

total is within the federal budget. The other way in which salespersons take advantage of this fallacy is in stressing the monthly payments associated with a purchase rather than the total amount. Anybody can afford pennies a week; unless, of course, the total number of pennies from all payments is more than the weekly income.

The central thread of discussion in ethics during the past two decades has also been through part/whole relationships. What I have in mind are the examples, arguments, and principles which have led to the dominance of rule utilitarian theories. Whether we examine generalization arguments in ethics, the distinction between acts and practices, or Garret Hardin's notion of the tragedy of the commons we find the same territory being surveyed. Consider the problem of air pollution from automobiles. The amount of pollutant coming from my car is well within the ability of the atmosphere to absorb. Yet the amount coming from all of our automobiles is not. Why should I have to drive a (relatively) nonpolluting vehicle when the one that I now drive has no significant impact on the environment? As an individual act, driving my kind of car is not harmful. But, considered as a social practice, considerable harm must arise. It is right for me to drive my car if and only if it is right for everyone to drive automobiles in similar condition. But it is wrong for everyone to do so. Thus it is wrong for me to do so. Attempting to justify my activity by reference to its consequences in isolation is irrelevant, at least according to the now dominant way of thinking among moralists. Individual actions derive their moral value from the wholes of which they are parts. If the whole is wrong so are the parts.

This last move is not the fallacy of division. This is because to say that an act is wrong is just to say that the whole of which it is a part is wrong. There is no way, in general, to evaluate the morality of acts apart from the wholes which they constitute. This is what leads to the tragedy of the commons. We each perform acts (parts) rather than practices (wholes). No individual person performs the practice (the whole) and so no one person is responsible. What is done in common or held in common leads to tragedy for no one person is available to take responsibility. When responsibility is held in common it is easy for each of us to ignore it. Only by seeing ourselves as entities who are people only by being part of a whole can we begin to comprehend that we do have responsibility even though no act that we perform has serious consequences.

Let me conclude on this high note. There are other areas of modern argumentation or philosophy which also demand an analysis in terms of part/whole relationships. To name only a few: frequency theory of probability; the relationship between the high degree of accuracy of mortality tables and the indeterminacy of our individual deaths; the reconciliation of the use of determinism in the social sciences and the concept of free will; the way in which each item in a collection of data may be explained away, has a low probability of confirmation, and yet the collection may provide strong evidence as a whole; and finally, Berkeley's astounding claim that objects are mind-dependent since each part of

them, their various attributes, are mind-dependent. The last example brings forth a very important point on which to end. Some of our most significant disagreements are really ones over whether a series should be analyzed in terms of its parts or whether it can only be understood as a whole. Berkeley assumed that objects are mere concatenations of their parts; contemporary moralists argue that morality is a phenomenon of the whole; and we still debate these issues. *

critical reviews

Toulmin's Bold Experiment

Ralph H. Johnson
University of Windsor

EDITORS' NOTE

This is the second part of Professor Johnson's critical review of An Introduction to Reasoning by Stephen Toulmin, Richard Rieke and Allan Janik. The first part appeared in ILN, iii.2 (March 1981), pp. 16-27. Section I of Johnson's review was his Introduction; Section II reviewed Toulmin's (et al.) theory of argument in Parts One and Two of the book. In Section III, below, Johnson focuses on Toulmin's theory of criticism as set forth in Part Three of the text; in Section IV he presents his answers to the questions he proposed in Section I as the appropriate matrix for this review.

Footnotes for both parts of Johnson's review are found at the end of this second part. We apologize for the inconvenience; the omission of the footnotes for the first part from the last issue was an oversight.

III. TOULMIN'S THEORY OF CRITICISM (PART III)

The purpose of Part III, says Toulmin, is to shift the focus from the abstract, general level of Parts I and II to consider how rea-

soning actually works and to questions that arise when arguments encounter criticism in actual practice. This description is not entirely accurate. After all, Parts I and II have not been all that abstract and indeed have at times prefigured the theory of criticism that becomes explicit here. It is to that theory that I shall address myself, though I also want to say something about Toulmin's position on two other topics: the burden of proof, and fallacies.

A. Standards of criticism. Let us assume that we have adopted Toulmin's pattern of analysis. Once we have laid out the structure of the argument, what will be the criteria or standards by which we assess it? Recalling an earlier passage in which Toulmin stated that some standards are field-invariant while others are field-dependent, let us review the criteria that have emerged prior to Part III.

Here is what Toulmin says in Chapter 2:

The claims involved in real-life arguments are, accordingly, well founded only if sufficient grounds of the appropriate and relevant kind can be offered in their support. These grounds must be connected to the claims by reliable, applicable warrants, which are in turn capable of being justified by appeal to sufficient backing of the relevant kind. (27)

Here Toulmin suggests that there are three standards or criteria to be used in assessing the grounds: (1) sufficiency; (2) appropriateness; (3) relevance. The standards for warrants are two: (1) reliability; (2) applicability. The standards for the backing are two also: (1) sufficiency; (2) relevance.

In Chapter 3, however, a slightly different picture emerges:

What makes one particular set of grounds or facts acceptable and relevant for the purposes of this or that specific claim? (34)

Here the standards for appraising grounds are (1) acceptability and (2) relevance. Sufficiency and appropriateness have been dropped from the previous list and acceptability has been added. I find this sort of shifting around distressing, the more so because this is not an isolated instance. Moreover, of the four criteria for the appraisal of grounds mentioned thus far, Toulmin attempts an analysis of only one--relevance.

Toulmin on relevance. One of the knottiest problems for logicians, both formal and informal, has been the concept of relevance. A formal analysis of the concept appears little more than a hope destined to be frustrated, in spite of the heroic attempts by Belnap and Anderson. Informal analyses have not fared much better. Yet argument analysis is hopelessly paralyzed unless the critic has mastered the art of making judgements about relevance, and defending them.

Toulmin's position does not advance matters very far. He asks: "What makes one particular set of grounds or facts acceptable and relevant for the purposes of this or that specific claim?" (34) Knowing Toulmin's predilection for pivoting his position around the concept of a field, the reader will not be surprised

at Toulmin's answer:

In certain respects, the conditions of relevance of grounds are fully intelligible only when we take into account the larger demands of the rational enterprise within which A's claim is presented. . . . The precise status of A's claim (as a scientific hypothesis, a criminal indictment, or a medical diagnosis, say) will determine the criteria by which he can select certain items of information as being to the point for scientific (or legal or medical) purposes, while setting others aside as being beside the point and having nothing to do with the case.

Accordingly, relevance is a substantive matter, to be discussed in science by scientists, in law by lawyers, and so on. There are very few "conditions of relevance" of an entirely general kind that hold good in all fields and forums and apply to all types of arguments. (34)

I find this somewhat bewildering. On the one hand, Toulmin says that relevance is a substantive matter. Presumably this means that determinations of relevance are contextual in nature and that field-invariant criteria are not available. But then he goes on to suggest that there are some ("very few") conditions of relevance that are universally applicable; i.e., field-invariant! Now so far as I can see, Toulmin nowhere lists any such conditions, which leads me to think that he does not really mean this. So I take it that his real position is that relevance is a substantive matter.

There is something to be said for this view. Certainly we would not expect laymen to be able to make judgements about relevance in the fields of law and medicine with any degree of reliability. But this fact constitutes a strong argument for the contextual position only if we grant the assumption underlying it: that all arguments can be assigned to fields and that all fields resemble, in the significant respect, those of law and medicine. Since I am reluctant to give Toulmin that assumption, his position on relevance, though plausible, requires further support.

Let me return then to what Toulmin says about standards prior to Part III. In Chapter 5, while speaking of backing, he says this about warrants:

. . . it is one thing to state a warrant, but it is quite another thing to show that it can be relied on as sound, relevant and weighty. (58)

Here again we find that the criteria suggested for the appraisal of warrants differ from those mentioned earlier. Here Toulmin has added soundness, relevance and weight as criteria to be used in evaluating warrants.

In Chapter 7, Toulmin makes the point that the elements are functionally interdependent, but once again we find him juggling the criteria for grounds:

We need to remark on three points in particular about this interdependence. First, the relevance of any factual information (grounds)

to a claim depends in part on the general rules, principles, or other warrants available for legitimating claims of the type in question. . . . That is to say, in order to ensure that our grounds are not merely true but also weighty and relevant, we must look at the warrant relied on to authorize the step from these facts to the present claim. (85)

So apparently we must add to the list of criteria for appraising grounds two more: truth and weight. That aside, we need to understand that Toulmin's basic point here is that the elements are not to be evaluated in isolation:

There will be no question, for instance, of completing the scrutiny of the grounds entirely before we have looked at warrants, backing and all the rest. Our critical judgement of the acceptability of any one element will remain only provisional until the whole argument has been set out explicitly and we have had the chance of checking back on the bearing of possible rebuttals, on the relevance of the grounds, and on the applicability of the warrant. (86)

We come then, finally, to Chapter 8, where Toulmin's account of the standards to be used is scaled down considerably. As if to summarize those earlier discussions, Toulmin says:

It must be clear just what kind of issues the argument is intended to raise (aesthetic rather than scientific, say, or legal rather than psychological) and what its underlying purpose is. (106)

In other words, we have to be able to assign the argument to some field or rational enterprise.

The grounds on which it rests must be relevant to the claim made in the argument and sufficient to support it. (106)

Here Toulmin mentions only two of the six criteria that have cropped up in earlier passages. What, we must wonder, has become of the other four? Perhaps appropriateness is only a synonym for relevance, and possibly weight is just another term for sufficiency. But what of acceptability? and truth? Are these criteria to be used in evaluating the grounds, or not? If they are, what is meant by them? No satisfactory answers are given to these questions.

The warrant being relied on to guarantee this support must be applicable to the case under discussion and it must be based on solid backing. (86)

Here only one of the criteria listed before turns up: applicability. What has happened to all the others? What is meant by solid backing?

The modality, or strength, of the resulting claim must be made explicit, and the possible rebuttals, or exceptions, must be well understood. (86)

Does this mean that if an argument is put forth without any modality (as, I believe, happens quite regularly), we may criticize the argument for that omission? Does such a mode of criticism, if it is one, deserve to be ranked with, for example, a criticism of the grounds as irrelevant? Questions like these receive no answer in the text, which must be accounted a fairly serious criticism.

The topics covered in the remainder of Chapter 8, though not without merit, do nothing to remove the clouds which hang over Toulmin's theory of criticism. He contrasts the merits of pairs of arguments from various fields and is able to show why, in each instance, one of the pair is a better argument than its partner. Cross-type comparisons are ruled out, however. An illuminating section contrasting adversary with consensus procedures concludes with the crucial point:

Context determines criteria.

In what terms we criticize and judge the merits of particular arguments and claims depends on their "type" and so on their "field." Whether it be politics or ethics, science or aesthetics, psychiatry or law, the underlying goals of the human enterprise concerned determine the fundamental context for the arguments and claims in question, and so give them their power to "carry conviction," by establishing claims on a secure basis. (120)

The question of how far Toulmin is willing to go in the direction of "field-invariant" standards has become unmistakably clear. Standards or criteria are context or field-dependent. Nowhere has Toulmin cited a single instance of a "field-invariant" standard or rule of procedure, in spite of hints in the early going that there are some. Nor should one be misled by Toulmin's apparent willingness to cite standards like relevance and sufficiency, for these turn out, on analysis, to be field-dependent.

Hence, Toulmin's position on criteria of evaluation comes very close to relativism, a point that he himself is cognizant of. In the Teaching Guide, he says:

The second main point presented in this chapter (Chapter 8) has to do with our seemingly "relativist"--but by no means arbitrary--approach to argumentation. Arguments can be rationally compared, only when they have to do with the same substantive questions. This means that our ability to argue effectively is directly related to our knowledge of the subject under discussion. (TG, 35)

If this is meant to be a rejoinder to the charge of relativism, it is not very satisfying. First, the question of what sorts of criteria there are for the evaluation of arguments is not restricted to the comparison of arguments. It has to do as well with the evaluation of individual arguments. That such evaluation must get along without field-invariant standards has not been shown. Nor does this follow from the fact that in order to argue and appraise arguments, we must have

some knowledge of the subject under discussion. For it might also be argued (by the non-relativist) that we also must have a knowledge of the standards and criteria of good arguments, and that these standards are not all field-dependent. Perhaps some form of relativism is inevitable, but Toulmin has not, I think, shown this to be the case.

Let me summarize my problems with Toulmin's position on standards and criteria before making two final points. Toulmin's treatment of this business is very loose: he never seems to give the same list of standards twice and he does not provide the reader with much of an analysis of any of them, except relevance. There are apparent inconsistencies in what he says, which are most easily reconciled by taking Toulmin to be advocating the view that all standards or criteria are field-dependent. Not only does this involve the problems earlier mentioned (ILN, iii.2) about the whole notion of a field, but it also takes him in the direction of relativism--a position he apparently wishes to embrace but has not provided adequate arguments for.

In addition to all this, Toulmin says nothing at all about the need for discrimination in criticism. Certainly, an argument which has omitted a modal qualifier is not guilty of a logical failing that is of the same magnitude as an argument that has been found guilty of producing irrelevant or insufficient grounds. To be an effective critic, one must be able to make such discriminations, but Toulmin says nothing about this important matter. Finally, I think it would have been useful had Toulmin taken a specimen argument and subjected it to the sorts of criticism which, on his theory, are appropriate. That would have given the reader a richer understanding of how standards and criteria are brought to bear on arguments, once they have been analyzed.

B. Burden of proof. In Chapter 9, Toulmin spends some time on the question of where the burden of proof lies in an argument. This is a subject of some importance yet one too rarely dealt with in introductory logic texts. Although Toulmin's treatment contains nothing new or astonishing, it is quite well worked out and presented and should perhaps serve to restrain the polemical sort of student who wants to challenge everything. For, as Toulmin says, "it is only when enough has been said to create a genuine and specific ground for doubt that there exists an occasion for rational discussion". (123)

The example Toulmin uses here is a timely enough one, about the use of food additives. The question is this:

Should commercial food processors have been in the position, all along, of having to justify their use of particular additives in advance of actually using them? Or was the initial burden, rather, on biomedical scientists and the FDA to "show cause" by producing scientific evidence of risk? (125)

Toulmin does not answer this question directly. Such questions are hard to answer, as he notes in the Teaching Guide:

Questions about "the burden of proof" are very important for criticism in concrete cases. Unfortunately, whereas the law has clear procedures for determining just what has to be demonstrated by whom and in what order, there are very few guidelines in everyday life to this all important issue. (TG, 37)

Instead, Toulmin speaks of "initial presumptions" (128); that is, opinions that it is in general reasonable to adopt, in the absence of solid arguments to the contrary. He illustrates this idea with examples from science and law, concluding (somewhat to my surprise):

So, in general, the practical demands of everyday argumentation make it unavoidable that we should rely on "initial presumptions," "prior probabilities," and the like. (128)

It would have been instructive had Toulmin been slightly more generous and given us some examples, from the realm of everyday argumentation, of what might be allowed as an initial presumption. Still it is to his credit to have raised this issue of the burden of proof. That he has not been able to give us the final solution is not so much cause for regret as it is a summons to informal logicians to further inquiry.

Chapter 9 concludes with sections on "The history of practical reasoning" (which should give the student an idea of how modes of reasoning have changed over time) and "Historical variability and skepticism" (which does a fine job of showing how to nip jejune skepticism in the bud).

Chapter 10, "Language, communication and reasoning," is the least useful chapter. Its focus is language and its role, but there is not very much of substance here. For example, the section on argument and definition is very brief. Toulmin does not mention the various kinds of definition, nor does he give sufficient attention to the question of just how definitions figure in arguments.

C. Fallacies. I had hoped that Toulmin's novel approach to the analysis of arguments would give rise to some new insights into the topic of fallacies, or at the very least make for an exciting treatment of them. Unfortunately, my hopes were frustrated. Toulmin's treatment of fallacies never ventures much beyond the conventional approach. He divides fallacies into two sorts: fallacies of unwarranted assumptions and fallacies of ambiguity--a fairly standard division. Under the former, Toulmin treats: hasty generalization, accident, false cause, false analogy, poisoning the wells, begging the question, evading the issue, appeals to authority, the appeal to the people, the appeal to compassion, and the appeal to force. (There is some doubt in my mind whether the last two are, in any way, argumentative strategies, but that's another issue.) Under the latter heading, Toulmin treats: equivocation, amphiboly, accent, composition and division, and figure of speech. Following the traditional wisdom about such lists, Toulmin says that no list of fallacies can be complete. That bromide cannot, it

seems to me, justify the omission of several of the most important fallacies from either heading. Certainly inconsistency and straw man belong on any roster. Two wrongs and provincialism occur with enough frequency in ordinary discourse to have some claim to representation also.¹⁰

There are other problems. The examples cited in the text are often artificial and thereby diminish the value of the account. Sometimes they aren't even bona fide examples of fallacy, as when in dealing with the fallacy of accent, Toulmin says: "A second type of fallacy of accent may be found in many advertisements and newspaper headlines" (182). Newspaper headlines can scarcely be construed as arguments, so that whatever infelicities they may occasionally contain it only confuses matters to refer to them as fallacies.¹¹ Then, too, I must wonder if Toulmin's presentations are sufficiently clear and rigorous to offer the student an adequate insight into the nature of the fallacy. Here, for instance, is Toulmin on "the argument against the person: (ad hominem):

The argument against the person is the fallacy of rejecting the claims a person advances simply on the basis of derogatory facts (real or alleged) about the person making the claim. (172)

There are instances where Toulmin's description is satisfied but we shall not want to say that any fallacy has been committed. Suppose, to cite a classic example, a lawyer rejects a witness's claim about an incident he claims to have seen on the grounds that (a) the witness is a known liar or (b) the witness was not actually present. In a court of law, where the credibility of the witness is a crucial factor in deciding whether or not to accept the testimony, the lawyer can reject the claim without committing any fallacy at all. The point is that it is sometimes permissible to attack a person's background or character instead of (or as a means to) attacking the person's claim, so that the fallacy of the argument against the person ought really to be defined as irrelevant attacks on the person.

In discussing the appeal to the people, Toulmin says:

The appeal to the people refers to fallacious attempts to justify a claim on the basis of its supposed popularity. The fact that many members of a given group hold some belief is offered as evidence that this belief is true. (174)

The account is not quite accurate. For we reason in this way all the time when we draw inferences about a population from a sample. The fact that many members of a given group (a well drawn sample) hold a certain belief (for instance, that Reagan will win the election) can surely be some evidence for the truth of that belief. And isn't the fact that large numbers of people buy a certain product (and hence presumably believe it is a good one) some evidence that the product is a good one?

Rather than continue to chip away at Toulmin's accounts of the individual fallacies, I would like to look at what he says at the beginning of the chapter. Close to the beginning, he says:

Just as certain widely accepted ways of constructing arguments are recognized as unsound across a wide range of fields, so too certain modes of procedure in argumentation have traditionally been recognized as unsound. These are termed fallacies. (157)

On the next page, Toulmin says: "Fallacies are arguments that are persuasive but unsound". (158) I don't think this is a good definition at all. In the first place, these fallacies can't be all that persuasive if Toulmin (and many others) can see through them. Second, what meaning are we to attach to the term "unsound" here? The traditional meaning would be "an argument which is either invalid or has one or more false premises, or both." But what sense can be made of this in Toulmin's approach to the analysis of arguments? Hence it seems to me that his definition of fallacy has not been integrated into his pattern of analysis.

A few lines later, we read:

Most disturbingly to some people, arguments that are fallacious in one context may prove to be quite solid in another context. So we shall not be able to identify any intrinsically fallacious forms of argument; instead, we shall try to indicate why certain kinds of argument are, in practice, fallacious in this or that kind of context. (157)

I have difficulty squaring this remark with the previous one. That is, if, as Toulmin said earlier, certain modes of procedure have been recognized as unsound, what was the basis of that recognition? Was it contextual unsoundness that was recognized? But what is that? contextual validity? contextual truth? The fuzziness of these remarks caused me to look carefully at Toulmin's treatment of the individual fallacies for examples of arguments that were fallacious in one context but solid in another. I thought I might find an illustration of this point in the treatment of the argument against the person, but, as I have already shown, I did not.

Let us look at his treatment of the fallacy of evading the issue:

Of course, not all such evasions of the issue are necessarily fallacious. Questioners do not always have a right to the information they request. Students, for instance, do not generally have a right to ask their teachers what questions will appear in their examination. (171)

Of course. A teacher who denies a student request for exam questions can hardly be said to have evaded the issue, for there is no issue! The fallacy can occur only when the person being challenged is under some sort of logical obligation to deal with the issue. Toulmin continues:

The situation in this case is significantly different from that between a politician and his constituents, whom it is his function to represent in Congress. Here as elsewhere, therefore, whether this argumentative procedure is fallacious or no depends

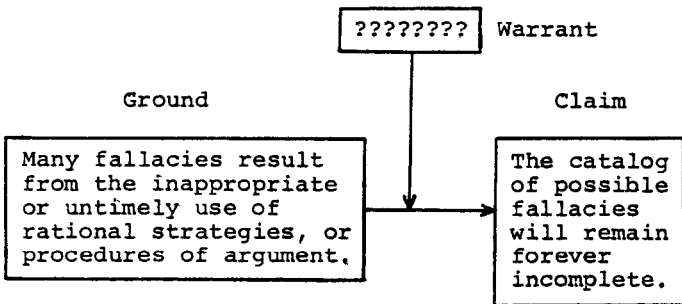
on the situation in which it is employed. (171) (initial emphasis added)

Doesn't it seem odd to describe the technique of evading the issue as an argumentative procedure, since it is the very opposite? A politician who attempts to turn aside legitimate questions about a position he has taken may indeed be clever rhetorically and may succeed. But such manoeuvres hardly seem classifiable as argumentative procedures and most certainly are instances of evading the issue. On the other hand, there may be times when a politician can rightfully refuse to supply information requested of him by his colleagues or constituents. These are not situations that can be described as "evading the issue." They are rather "the rightful withholding of information." So that wherever one can truly describe a situation as evading the issue, a fallacy has indeed occurred.

To bring this section to a close, I want to talk briefly about the causes of fallacy. Here is Toulmin:

Many fallacies result from the inappropriate or untimely use of rational strategies, or procedures of argument, so the catalog of possible fallacies--like the catalog of topics, or types of argument--will forever remain incomplete. (People can always invent new ways of going astray in their reasoning!)¹² (157)

This is a curious argument. Suppose we investigate it using Toulmin's schema:



Is this a good argument? Note, first, the absence of any modal qualifier or rebuttal. Second, I question the ground. Are fallacies caused by the untimely or inappropriate use of rational strategy? Or rather from the lack of mastery and appreciation of their use? I find it hard to accept the view that someone who commits a common causal fallacy like post hoc does so as a result of having misused a rational strategy. What rational strategy is being untimely used when someone begs the question, or is guilty of ad hominem? Such fallacies seem rather to be caused by carelessness in reasoning or by the unwarranted intrusion of emotion. We reason fallaciously, for the most part, when we fail to follow rational strategy; when, for example, we forthwith promote a temporal sequence into a causal relationship without sufficient inquiry. People do this when their reasoning skills are either undeveloped or impaired by other factors. And I think when it comes right down to it, Toulmin agrees with me:

So the real danger behind the fallacy of false cause is the danger of oversimplification. In ordinary discourse, we often do not stop to articulate our warrants, let alone scrutinize our backing and modal qualifiers. By paying closer attention . . . (165)

In speaking of the argument against the person, he says:

The most blatant forms of this fallacy reduce to nothing better than name calling--and it is an unfortunate fact that we are all of us apt to take such tactics seriously when we are on the opposite side of an argument from the claimant in question. (172-73)

Third, I would be curious to know how Toulmin would formulate the warrant (and the backing) that is being appealed to implicitly here. I presume that the warrant comes from the field of informal logic, whose province it is to formulate and investigate such warrants and study their backing.

D. Summary. The real function of Part III is to present a theory of criticism, growing out of the theory of argument in Parts I and II. The main problem I have with Toulmin's theory of criticism is that it is not sufficiently developed. This problem is particularly acute in the matter of standards or criteria, where the exposition is very loose, and important concepts are left unanalyzed and unexplained. Toulmin gives lots of good advice about criticizing arguments, but that advice is too rarely embodied in actual examples of criticism and not sufficiently funded at the conceptual level. Another serious shortcoming is the absence of any mention of the need for discrimination in the presentation of one's criticisms of an argument. Some of these same problems crop up also in the material on the burden of proof, which is fine as far as it goes, and in the chapter on fallacies, which is quite uneven.

In some ways, Toulmin's theory of criticism seems largely (and strangely) independent of his theory of argument. One would have thought that a new theory of argument, such as he has offered in Part II, would have brought new dimensions to the theory of criticism. But this is not the case. The questions Toulmin urges us to ask are undoubtedly the right sort: Are the grounds relevant and sufficient to support the claim? Is the warrant relevant and based on solid backing? But these are the same sorts of question that one would ask (but for terminological differences) if one approached the argument from the traditional framework.¹³ So it seems to me that the interplay between Toulmin's theory of argument and his theory of criticism is less robust than one would have expected.

Although I have not had the opportunity in this review to deal at all with Part IV, in which Toulmin applies his mode of analysis to special fields of reasoning, I want to say that I thought these chapters were extremely well-written, lucid, and certain to give teacher and student alike a deeper insight into and appreciation of various types of reasoning.

On the whole, then, it is my judgement that An Introduction to Reasoning is an intriguing experiment in argument analysis that does not fully satisfy. The theory of argument which lies at the core encounters some fairly serious problems, and the theory of criticism does not seem sufficiently developed or integrated with the theory of argument. The problems are of such a degree that I must finally answer the question posed in the Introduction by saying: "No. This is not the new paradigm. At any rate, not yet." However, it is quite possible that Toulmin's approach can be amended or revised to meet the criticisms I have offered.

Although Toulmin's text fails when judged by this criterion, let us remember that the criterion is an exceedingly difficult one to meet and not one that would ordinarily be applied to a text. The very fact that I decided to use it as my criterion says much about the vision that informs this experiment, and perhaps accounts for the largely critical tone of my remarks. I would gladly have added page after page reciting its virtues but for the inordinate length that would have added. Briefly, let me say that I cannot think of another text which imparts a deeper appreciation of the reasoning process than does this one. So that in spite of its problems, An Introduction to Reasoning is, in so many respects, an admirable text and one which should achieve the goal implicitly lodged in its title.

Toulmin concludes his Preface with these words:

Finally, in this text we have attempted to discuss practical argumentation in a wide variety of fields and disciplines. We shall be grateful for reactions from instructors who use the book in different kinds of classes. In a rapidly developing field of teaching and study, we shall need to pool our experience if we are to develop a well-founded tradition of teaching and a common body of understanding about practical reasoning and argumentation. (vi)

It may seem that this review, written by one who has not yet used the text, has done little else but make waves. It is then my hope that those waves will, in the long run, contribute to the pool of experience and help bring about the common body of understanding which this bold experiment has certainly enriched. *

FOOTNOTES

1. Stephen Toulmin, Richard Rieke and Allan Janik, An Introduction to Reasoning, (New York: Macmillan Publishing Co., Inc., 1979.) References to the text are incorporated into the citation. I shall hereafter refer to Toulmin only as the author and trust that Messrs. Rieke and Janik will not feel slighted. References to the Teaching Guide will be noted by TG.

2. Cf. Ralph H. Johnson and J. Anthony Blair, "The Recent Development of Informal Logic," in Blair and Johnson, eds., Informal Logic: The First International Symposium (Inverness, CA: Edgepress, 1980), pp. 4-28.

3. Ibid., pp. 11-24.

4. Cf. for example, R. H. Johnson and J. A. Blair, Logical Self-Defense, (Toronto: McGraw-Hill Ryerson, 1977.)

5. Ibid., p. 142.

6. It might be more accurate to refer to such a model as a dynamic one.

7. I think Thomas's approach to missing premises is an instance of what I would call a quasi-deductivist approach. Cf. Stephen Thomas, Practical Reasoning in Natural Language, 2nd Edition, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1981), pp. 171-183.

8. Howard Kahane, Logic and Contemporary Rhetoric (Belmont, CA: Wadsworth Publishing Company, 1971; 3rd ed. 1980), p. 143.

9. Ralph H. Johnson, "The Shape We're In: A Review of Some Non-formal Methods of Argument Analysis," a paper presented at the "The New Logic Course" session of the Western Conference on Teaching Philosophy at the American Philosophical Association Western Division Meetings, Milwaukee, Wisconsin, April 24, 1981. The paper is forthcoming in Teaching Philosophy, next issue.

10. For treatments of these fallacies, the reader is referred to Johnson and Blair, Logical Self-Defense and to Kahane's Logic and Contemporary Rhetoric.

11. Toulmin's parenthetical comment elicits this rejoinder from me: "Show us some of the new ways of going astray that have been invented recently." I, for one, would welcome a revised catalog of fallacies, which deleted those that are pretty well out of stock (such as amphiboly) and replaced them with newer models.

12. It is also a mistake, though less obvious, to think of advertisements as arguments. For a discussion of this point, cf., Logical Self-Defense, Chapter 10.

13. The approach to argument analysis adopted in Logical Self-Defense remains within the traditional framework. The standards listed there for the evaluation of arguments are: relevance, sufficiency, and acceptability. Cf., pp. 7-9.

Baum and Engel

Nicholas Griffin
McMaster University

Ethical Arguments for Analysis. Brief Edition.
Ed. by Robert Baum (New York: Holt, Rinehart
and Winston, 1979.) Pp. 220 + vii.

Analyzing Informal Fallacies. S. Morris Engel.
(Englewood Cliffs: Prentice-Hall, 1980.)
Pp. 184 + xvi.

Both of these books consist of passages for analysis taken primarily from popular sources (newspapers, advertisements and political speeches, for the most part). Apart from this, however, they are very different. Baum's examples are all concerned with contemporary moral issues--indeed, his book was originally designed as a "supplementary text for ethics courses" (Baum, p. v)--whereas Engel's are putatively all examples of some form of fallacy. Engel includes no less than 573 examples, most of them, understandably, very short, whereas Baum reproduces longer pieces in facsimile (although some of Baum's examples are little more than a paragraph long; and, like Engel, he occasionally includes cartoons).

Engel's book is misleadingly titled. The "analysis" of which the title speaks consists merely of the classification of his examples into three main categories (fallacies of ambiguity, presumption, and relevance) and their attendant subdivisions (there are perfunctory comments on selected examples). Even as a classification system the book is riddled with inadequacies and errors at every level. The principles of the classification are not explained and the subcategories appear largely arbitrary: e.g., begging the question and question-begging epithets are two distinct subdivisions of fallacies of presumption; while genetic fallacy and abusive *ad hominem* are both included under "personal attack". Nor is it clear why fallacies in which "one argues A is so because of B (where B is even more suspect than A)" (Engel, pp. 54-5) should be regarded as cases of begging the question.

The various criteria for the different classifications are often vague and rarely provide more detail than could be found in a dictionary, and sometimes less. Thus amphiboly is described as coming about "from the careless way we put our words together in sentences, thus giving rise to meanings we had not intended to convey" (Engel, p. 2). The Oxford English Dictionary, by contrast, gives us: "Ambiguity arising from the uncertain construction of a sentence or clause, of which the individual words are unequivocal", which is much better: on Engel's account just about any failure, due to careless use of language, to make clear our intended meanings would count as amphiboly. More curiously still the shop sign "Brains 25¢"

is treated as a fallacy of equivocation, rather than amphiboly, despite the fact that equivocations are said to occur when "a key term in an argument is allowed to shift its meaning in the course of an argument" (p. 14). "Brains 25¢" involves no argument nor any shift of meaning. On pp. 35-6 Engel treats another shop sign, "We never close. Open Every Night til Midnight", as an example of amphiboly rather than of self-contradiction (or misspelling).

Even Engel's generic notion of a fallacy is defective since it seems to encompass an arbitrary selection of linguistic oddities and even poetic devices such as personification--though not (for unexplained reasons) related forms of metaphor. Apart from these cases, many of Engel's supposed fallacies do not occur in arguments. For example, "Our low prices are the direct result of our lowered price policy" (Engel, p. 57) is hardly a case of begging the question, nor even of vacuousness (since the low prices might have been a result of something other than a policy, e.g., a glutted market). A similar case occurs on the same page where Hamlet's report of the ghost's speech, "There's ne'er a villain dwelling in all Denmark/ But he's an arrant knave", is misquoted. (Engel mispunctuates the example in such a way as to destroy its sense--and the point he wished to make about it.)

Engel's collection, in fact, is little more than a collection of linguistic curiosities, ill-organized and poorly explained. Fallacy theory is as yet lamentably under-developed, but it should nonetheless have been possible to produce a classification of fallacies less subject to vagaries and exceptions. Baum sets himself an easier task in that he classifies his passages not according to their logical features, but by subject matter. He has twelve divisions according as his examples relate to interpersonal relations, victimless crimes, sexual morality, censorship, gun control, animal rights, abortion and sterilization, euthanasia, corporate rights, civil disobedience, punishment, and internal relations. His job is also easier because he sets out merely to present the passages, rather than to provide any analysis of them. He does, however, provide a longish introduction in which he works through one short example and makes some (fairly fragmentary and, by his own admission, incomplete) remarks about how arguments should be evaluated. In this his approach is more careful (and also more thoughtful) than Engel's. He points out the need to identify clearly the conclusion and (explicit and implicit) premisses in an argument, and urges, quite properly, that context be taken into account and the principle of charity used in evaluating arguments.

His account is not faultless, however. Line (7c) in his sample analysis is ambiguous, since it is not clear whether "more" modifies "harmful" or "acts". More seriously, he claims that moral arguments can only be good ones if the conclusion specifies alternative courses of action which the agent in question might have taken. Since the number of potential alternative actions is infinite, it is not clear that such a proceeding will ever materially strengthen the conclusion. Surely it would be better to require that the conclusion be issued with a conditional warranty; that the action in

question is wrong or right provided certain specified circumstances pertain. There is also an unwarranted individualism in his approach to ethics. His requirement that an argument can be a moral argument only if an individual agent can be identified (p. 10) rules out important areas of moral discussion, e.g., international relations. Nor is he even-handed in his selection of passages. The section on abortion and sterilization, for example, contains ten anti-abortion texts and only six in favour of liberalized abortion laws (either up to or beyond the liberalization effected briefly by the U.S. Supreme Court decision of 1973). (In addition, the section contains two brief pieces on the completely separate question of sterilization--one from the Knights of Columbus and one from William Buckley advocating the "punitive sterilization" of wastrels--together with a report of a speech by Spiro Agnew so incoherent as to defy classification.)

The main doubts about Baum's book, however, concern its utility. According to Baum it could be used either for informal logic courses concerned with diagnosing fallacies, or for an ethics course concerned with contemporary issues. The trouble is that these two types of course require different things of a book of readings. Put neatly and overly simply: the ethics course requires that the arguments presented be reasonably strong ones; the informal logic course, on the other hand, requires that they be relatively weak. From the point of view of the logic course there are, it is true, plenty of fallacies to expose in Baum's selection. But many of the examples are extremely long if they are to be used for the sort of detailed, extended analysis Baum suggests. And since the book is not arranged according to the logical structure of the arguments involved it would be difficult to use in a systematic way. In short, it would require a good and very selective logic teacher if the book were to be successfully used to teach the evaluation of informal arguments. On the other hand, for an ethics course, the complete lack of any philosophically sophisticated texts should prove a drawback. Since the book was originally designed for an ethics course it is hard to understand why philosophers should have been completely excluded. The result is that important issues which need discussion get omitted or fudged. There is nothing, for example, of the strongest arguments for abortion on demand (those of Judith Thomson, Philosophy and Public Affairs, 1971). It cannot be that such texts were excluded on the grounds that they were too difficult. Thomson's central argument is notably simple, can be easily excerpted from a long article and raises interesting logical questions to boot. Moreover, even journalism by philosophers has been eschewed. Peter Singer, e.g., has written frequently and vividly about animal rights, but is not included--although, ironically enough, two letters to the editor of The National Observer commenting somewhat naively on one of his articles are (p. 99). This is not to say, of course, that all the arguments given are bad ones, but anyone using the book to illuminate contemporary moral issues will have to plough through long pages of tedious confusion and prejudice.

It is not difficult for newspaper readers to find examples of fallacies. What is much more difficult is to find fallacies which can

be easily and briefly presented (together with their relevant context), are susceptible to a relatively straight-forward diagnosis, exemplify important logical points and concern matters which are worth taking seriously. Baum's examples usually satisfy the last two requirements, but in many cases not the others. Engel's examples almost always satisfy the first, but less frequently the other three. However, what is most difficult of all is to present the fallacies in such a way that the collection can be used in a systematic way in the classroom to develop skills in logical evaluation. This is not easy given the present unsatisfactory state of fallacy theory, but informal logic teachers are entitled to more help in this regard from the compilers of books of passages for evaluation than they get from either Baum or Engel. *

discussion note

ANOTHER NOTE ON THE "SURPRISE TEST" PUZZLE

Peter Galle (Capricornia Institute of Advanced Education, Rockhampton, Australia)

[Eds' Note: In ILN, ii.1 we ran a discussion note from Harry Nielsen--a proposed solution of the "surprise test" puzzle. Peter Galle writes: "I found myself dissatisfied with Nielsen's analysis and propose the following as more clearly what has gone wrong with the student's reasoning." Below is a reprint of the puzzle as Nielsen presented it, followed by Galle's analysis:]

A schoolteacher announces to her class that there will be a surprise test during the following week. She specifies that by a "surprise test" she means one which no one could reasonably predict while walking to school. Immediately, one of her brighter students claims that she has contradicted herself. He offers this argument: The surprise test could take place on Friday, for if there had been no test up until Friday, then from that fact and the knowledge that there will be a test any student could predict while walking to school that he was going to be given the test on Friday. So the test must take place between Monday and Thursday. But the