

IV.

In summary, it may be said that the suggested account of the two wrongs fallacy is preferable to the standard account because it recognizes those cases where two wrongs reasoning is legitimate, and those cases where it is not. In contrast, the usual account creates the mistaken impression that any two wrongs argument is unacceptable, and perpetuates the related misconception that acts are right or wrong independently of the circumstances that surround them. The proposed definition not only enables the student learning informal logic to recognize those instances of two wrongs reasoning which are fallacious, but also enables them to recognize valid two wrongs arguments.

To see how our account allows a deeper analysis of two wrongs arguments, we might consider an example of two wrongs reasoning which Johnson and Blair discuss. Written in defense of a group of militant Indians who occupied a small park in Kenora, the argument in question suggests that:

The occupation of a 14-acre park by the native people in the Kenora area is completely justified. After all, what's a mere 14 acres when they have been robbed of 14 million square miles—the entire North and South American continent.⁹

According to the standard analysis, this argument is invalid because it contains an instance of two wrongs reasoning. In short, because it argues that:

The Indians were wronged long ago.

The Indians were justified in occupying the 14-acre park in Kenora.

We have already seen that such an analysis is problematic because it is not true that all cases of two wrongs reasoning is invalid. In contrast, the revised account does not make this mistake, and tells us exactly why the argument represents a case of invalid two wrongs reasoning (for our purposes, we may ignore the problems that arise in light of its problematic premise). As this is a case of civil disobedience, the first restriction on valid two wrongs reasoning is fulfilled (i.e. the Indians in question are attempting to alleviate some perceived injustice). Yet the argument is still guilty of the two wrongs fallacy because it fails to show that there are no more appropriate means by which the Indians could effectively achieve their end. Of course, it may be that the argument could be rectified, but this would require additional details which are not provided in the original argument.

Given this analysis of the argument in question, it can be said that it provides a more sensitive account of the argument, and of two wrongs reasoning, than the usual analyses. Given the frequency of such arguments in everyday moral reasoning, the proposed account can provide a worthwhile addition to an account of informal logic and the fallacies which it contains.

Notes

¹Howard Kahane, *Logic and Contemporary Rhetoric*, p. 28; Belmont: Wadsworth, 1976.

²Vincent Barry, *Practical Logic*, p. 60 (Second Edition), New York: Holt, Rinehart and Winston, 1980.

³For other accounts, see Capaldi, *The Art of Deception* (New York: Donald W. Brown Inc., 1971) and Johnson and Blair, *Logical Self-Defense* (Toronto: McGraw-Hill Ryerson, 1977). I shall discuss Johnson and Blair's account as I proceed.

⁴Kahane, p. 29.

⁵Johnson and Blair, p. 78.

⁶Barry, p. 61.

⁷Johnson and Blair, p. 78.

⁸*Ibid.*, p. 95.

⁹*Ibid.*, p. 74. ●

Leo Groarke, Department of Philosophy, York University, Downsview, Ontario M3J 1P3 Canada

Musclebuilding for Strength in Critical Thinking

Mark Weinstein
Hunter College, CUNY

In a recent paper¹ Richard Paul argues for teaching critical thinking in the "strong sense". The paper offers his analysis of critical thinking in the "strong sense", but most importantly, attempts to motivate critical thinking teachers to give their students a sense of the "global problems in the analysis and evaluation of reasoning" (p.3). Paul argues that we must help students toward a "clearer recognition of the relationship between world views, forms of life (and) human engagements and interests": placing at the focus of our concern "dialectical/dialogical" "argument exchanges" in which "fundamental lines of reasoning are rarely "refuted" by individual charges of fallacy" (p.3). He requires that such a stance be taken "from the outset" in our critical thinking courses and suggests that we use "multicategorical ethical issues" (pp.2,5) as the means of obtaining **strength**.

Paul rejects what he appears to consider the usual procedure in critical thinking courses: the teaching of "a battery of atomic technical skills independent of egocentric beliefs and commitments" (p. 3). Such an attitude towards the teaching of critical thinking, Paul maintains, merely reinforces student tendencies to respond to challenging ideas with "sophistry" and "dismissal"; that is, to illicitly defeat or disregard alternatives threatening to "a priori egocentric (or sociocentric) belief systems" (p.2).

Since I concur with much of what Paul says, and, moreover, believe that the "spirit" of his proposal is more

important than its "letter", I will not attempt a detailed analysis or criticism of Paul's text. Rather I would like to describe a process that is similar in outcome and goals and that raises issues that may be of interest to other advocates of **strength** in critical thinking.

Paul offers very little by way of concrete suggestions for techniques useful in developing **strong** critical thinking skills. His only example of a pedagogic device is an assignment for a major mid-term project (p.6). Although Paul offers the reader a detailed account of what he requires and furnishes a sense of what sorts of source materials might be used, he offers no suggestion as to how to bring students to the point where they can, meaningfully, complete the assignment. This problem is a critical one to the extent that Paul is right in his analysis of the pervasiveness of "weak" critical thinking approaches. For if critical thinking is endemically atomistic, students will have had little or no exposure to the sorts of techniques and concerns that enable them to do the task assigned. Of course, it is Paul's classroom procedure that prepares his students for the task at hand. But what of the rest of us. Clearly text books are of little help. If we examine informal logic texts we might well ponder how to bridge the gap from the sorts of tasks characteristic of most texts to the multi-faceted analysis that Paul describes in the assignment.

Paul does not concern himself with the crucial issue of the classroom process. And there is no reason why he should. His paper is, after all, the presentation of what he seems to consider a radically new and vital attitude towards teaching critical thinking. Such a paper is, clearly, appropriately concerned with analysis and justification. Paul need not concern himself with the presentation of pedagogical techniques. But the critical thinking teacher striving to achieve a basis for **strong** critical thinking requires them nonetheless. Especially if the concern of the teacher is less with "discussion group(s)...composed of teaching assistants..." (p. 4) and more with his students who, more often than not, resemble the proverbial "98 pound weakling". It is the apparent need to develop contexts and techniques to foster **strong** critical thinking that prompts me to offer a description of my course in musclebuilding for **strength** in critical thinking.

II

Hunter College, CUNY, is not unlike many other large colleges. Its population is ethnically diverse and poly-cultural. The students' abilities, attitudes and goals range broadly across the spectrum of academic achievement and aspiration. The population includes many brilliant students, but whatever the level of native intelligence and academic skill, Hunter's students are, for the most part, pragmatic in attitude towards their education and its goals. Hunter has a large segment of its population enrolled in programs in the applied arts and sciences: nursing, accounting, computer programming, physical therapy and the like. We have a fair number of students who, at least during their undergraduate career, aspire to medicine and law. We have a small but uniformly excellent group of Philosophy majors.

My students exhibit a wide variety of academic needs in responding to the demands that my Logical Thinking course makes on them. Students have a basic problem with fluency. They dislike being made to speak in class and

they have a limiting view of how much they can, and ought to be made to, write. Many members of my class cannot speak well or easily in the classroom—mostly due to language related problems: embarrassment over foreign accents or, more rarely, problems of dialect, grammar and vocabulary. Due, mainly, to Hunter's extensive program of evaluation and remediation students come in my class writing reasonably well. But the majority of my students, like, perhaps, the majority of their teachers, find writing threatening or burdensome.

Few students can write an articulate and well-balanced discussion of complex issue when they enter my class. And even fewer have any sense of logical analysis and organization. Students tend to rely on factual presentations to add bulk and structure to their papers. They have, in general, enormous difficulties in perceiving relationships between ideas and are hard pressed to understand the function of context except in a crude and thoughtless fashion. My students worship "fact", revel in the presentation of "data" and, almost completely, fail to see the need for analysis, interpretation and underlying contextual considerations. For most Hunter students the only logical distinction is between "facts" and opinions"; the former being associated with the "scientific" and the latter with the personal and the emotive. Sadly, such an attitude is reinforced in many of their courses and is a natural outgrowth of much of their pre-college education.

III

My classroom procedure is determined both by my interest in working towards **strong** critical thinking and by my department's mandate that Logical Thinking serve as a "foundation for work in the other academic disciplines". I do not find these goals incompatible and, in fact, my attention to basic skills has furnished the requirements and methods that result in my pointing the class towards the problem of building **strength**.

I use Kahane's popular **Logic and Contemporary Rhetoric**² as a major text for my course. The text has many features that I can turn to my pedagogical advantage. First, Kahane offers large numbers of exercises, ranging from issues of broad social and cultural concern to **technicalia** that require sophisticated concepts from logical theory and the theory of science. Although many of the "social and political exercises are "dated", they afford a range and breadth of interest that enables my students to begin the task of analysis. Distance makes the issues in Kahane more available to dispassionate discussion, and it is easy to relate recent history to the pressing problems of today. But most importantly, there is so much variety in Kahane's text that all of my students can find many exercises that they can relate to, exercises that connect with their background, their knowledge and their values. Second, Kahane's exhaustive presentation of informal fallacies affords a simple and available framework with which analysis can begin. Last, Kahane is readable. With the exception of the abstract theory of argument in Chapter One, my students find the text approachable and even, in many cases, relatively self explanatory. The bulk of the class time with Kahane is spent on Chapters Two through Five.

I require that my students sit in a circle. Given my class size, generally forty to forty-five, this is frequently awkward. But it is very important. It not only tends to keep my students awake (at 8:00 a.m. and after an hour on the New

York City subway system) but raises the likelihood of students speaking to each other. I consider it crucial that the environment in Logical Thinking enhance students' ordinary competence—all of my students can speak and argue with other students; few feel as free when responding to points made by the teacher. I do no lecturing on Kahane, with the exception of a week of lecture on Chapter One. Students are expected to read the chapter assigned before coming to class and are responsible for requesting whatever clarification of the text they require. I will clarify any aspect of the text that is requested, but do not initiate the process.

Two things become apparent when the class operates within such a structure. Students have to be given the opportunity to see for themselves what they do not understand. (Since all students hear the questions and the responses, they are given a ready gauge against which they can judge their own comprehension.) And, there is an enormous range of ability to grasp the text, even with everyone "doing the reading". Forcing my students to take responsibility for their own intellectual process, in even as elementary a task as the reading of a simple text, begins the process of assessing liabilities and strengths. This procedure is the first step in building the confidence and involvement that will culminate in significant analysis and criticism.

During class, the largest amount of time, by far, is spent discussing the exercises at the end of the chapters in Kahane. Kahane's text, like most informal logic texts, seems to require that students show their competence in understanding the use of informal fallacies by performing a task of classification. Samples of arguments given as exercises are to be labeled as one or another of the fallacies discussed in the text. Although there is frequently, some mention of giving reasons for choices, both the answers given in the text and the discussions offered in the body of the chapter fall far short of the level of depth, sophistication and detail required by the notion of **strong** critical thinking. Students feel quite comfortable performing the "atomistic" task of sorting samples according to fallacies; but do not easily or naturally grasp the demands made upon them when I require that they analyze examples with an eye to interpretation and context.

Students look over the chapter exercises before coming to class. They choose those they have most interest in discussing and do the preliminary task of identifying premises, conclusions or other relevant structure. They also choose the most plausible fallacy. The class consists of our discussing arguments selected by individual students. We will sometimes spend an entire period on one exercise, generally, do three or four per session. We discuss whatever the argument warrants: do structural analysis, clarify the application and the theoretic underpinnings of the fallacies and develop technical apparatus as needed. But mainly, we discuss contexts. We try to develop a sense of how arguments are grounded within the situation that prompts them. We look at the various possible settings for the argument and try to determine which of these support and which defeat the charge of fallacy. This requires that we look closely at how the words of the exercise could be interpreted, what background information might be expected of the reader, what point of view is presupposed by the author, what evaluative or factual analysis is assumed; and most importantly, how these considerations shift as we try to see the argument as fallacious or as cogent. Our task is to see how the

evaluation of the cogency of an argument is a function of context. And we do this through ongoing analytical and critical class discussions. Students learn to generate, employ and refine standards of meaning and relevance, learn to develop skill at adjudicating claims to warrant and truthlikeness and to develop the confidence and insight needed to conjecture as to presupposition and motive. Students acquire these skills through practice, by engaging in discussions with their teacher and peers, and by being placed in an environment where they hear differing points of view. Students learn to speak and to listen, to criticise and to take criticism. They learn not to accept claims, whether made by textbooks, their teachers or themselves, without examining the background from which the claim takes its sustenance.

The procedure that I have just sketched presupposes an attitude towards the theory of argument and, especially, towards informal fallacies, that requires comment. I believe, and Paul would seem to agree, that arguments can rarely be evaluated outside of their context. I would assert, as a matter of principle, that the interest of an argument as well as the informativeness of its premises is directly proportional to the richness of the context in which it is, significantly, embedded. Thence to determine cogency and warrant without trivialization is necessarily to see the argument within the context in which it occurred. Further, I maintain that each informal fallacy determines a class of corresponding argument types and that purported fallacies of the sort found in informal logic texts can, invariably, be seen as cogent arguments as long as we are free to vary the context within which the arguments are offered. Thus the analysis of informal fallacies is not a mechanical task, akin to the finding of characteristic patterns, but rather, an artful procedure that requires sensitivity to, among other things, meaning, context and intention. Notice, classifying the argument type that corresponds to the fallacy may very well be quasi-formal, requiring pattern identification and the like. But determining the fallaciousness of the argument is of another nature entirely. Examples of what I mean abound. Appeals to authority, to take an obvious instance, are very easy to find and may even be identified through the use of characteristic phrases and constructions. Which appeals to authority are fallacious cannot, of course, be easily decided. The most surprising people can turn out to be authorities if only we are creative enough to see the possibility of varied and often surprising contexts.

Needless to say these views are controversial, although, perhaps, acceptable in this setting. I take what I have just said to be at least part of the theoretic basis that supports a concern with **strong** critical thinking. But the point of this paper is not, primarily, to analyze or defend critical thinking in the **strong** sense. It is rather to describe pedagogical procedures for developing **strength** in critical thinking and, most importantly and perhaps surprisingly, to show how a commitment to the development of **strength** in critical thinking can be integrated into a course whose primary goal is the development of basic student skills of a clear and obvious sort.

The classroom discussion of the exercises in Kahane has two functions. First, the development of discussion skills and the concomitant awareness of the multiplicity of points of view and contexts of analysis. The second is the preparation of the exercises for written analysis. After the class has finished discussing a chapter, the students are required to write at least five pages of short analytical essays based on exercises of their choice. At first, students

write one or two paragraph analyses of the arguments, generally following a standard format: analysis of structure, choice of most apparent fallacy or fallacies and a brief evaluation of the weaknesses and strengths of the argument. As we progress through the chapters I require that fewer exercises be chosen and that individual analyses increase in length to an average of one to one-and-a-half pages. This requirement forces students to choose exercises about which they have more to say and demands that they become more deeply involved in complex analysis. In class our discussions introduce concepts through which students can move to more sophisticated levels of analysis. The exercises that Kahane offers in his text afford ample opportunity for the issues that Paul identifies as relevant to **strong** critical thinking. In addition to the political and motivational contexts that Paul requires for **strong** critical thinking (pp. 4-5), Kahane has exercises that deepen analysis in equally salient ways. I can introduce my students to methods of analysis found within technical semantics and the theory of explanation, to issues in statistics and probability as well as economics and political theory. And all of these topics arise naturally within the classroom discussion and are reflected in the students' writing.

The use of concepts from the philosophy of language and the philosophy of the natural and social sciences gives my students a dimension of analysis that, although, different from the areas that Paul identifies, has at least equal claim to being a source of **strength** in critical thinking. For such concepts, like the political and motivational ones that Paul discusses, are crucial in understanding the meaning, relevance and warrant of the kinds of arguments that are common both in texts and in serious daily life situations. Contexts within which fallacies are to be evaluated are not merely social and political, but they are also theoretical and epistemological. For **strength** in critical thinking we must become aware of both the sociology of arguments and their epistemology.

But whether the concept I am introducing is that of forms of life or the functioning of indexical terms the manner of presentation is the same. Rather than present concepts through self-motivated lectures, ideas are put forward within the discussion of concrete instances of their use and in response to student prompting and concern. Students are introduced to concepts by seeing them put to use in dialectical, analytical and critical contexts. Concepts are not taught for their own sake but rather are offered as tools to perform tasks as the arise. I find that even the most technical concepts are grasped easily and naturally if the classroom procedure motivates the students to see the concepts as effective devices for clarifying issues of concern. Students learn concepts through occasions for their use; by seeing them employed in discussion and by speaking and writing. By the time we have worked through Chapter Five in Kahane, students are averaging five to ten pages of written analysis per chapter. Writing essays that are thoughtful and probing and that show familiarity with sophisticated ideas and methods.

The work in Kahane is reinforced by a requirement that students keep a scrapbook of arguments found in their daily life. Like many informal logic teachers, I require that my students cull arguments, whether apparently fallacious or not, from the media and their personal interactions. These arguments can be brought up in class and are the

basis of written analyses. If we include the work that my students do on emotive language and the analysis of extended arguments (Chapters Six and Seven in Kahane, and additional handouts for analysis—including student writing from past semesters) students submit upwards of fifty pages of writing in preparation for the major analytic assignment of the term.

The process of discussion and writing culminates in a term project similar to the one that Paul outlines³. I do not, however assign any particular topic; rather, students are permitted to choose a topic of concern to them. I recommend topics that are "multi-categorical" and "ethical". Students pick abortion most frequently; with nuclear issues, capital punishment and gun control being other common choices. I require students to pick topics that they perceive as having strong arguments on both (or all) sides; and caution them to minimize data and maximize analysis. The format for their papers, which are to be five pages in length, is to present both sides by showing how each side sees its claims to be a rebuttal to the facts and analyses of the other side.

Many of my students write fine papers and all of them improve significantly over the period of time that we do informal logic. Many of them see their issues in terms of the dialectical shifts that Paul describes, following the redefinition of issues and the move from factual to conceptual and value analysis. But many persist in overburdening their analytic abilities with masses of data—using facts as a crutch and detail as a mask for thoughtlessness. I struggle, as do my students, to resist an education and a culture that puts a premium on facts. And I succeed to a greater or lesser extent depending on the individual concerned. But all of my students, through attempting to master **strong** critical thinking learn invaluable lessons. They see that they can be more deeply rational than they would have imagined before the course. They learn many new and interesting concepts. And most importantly they speak and they write. They refine and they extend their skills. They discover the role of the creative intelligence and of the intellectual imagination. They come to respect each others' opinions and become more wary of their own preconceptions. And they see thought as an expression of life.⁴

IV

The idea of **strong** critical thinking adds one more pair to the list of apparently competing goals that govern pedagogy and content in critical thinking courses. The contrast strong/weak, like the contrast formal/informal and teaching skills/teaching content, seems to require hard choices and unwelcome compromises. Despite this appearance of dichotomy, it is my experience that being concerned with implementation resolves these polarities through the classroom process. My Logical Thinking course is firmly anchored in the conviction that the primary role of critical thinking is to help students become more competent as **students** (as opposed to, for example, as citizens, or as consumers, or as revolutionaries). By looking at the range of courses that students are confronted with, I discovered a role for both informal and formal logic.⁵ My belief that thinking can only be taught through speaking and writing reinforced my concern that many informal logic texts tend to trivialize arguments by taking them out of context. These concerns resulted in a teaching

strategy that both increases the depth of analysis and demands the large expenditure of effort in speaking and writing that is the *sine qua non* for developing fluency and skill. Most surprisingly, I found that responding to student's needs rather than following a tightly structured curriculum forced me to present a richly varied set of concepts while enabling me to cover more ground in one semester than I would have thought possible.

The field of informal logic has been characterized by two focuses of concern: classroom techniques and theoretical analysis. These two approaches to the analysis of critical thinking appear to be another pair of dichotomies requiring incompatible processes and demanding opposing goals. My attempt to resolve the various substantive and competing demands on the structuring of Logical Thinking led to the realization that it was by simultaneously resolving both theoretical and pedagogical issues that I could see my way to the resolution of, apparently, competing requirements. Any analysis of the basic concepts of informal logic requires a clear conception of the process through which thought is expressed. And so the theory of teaching critical thinking is, necessarily, bound to the analysis of the needs of students as readers, speakers and writers. Similarly, any understanding of the process through which cognitive skills are developed requires a theoretic grasp of the conceptual structures that underlie the competent performance of relevant tasks. Informal Logic is the locus of many and diverse concerns. It, more than most other areas in Philosophy, requires a commitment to that most hoary of all of the philosophical verities: practice without theory is blind; theory without practice is empty.

Notes

1. Paul, Richard, "Teaching Critical Thinking in the 'Strong' Sense," in *Informal Logic Newsletter*, vol. iv, no. 2, May 1982, pp.2-7. I have freely adopted (and adapted) Paul's terminology. I gratefully acknowledge his priority in the identification and the labeling of this crucial concept.
2. Kahane, Howard, *Logic and Contemporary Rhetoric*, Belmont CA: Wadsworth Pub. Co., 1980, 3rd edition.
3. The paper assignment comes at, roughly, the tenth week of a fifteen week semester. For the remainder of the course I follow a different procedure. See my paper, "A Role for Formal Logic in Informal Logic Courses," in *Informal Logic Newsletter*, vol iv, no. 2 May 1982, pp.13-15, for details.
4. My students' tendency to revert to a "fact" structure makes me suspicious of the apparent ease with which Paul's students come to the awareness of the deep levels of analysis and criticism that he describes. There are a number of theories, most of them derived from neo-Marxist analysis, that offer ready made analytic structures, especially relevant to social and cultural criticism. I consider the inculcation of such pre-fabricated analytic models the opposite of critical thinking in any sense; and I hope that Paul's analysis of the "profoundly 'nationalistic' bias" of his students (pp. 5-6) does not represent the facile left-wing stereotype that was once fashionable as an alternative to careful analysis.
5. See my, "A Role for Formal Logic...", *loc.cit.* ●

Mark Weinstein, Department of Philosophy, Hunter College, CUNY, 695 Park Avenue, New York, N.Y. 10021

Teaching Informal Logic as an Emancipatory Activity

William Maker
Clemson University

Informal logic is a relatively new subject in the philosophy curriculum, one which has emerged along with other "practical" philosophy courses such as business ethics in recent years. I think it is probably safe to say that few of us have had any formal training in it. As undergraduates we may have had a course in traditional non-symbolic logic, most likely with Copi's classic *Introduction to Logic* as the text. Perhaps we only studied symbolic logic. In any case, an informal poll of various colleagues who emerged from grad school around the same time as I did (1979) and who have been called upon to teach informal logic confirmed that my own experiences were by no means unique. Shortly after beginning to teach informal logic I discovered the following: That no course in logic I had had prepared me for teaching this sort of logic; that although I was teaching various upper-level courses this was the hardest one to teach; that it was difficult to find a suitable text and to decide on an overall perspective from which to teach the course. And although I am not a specialist in logic, I found myself at the end of the first semester longing for the good old days—in my case only one year before—of teaching symbolic logic.

Especially for those of us who are not logicians by training, teaching informal logic is a unique experience, one which we may well regard, at least initially, as a burden, as something we are required to do because students need such a course, because enrollments in it are high and because we are the junior members of the department. Beyond these practical matters, the fact that informal logic is designed to meet a practical need—teaching students how to reason logically in a wide variety of contexts—also contributes to the unease some of us may feel about teaching it. In our other courses, even in introduction to philosophy, we are on home ground, dealing with a subject we are committed to and know well, a subject we love and regard as possessing a special significance and importance. But the connection between our own philosophical interests and labors and informal logic may seem tenuous at best. The situation appears comparable to that faced by our colleagues in literature who are called upon to teach composition.

There are various possible responses to this situation. One is to regard the teaching of informal logic as a necessary burden, as part of the price one pays for being