point of the analogy is that, as viewed by Philosophy, Rhetoric is merely an art of gift wrapping or packaging—the packing may indeed be pleasant and useful in many ways, but it is still the thing inside that is of real value and importance.

Philosophers are not the only ones who view Rhetoric in this way; indeed, in the present day when one encounters the word "rhetoric" it is usually used against some such background as this analogy, as when people speak of *stripping away* or *cutting through* the rhetoric of some politician's speech in order to get at the substance.

And this packaging notion connects, I believe, with an older tradition of viewing Rhetoric as a sort of long-winded Logic. Here is an example from the 16th century, Thomas Wilson's *The Rule of Reason, containing the Art of Logic, set forth in English* (Wilson, 1970), which was the first Logic textbook in the English language. In his introduction, Wilson provides a description in verse of the seven liberal arts; here is what he says about the Trivium, the part which contains Grammar, and also both Logic and Rhetoric:

Grammar doth teach to utter words, To speak both apt and plain, Logic by art sets forth the truth, And doth tell us what is vain. Rhetoric at large paints well the cause, And makes that seem right gay, Which Logic spake but at a word, And taught as by the way.

Rhetoric, we see, takes what Logic gives, and packages it, applying gay colours, and also doing this at large, thus providing the padding needed for safe shipment. A page later, in the same vein, Wilson cites Zeno's famous characterization of the difference between Logic and Rhetoric:

... Zeno being asked the difference between Logic and Rhetoric, made answer by Demonstration of his Hand, declaring that when his hand was closed, it resembled Logic, when it was open and stretched out, it was like Rhetoric.²

3. Reasoning and Logic

Reasoning, in the sense I have in mind, is an intellectual process, and Logic is the discipline that studies it, not descriptively, as psychology or cognitive science might study it, but normatively; Logic supplies the standards by which the correctness and adequacy of reasoning is assessed. I shall first try to characterize this process, and then say a bit about the standards.

3.1 Reasoning as building a reckoning

Reasoning, I want to suggest, is not at all a mechanical process of working through an algorithm, like doing a problem in long division or running through a chain of syllogisms. It is not like cooking with a recipe. It is instead a creative process, one of building, of constructing, of making—like painting a picture, writing a poem or a computer program, composing a piece of music, building a garden shed. It is, I hold, the creating of a certain kind of abstract structure. The ingredients for this structure are mental—your thoughts, beliefs, intentions, etc., both old and new. The structure is a configuration of these, an arrangement of them in interconnected premise-conclusion combinations. When you have finished building your structure your thoughts will be organized in a certain way.

I call such a structure a *reckoning*,³ using this word to refer to the product of the operation, not the producing of it. Think of it as like the listing of credits and debits that come with a credit card bill, only more complicated and multi-dimensional. To reason, then, is to construct a reckoning. The reckoning is your thoughts, or some subset of them as brought into some kind of systematic order.

A good way of picturing a reckoning is provided by the arrow diagram as studied in Informal Logic. This is simply a diagram in which arrows proceed from symbols representing reasons to symbols representing what they are reasons for. I want something a little richer than this, though, since I allow not only arrows leading from reasons to what they are reasons for, but also arrows of a different type proceeding from reasons to what they are reasons against. The kind of reckoning I have in mind is a total reckoning, one that includes all the pros and cons.

Of course, the considerations which are the reasons may come individually or in bundles. Further, any consideration, or bundle of them, may have many arrows proceeding from it as well as many aiming at it. And arrows can aim at other arrows too, when there are reasons why some other reasons do or do not support what they are supposed to. Diagrams can show all this.

Of course, not just any reckoning structure will be acceptable; there are two conditions that must be met. First, the reasoning must be logically correct; that is, every arrow must truly lend the support claimed for it. Second, the reckoning must be logically adequate; it must fulfill the purpose for which the reasoning was undertaken.

There is an analogy here to English composition. In writing, the text you produce must first conform to various standards of grammatical and orthographical correctness. Second, it must be adequate to the purpose for which it was composed—a novel, a philosophical essay, a letter to your mother, or whatever.

And, just as in composition, the method used to compose a reckoning is generally one of trial and error; one throws in something that seems likely to work, checks the result against the standards, and tries again. But here the standards come from Logic.

3.2 Logic in the broad sense

When I speak of Logic determining the standards of correctness and adequacy for reasoning I mean Logic in a very broad sense, though I believe still a legitimate one. I mean it to include much more than formal or deductive logic, syllogism, propositional and predicate logic, etc., as found in the textbooks.

Many writers now restrict the word "logic" to this narrow formal sense. One example is Gilbert Harman in his insightful discussion of reasoning in *Change in View* (Harman, 1986). Those who wish to stick to this narrow sense of "Logic" will have to find some other phrase for my notion; for example, they might call it "Normative Epistemology."

In invoking this broad conception of Logic, I revert to an earlier period in the history of the subject, the 17th and 18th centuries, a period which, to be sure, is now commonly regarded as a low point in the history of *formal* logic.⁴ Consider, for example, the very influential 17th century *Port-Royal Logic*, the actual title of which translates to,

Logic or the Art of Thinking: Containing, besides the common Rules, several new Observations concerning the Formation of the Judgment ([Arnauld and Nicole], 1662).

I think it fair to say that the "thinking", and the "formation of judgment" referred to here are very much the same thing as my "reasoning". Or consider Isaac Watts in the next century, 1725, whose title makes even more explicit the idea of Logic as setting correctness and adequacy standards for reasoning:

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Logick: or the Right Use of Reason in the Inquiry after Truth, with a Variety of Rules to guard against Error, in the Affairs of Religion and Human Life as well as in the Sciences (Watts, 1775).

I shall mention just two of the respects in which this broad conception goes beyond conventional formal logic:

3.2.1 Induction and degrees of strength

Among other things, I mean Logic to include inductive logic, and this means that it does not deal only with the black and white categories of True and False, Valid and Invalid; there are also all the grays. Each element of a reckoning has associated with it a degree of strength. In the case of a consideration, this is the degree of confidence I, the reasoner, have in it. In the case of an arrow there is the degree to which I take the items at the tail to support, or refute, the item at the head.

3.2.2 Action and practical reasoning

A second feature of this broad sense of Logic can be put in Kantian terms: it covers not only theoretical but also practical reason. That is, it includes reasoning to a decision about what to do as well as reasoning to a judgment about what is the case. This inclusion of practical reason is important not only because so much of our reasoning is aimed ultimately at a practical purpose, but also, as we will see, because even our theoretical reasoning itself is subject in certain respects to the verdicts of practical reason.

3.3 Correctness and adequacy

3.3.1 Correctness

The correctness of a reckoning consists in each arrow truly lending the degree of support which is claimed for it. The key rule is formulated by Watts:

If we proportion our assent in all things to the degree of evidence, we do the utmost that human nature is capable of in a rational way to secure itself from error (Watts, 1775: 177).

That is to say, the degree of confidence in supported items must be properly related to the strengths of the items giving support taken together with the strengths of the arguments through which they give support. Because of the interconnections in a reckoning, a change in the strength of one element will most likely have ramifications throughout the reckoning, requiring changes for many other elements.

3.3.2 Ideal and human reasoning

Before considering the adequacy condition I must draw a distinction, which, though sometimes overlooked is of fundamental importance, between a *logically ideal reasoner* and us poor *human reasoners*. Ideally, reasoning takes no time and

is cost free; for us this is not so. The ideal reasoner has the entire reckoning in mind at once; we must scan it piece by piece. Ideally, we would be totally clear about what information we already have and what we do not; we, with our defective memory and wandering attention, must be often uncertain even about that. The ideal reasoner can include all logical consequences in a perhaps infinite reckoning; we must observe what Harman calls the "Clutter Avoidance" principle—not cluttering one's mind with trivialities (Harman, 1986: 12). Ideally, all our ideas would be sharply defined, and could be exactly expressed in our language; actually, our ideas are fuzzy and confused, and our language gives us only rough means of expressing them. Again, when the ideal reasoner changes some feature of a reckoning the necessary adjustments are made instantly through the whole reckoning; for us, this is adjustment is hit or miss. And so on.

Because of these limitations, we humans must usually resort to shortcuts, simplifications, approximations and heuristics. And this makes a difference to the types of reasoning we undertake, and so to the conditions of adequacy. It also gives us more things to reason about, since the question of which shortcuts, etc., to employ may itself have to be addressed by reasoning.

3.3.3 Adequacy and the aims of reasoning

In addition to being logically correct, a reckoning must be logically adequate to the purpose for which the reasoning is undertaken, and this is another dimension of the breadth of Logic as I conceive it.

Reasoning will always begin with some body of already accumulated information, perhaps already structured into a partially completed reckoning. This will be true even of our first reasoning, which will begin with information acquired by processes other than reasoning.

I call this body of information the *database*. There may actually be more to it than *information* strictly speaking since in view of the possibility of practical reasoning, the database may contain intentions, commitments, preferences as well as practical, even ethical, principles.

This database may be both supplemented and truncated *hypothetically*; this happens when I reason from a database differing in some respect from my own. Such reasoning can serve many useful purposes, but to simplify things I shall here pass over all forms of hypothetical reasoning, and consider just the case in which one reasons for real on the basis of the data one has, or thinks one has.

The purpose of reasoning will always, in one way or another, be to add to or in some other way to modify the database. The adequacy of the reasoning will depend on the exact purpose for which the reasoning was undertaken. There are three main types of case:

To improve the database. A common occasion for reasoning is the arrival of new information, either sought or unsought. The project is then to incorporate this new information into the database, making such further adjustments as may be required.

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A special case of this is when I have no new information, but suspect that my existing database may be defective in some way, and want to correct it.

In both these cases, the reasoning will take the form of structuring all or part of the database into a reckoning, and the test of adequacy will be the coherence of the resulting database. Even ideal reasoners may have new information thrust upon them, and so will have to engage in this type of reasoning.

To answer a question. In this case we reason in order to derive from our database an answer to a question we have raised. The question may be theoretical or practical. Here, adequate reasoning will generate a reckoning that extends the database to include an answer to the question, a reckoning in which all relevant possible extensions have been developed. Ideal reasoners would have no need for this type of reasoning since they would already have worked out the answers to all the questions for which their databases implied answers.

Meta-reasoning. It is, of course, possible to reason about one's reasoning. There can, for example, be practical reasoning about how to conduct one's reasoning. Should one start reasoning about an issue at all, or just guess? Should one continue to reason or settle for the results reached so far? Should one use this or that approximation or shortcut? These are all practical issues, and reasoning about them will take the form of balancing the costs of reasoning in various ways against the benefits. This is a place where practical reason can dictate to theoretical reason.

And at another level, there can be reasoning about what are the proper standards for reasoning. Ideal reasoners already know this, of course, but the rest of us, even logicians, may find ourselves caught up in it on occasion.

It should be noted that while these meta-issues *can* be reasoned about, they don't always *have* to be. Reasoning can start, stop and switch in an unreasoned way, and anyhow, at some point it must simply commence.

3.4 Dialogue

I have so far spoken of reasoning as a reckoning building project to be carried out by a single reasoner, but of course it is also possible for two or more individuals to collaborate in constructing a common reckoning. This could be compared, say, to several authors collaborating on the writing of a book. It will require a form of communication between the reasoners which I call *dialogue*.

For a common reckoning, the database too must be shared, at least in those parts which figure in the reckoning. If those engaged in dialogue find that they cannot build a common reckoning because of differences in their databases, then they must resolve those differences or abandon dialogue. Thus the procedure which Locke, though not we, would call *argumentum ad hominem*, that in which you "press a man with Consequences drawn from his own Principles or Concessions," is not dialogue unless you yourself accept those principles and concessions. (Locke, 1985: 686)

It must be remembered as well that what was said before about human reasoning, shortcuts and approximations, and so on, applies also to dialogue; those engaged in dialogue may reasonably settle for approximate agreement in database.

Not only must there be, or come to be, a common database for dialogue to succeed; success also requires that the common reckoning constructed be logically correct and adequate; the same standards apply here as in the reasoning of an individual. This success condition, as I shall urge in a moment, is a respect in which dialogue differs from those forms of argument which might otherwise resemble it.

4. Argumentation

I come now to Argumentation, the discipline which studies the activity of arguing. For some general orientation in discovering just what this activity is, I begin with a couple of definitions by argumentation theorists. The first is by Charles Willard:

Argument is a form of interaction in which two or more people maintain what they construe to be incompatible positions (Willard, 1989: 1).

Van Eemeren, Grootendorst and Kruiger give a somewhat more detailed statement:

Argumentation is a social, intellectual, verbal activity serving to justify or refute an opinion, consisting of a constellation of statements directed towards obtaining the approbation of an audience (Van Eemeren, Grootendorst and Kruiger, 1987: 7).

From it we learn that arguing has both an aim, gaining the approbation of an audience, and a method, producing a constellation of statements. But for purposes of this Conference on Argumentation and Education, we need a still more fine grained account, and a first point to settle is what kind of study of arguing we have in mind when we speak of Argumentation.

4.1 How studied

The arguing activity, like other human activities, can be studied from many different points of view, and by many different methods and disciplines. As a human interaction, arguing is fair game for the social sciences. As involving the exercise of mind, it can be studied by psychology. As involving the use of language, it can be studied by all the disciplines, from linguistics to literary criticism that have a concern with the use of language. And so on. That arguing can be studied in a bewildering variety of ways is a thing we can learn from the Proceedings of the 1986 Amsterdam Conference on Argumentation (Van Eemeren, et al., 1987).

However, for purposes of this conference, which emphasizes Education, I believe the mode of study to consider is that fostered by those undergraduate courses to which I referred above. And in those courses, as near as I can make

out, Argumentation is taught with a primarily practical purpose; the chief object is to teach students how to argue better, how to participate in the activity in a more competent way. The primary, though not exclusive, emphasis appears to be on written argument; thus the main thing is for students to learn how to write good argumentative prose. Of course, a certain amount of theory must come into such courses as well; here as everywhere, theory assists practice.

In this respect, Argumentation may be compared to the study of other human activities, such as, say, dancing. Dancing too, as a social phenomenon, may be studied from many different points of view: we could ask why humans do it, and what purpose it serves in society; we could catalogue the various dance steps, and explore the connection with different types of music. Or we could study it with the aim of learning how to dance. In these terms, my claim is that university courses in Argumentation function as Arthur Murray Schools of Argument.

I do not, of course, have any special expertise about these courses, having never either taken or taught one. Still, I've picked up a few clues.

4.1.1 The teachers

One clue has to do with the teachers of these courses, at least some of them, and how they themselves are taught. I cite a recent posting on an e-mail Rhetoric list about this: a Director of Graduate Studies in English wrote:

At my university, the doctoral program in English requires a course about how to teach argumentative writing to undergraduates. Since the graduate students don't know much about argument theory themselves, the course covers matters such as: deduction/induction, the Toulmin model, classical stasis theory and modern adaptations of it, fallacy theory, schematic textual analysis of arguments, GASCAP modes (generalization, authority, sign, causation, analogy, principle).

It also deals with pedagogical issues like course design, writing assignments, evaluation etc.

Here we see that while a number of different aspects of argumentation theory are covered, the main point of the courses which these doctoral English students are being prepared to teach is to teach people how to write argumentatively, though many of the topics listed are ones that might equally well be assigned to Logic.

4.1.2 The text books

I have also looked at a few of the text books that seem to be designed for these courses. I list three of them here since the titles themselves are informative, and shall make a few comments about them later.

John C. Reinard, Foundations of Argument: Effective Communication for Critical Thinking, 1991.

Timothy W. Crusius and Carolyn E. Channell, The Aims of Argument: A Rhetoric and Reader, 1995.

John D. Ramage and John C. Bean, Writing Arguments: A Rhetoric with Readings, 3rd edition, 1995.

4.2 The arguing activity

Now for the activity which these courses aim to make their students better at. Here I shall simplify somewhat since these courses cover a number of different forms of argument, and I shall consider just the one which I consider to be their primary concern. I will find this to be a combination of two components—pure argument, as I call it, to which are added supplemental persuasive devices.

4.2.1 Pure argument

In identifying the arguing activity we have noticed that there are two dimensions to be dealt with—the aim and the method.

The aim—influencing judgment. Arguing, especially the main line arguing I am here considering, is an activity with a characteristic goal; one engages in the activity in order to achieve a certain result. The characteristic result aimed at in arguing is that an audience think in a certain way, where this includes practical as well as theoretical thinking. The audience may be another participant in an arguing encounter or it may be some third party, such as a judge or jury. The audience may start from a position of opposition, from a neutral position, or, in the case of a possibly defecting audience, from a position of agreement. In all these cases I shall refer to getting the audience to think in the desired way as influencing the judgment of the audience.

The method—giving reasons. But not every means of influencing someone's judgment counts as arguing; hypnosis and drugs, for example, do not count. Arguing is a linguistic activity; its result must be achieved through the use of language, or at least through some equivalent of language such as gesture or drawing pictures; there must be something amounting to a constellation of statements.

Using Austin's categories, we may say that the judgment is to be influenced through the performance of various locutionary and illocutionary acts. To argue, thus, is to *attempt* to perform a certain perlocutionary act, that of influencing; you succeed in performing that act if you succeed in actually producing the desired state of mind in the audience.

But not even every linguistic means of achieving this aim counts as argument. To merely inform someone of something, for example, is not to argue, though it may influence judgment. To argue is to seek to influence judgment linguistically by giving reasons.

But what is meant by "giving a reason"? Here, I believe, is where my account of reasoning as constructing a reckoning proves its value as a bridging concept between arguing and reasoning. To give a reason, I suggest, is to make a

statement with the intention that the audience incorporate it as a premise in a reckoning which the audience itself is constructing.

The arguer, that is, seeks to influence judgment by getting the audience to construct a reckoning supporting the desired judgment, and the arguer does this by supplying the audience with ingredients for such a reckoning. When I argue with you it is as if I should try to get you to make a cake by plying you with eggs, flour, sugar and baking powder; in the end, I hope, you will do your own mixing and baking. This is why it is that, when your judgment has been influenced by someone's successful arguing, you have the feeling that not only that person, but reason itself, has persuaded you.

4.2.2 Pure argument plus persuasion

What I have defined so far is a rather rarefied and rationalistic notion of arguing. To mark it off from other notions with which we will have to deal, I shall call it *pure* argument; pure argument is the activity of seeking to influence judgment by providing an audience with ingredients for an appropriate reckoning.

But pure argument, I think, is only a part, not the whole, of the activity which Argumentation courses teach. Thus the arguing activity we are seeking is a combination of pure argument plus this other thing. One label that can be used for this second factor is "persuasion," but that word has several different uses in this context, and to avoid confusion I think it will help to take a slight detour through classical Rhetoric.

Logos, Ethos and Pathos. In his Rhetoric Aristotle lists three "proofs" which are available to the speaker:

Now the proofs furnished by the speech are of three kinds. The first depends upon the moral character of the speaker [Ethos], the second depends on putting the hearer into a certain frame of mind [later identified with Pathos], the third upon the speech itself [Logos], in so far as it proves or seems to prove. (I.ii.3, 1356a).

and these three are usually mentioned in the textbooks for these Argumentation courses. Ramage and Bean, for example, refer to them as "The Rhetorical Triangle" (Ramage and Bean, 1995: 86).

Logos may, in this context, be at least roughly equated with the reasons given, and so with the pure argument described above. Ethos has to do with the character of the speaker, which is to be established as trustworthy. Pathos has to do with the passions of the audience, which are to be aroused as required.

I remark here in passing that as a visitor in the Oz land of Argumentation, I am tempted to think of *Logos* as the Scarecrow, *Ethos* as the Lion and *Pathos* as the Tin Man, all of them helping the arguer along the yellow brick road to judgment influence.

In any event, I find that Argumentation as taught deals with all three of these, so I conclude that the arguing activity we are concerned with is a

combination of pure argument together with the persuasive techniques associated with *Ethos* and *Pathos*.

Convincing and persuading. Some books reach essentially the same result by a slightly different route; they distinguish convincing from persuading, with convincing taking over the role of Logos, and persuading covering the other two. In the nineteenth century, Richard Whately's Elements of Rhetoric, first published in 1828, followed this line, with one main part of the book devoted to "Conviction" and another to "Persuasion" (Whately, 1830). Among current texts, Crusius and Channell follow this path, with chapters on "Making Your Case: Arguing to Convince" (p. 74), and "Appealing to the Whole Person: Arguing to Persuade" (p. 108).

5. Education

Having now characterized both the reasoning and the arguing activities, and having associated them with their respective studies, Logic and Argumentation, I can now conclude with a few remarks about the relevance of all this to Education. This will also give me occasion to refer again to the ancestral voices.

5.1 University courses

It seems clear that reasoning and arguing are both important activities, and so since, as we like to think, skills in both can be improved by study at university level, there are good grounds for giving instruction in both of them at that level. There are important pedagogical issues here as to whether they should be taught in courses dedicated to them or taught incidentally in other courses, and if in dedicated courses, whether there should be a single combined course or separate courses for each. To simplify matters, I shall just assume that it has been decided to have separate dedicated courses for each. That's the way it seems to be in many universities, though in mine, while there are dedicated Logic courses, Argumentation is taught only incidentally in courses dedicated to other subjects.

It is important to notice, though, that even though the courses are separate, some degree of combination will still be required. That is, there will be a need to include some Argumentation in the Logic course, and some Logic in the Argumentation course.

5.1.1 Argumentation in the Logic course

Argumentation will be required in the Logic course since, as the study of reasoning, Logic will have to give some consideration to the reasoning that is stimulated by the arguing activity. I am thinking here of reasoning on the part of the audience at whom the arguing is directed. The audience will receive some combination of pure argument plus persuasion, and will then have to separate out the pure argument for logical evaluation.

Logic already deals with this, at least to some extent, in its discussion of informal fallacies, where the student is warned, for example, against the *ad hominem* (in the contemporary sense) which is the persuasive device of undermining the *Ethos* of an opponent. And as to *Pathos*, Logic already labels the appeal to pity as the *ad misericordiam* fallacy, and could similarly handle any other passion for which a Latin name could be found.

Still, I think it very likely that Logic courses would benefit from a more systematic treatment of these matters than they ordinarily provide, and that this could come from Argumentation, but I shall not explore that project here.

Instead, I shall just observe how this fits in with the ancestral philosophical warning about packaging. Arguing wraps up pure argument in *Ethos* and *Pathos*, and what Logic has to say about this is that you should always unwrap a package before seeking to deal with its content.

5.1.2 Logic in the Argumentation course

One needs Logic in the Argumentation course because of the pure argument component. This component seeks to get the audience to construct a certain reckoning. But for the purpose of Argumentation, must this reckoning be logically correct and adequate?

It is not, I think, an *intrinsic* part of the aim of the arguing activity that the reckoning it induces be correct and adequate; one wants the audience to reach the desired conclusion by reasoning, but one needn't care about the correctness of that reasoning.

Even so, the Argumentation books counsel against the use of incorrect argument, giving two main reasons for this. One is that the promotion of incorrect reasoning would be ethically wrong (E.g., Crusius, Channell, 1995: 9), and I suppose the argument for that would be that the promotion of bad reasoning would not serve the larger social purpose which these books see arguing as having.

The other reason given is that arguing will be more effective if it is logically correct. There are several reasons why logically incorrect argument might be less effective. First, the audience may have some logical sense, and may detect the incorrectness. Second, if you are actually caught in the act of pushing an incorrect argument it will seriously damage your *Ethos*. Finally, one of the books cites a study showing that under certain circumstances, people, or at any rate students, while they may be as easily persuaded by invalid as by valid arguments, remain persuaded longer when the arguments are valid. (Reinard, 1991: 214).

Thus the need to avoid incorrect reasoning is external to the arguing activity—either as an external principle, as the need not to shoot people is an external principle applying to the activity of gun using, or as a matter of efficiency, as the need not to insult customers applies to the activity of selling used cars. With dialogue, on the other hand, the need for correctness of reasoning is of the essence.

Still, correctness is a consideration for the arguer, who will at least usually want to promote logically correct and adequate reckonings, and so will need the assistance of Logic, which should therefore be included in these courses.

5.2 Maintaining the distinction

But in spite of these interconnections, Logic and Argumentation are still distinct subjects, and should be kept so. Logic teaches standards for assessing the correctness and adequacy of reckonings; Argumentation teaches techniques of influencing judgment by offering reasons. I here invoke another philosophical ancestor, Bishop Butler of the eighteenth century, and a remark of his which has been relayed to the twentieth century by G. E. Moore: "Everything is what it is, and not another thing."

5.3 Pure argument and dialogue

As we have seen, arguing as taught in Argumentation is a combination of pure argument plus the persuasive devices of *Ethos* and *Pathos*. The addition to pure argument of these extra elements is what the philosophical ancestors were complaining about when they invoked what I have called the packaging analogy. But setting that to one side, I now conclude with an observation about the distinction between pure argument and dialogue.

When you are on the receiving end of pure argument it is very much like being a participant in dialogue; in both cases, another party is proposing that you reason in a certain way, and you are pondering whether to construct your reckoning in the way suggested.

But of course, the two situations are different. Argument, even pure argument, as we have seen, is not essentially concerned about the correctness of the reckoning, and does not care whether the database on which it is built is satisfactory; dialogue cares about both of these. In the case of the argument receiver it is always "buyer beware!"; for the sender the question is, "will it sell?" In dialogue there is genuine cooperation in a search for the right answer.

This is what worried the philosophical ancestors when they call up the other analogy, that of the donut shop. Argument, as taught by Argumentation, imitates something that it actually is not, namely dialogue. Indeed, very often the appeal to *Ethos* takes the form of encouraging the illusion that dialogue is going on. But it is dialogue, real dialogue, not argument, that aims at the True and Good. And so it is dialogue, not argument, that provides a proper diet.

And it is dialogue that brings us back to philosophy, so that the philosopher, returning from a visit to Argumentation, will agree with Dorothy's remark on departing Oz: "There's no place like home."

¹ I have modernized Wilson's spelling.

² The source for this story appears to be Sextus Empiricus, *Against the Professors* 2.7. (Long and Sedley, 1987: 185).

- ³ I press the word "reckoning" into service here being unable to find a better. "Case" is an alternative to consider, but with its background in the adversarial forensic context, it suggests too strongly a contrast between the "case for" and the "case against", whereas the reckoning must include both. "Position" is another candidate, but it is too closely associated with a public stance adopted in some kind of social exchange; a reckoning has to do with the ordering of one's own thoughts.
- ⁴ See, for example, W. and M. Kneale's *Development of Logic* (1962) p. 307, where the authors refer to "the marked decline of interest in formal logic which occurred during the seventeenth and eighteenth centuries."
- Note that Whately defines the subject of his Rhetoric book as "Argumentative composition, generally and exclusively," (p. 6) so that his is really an Argumentation book in our sense of the word.

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ROBERT W. BINKLEY
DEPARTMENT OF PHILOSOPHY
UNIVERSITY OF WESTERN ONTARIO
LONDON, ONTARIO N6A 3K7