

Truth and Premiss Adequacy
Robert C Pinto
Department of Philosophy
University of Windsor

Introduction

It is a commonplace that to appraise an argument, or the inference it invites,¹ we must determine the adequacy of the premisses on which the argument or inference depends. Among informal logicians there is a growing consensus that, in the context of appraisal, truth does not suffice as a criterion of premiss adequacy (for example, Govier 1987, Feldman 1994). In that consensus, even if a premiss is true, it does not provide a good reason for accepting a conclusion unless it – the premiss – is reasonable to accept. Using the term ‘acceptable’ normatively, and supposing that a premiss is acceptable if and only if it is *reasonable* to accept it, this amounts to the view that acceptability is a necessary condition of premiss adequacy.

This view represents a break with the idea that an argument is a good one if and only if its premisses are true and imply its conclusion. But that idea – the idea of soundness as the criterion for judging arguments – may be of quite recent origin.² It is certainly not contained in the classic formulations of logic found in Aristotle.³

There are a number of different ways in which the idea of acceptability might be spelled out. Does “it is reasonable for *s* to accept *p*” mean the same as “it reasonable for *s* to *believe p*” or as “*s* would be *justified in believing p*”? Though some have construed acceptability that way, I would not - I think it is sometimes reasonable to argue and reason from simplified assumptions that we do not and ought not to believe literally true. Again, is the reasonableness of accepting a premiss to be judged on exclusively epistemological criteria? Though many assume that it is, I think the considerations which make a premiss reasonable to accept do not have to do exclusively with its evidentiary status - they often include other features of the context in the which the argument arises, since we will demand a higher or lower “standard of proof” depending on what is at stake and on the time constraints under which we are working. However, in this paper I will not try to elaborate or defend any one particular way of spelling out what acceptability is.

Even among those who agree that acceptability is a necessary or indispensable condition of premiss adequacy there is a dispute about whether it is a sufficient condition. A number of recent contributors have urged that in determining the adequacy of a premiss, we must consider the truth of each premiss as well as its acceptability.

That considerations of truth should have a role to play in the assessment of arguments seems evident from the fact – pointed out by in Allen 1998⁴ – that even when we have previously judged an argument good, we will in most cases reverse or qualify our judgment if we should discover that one of its premisses is false.⁵ Though I number myself among those who deny that truth a necessary condition of premiss adequacy, I am prepared to concede that in *such* cases - cases where discovering a premiss is false would cause us to reverse or qualify our assessment – falsity in a premiss is a fault or defect in that premiss.⁶ But not every defect in an argument renders it a bad one or deprives it of probative force. Derek Allen (1995, 223-24), for instance,

has claimed that lack of clarity in a premiss is a defect in an argument, but insists quite intelligibly that it is not a necessary condition of an argument's being logically good.

The issue I want to investigate in this paper is whether acceptability is a sufficient condition of premiss adequacy, or whether truth must be recognized as an *additional requirement* a premiss must meet in order to be adequate. Another way of formulating the issue is to ask whether in typical or central cases, falsity of a premiss undermines its adequacy and cancels the probative force of arguments that depend on it.

Goals of this paper

In my 1992 TISIL paper (published as Pinto 1995), I presented arguments intended to show that truth is not a necessary condition of premiss adequacy. To my knowledge, no telling criticisms have yet been made of those arguments. I don't want to rehash those arguments here, but I have included an Appendix to this paper which restates them and which considers the import of some critical remarks that Ralph Johnson has made about one of them.

In this paper, I am going to zero in on three arguments that have been offered on this issue since 1995 – one by Derek Allen, one by Jim Freeman and one by Ralph Johnson. I will try to show that each of these arguments is unsuccessful. But I believe that examining them can lead to a more satisfactory account of premiss adequacy.

It is my view that our appraisals of arguments must be relativized to persons at times. Since, however, that view is one of the things at issue in current disputes about premiss adequacy, I shall avoid the relativizing qualifications in what follows.

Derek Allen

In a series of lucid papers Derek Allen (1995, 1998, 2000) has urged that the theory of argument recognize two conceptions of argument goodness, which he calls *logical goodness* and *epistemological goodness*. In Allen's view an argument may be epistemologically good even though one or more of its premisses are false, but it cannot be logically good if any of its premisses are false.

In this paper, I want to skirt the issue of whether a workable notion of logical goodness which abstracts from the epistemological considerations is available.⁷ What motivates the claim that we need such a conception is the contention that truth must be recognized as a condition of premiss adequacy,⁸ together with the fact that the epistemological conceptions under consideration don't supply this. We can therefore turn directly to the contention that arguments with false premisses are seriously defective – that they lack probative force.

In his OSSA paper, Allen (1998) elaborates a line of reasoning - adumbrated in his Amsterdam paper⁹ - which turns on the claim that arguments with false premisses do not provide good reasons for their conclusions. To defend the latter claim, Allen asks us to consider a case in which three propositions, each of which is favorably relevant to the conclusion that White committed a certain murder, are offered in defense of that conclusion. Suppose, he says, that the evidence propositions are false.

Then, despite their favourable relevance to the proposition that White committed the murder, they are not *good reasons* for that proposition. To generalize: a false proposition, *p*, even if favourably relevant to a second proposition, *q*, is not a good reason for *q*

because, being false, it has no tendency to show that q is true. If then the premises of an argument are false, they are not good reasons for the conclusion. But if an argument's premises are not good reasons for the conclusion, this is plainly a defect of the argument. Thus if the premises of an argument are false, this is a defect of the argument.

At the heart of this reasoning is the following argument:

A1) A false proposition has no tendency to show that another proposition is true.

Therefore,

A2) If the premisses of an argument are false, they are not good reasons for its conclusion.

No grounds are offered, however, for A1 – the contention that false propositions have no tendency to show that another proposition is true.¹⁰

Let me try to cast doubt on A1 by suggesting, in a preliminary way, a competing story about the kind of example Allen is considering. To *show* that a proposition q is true is to make it *evident* that q is true – it is, in other words, to confer a certain *epistemic status* on q . A proposition p cannot confer such epistemic status on q merely because it is favorably relevant to q – p needs some virtue over and above favorable relevance if it is to render q evident. Allen wants to suggest that the virtue needed is truth. My countersuggestion is that the virtue p needs in order to confer evidence upon q is not an alethic virtue but an epistemic virtue – that what counts is not whether p is true but is whether p is reasonable to believe or accept.

A propos of my countersuggestion, it's worth noting that Allen (1995, 220) had conceded that “an argument with true premisses would be useless for the purpose of rational persuasion if no one is or would be epistemically justified in believing its premisses true.” But he insisted that the value of arguments could be assessed independently of the role those arguments might play in rational persuasion and in the context of dialogue. He appealed to a notion of “monolectical argument” which he unpacked as follows:

...an argument is not a dynamic exchange but a set of things variously called sentences or claims or statements or propositions consisting, as Merrilee Salmon, for example, put it, of “the verbal evidence to support a claim together with the claim itself....”

I agree with Allen that the relation of premiss to conclusion can be considered in abstraction from the role that sentences or propositions play in the context of persuasive dialogue, and indeed that its occurrence in persuasive dialogue is not the “primary” instance of its occurrence (see for example Pinto 2001, 130). But I would maintain that anything like “evidence to support a claim” can occur only with reference a context in which that claim is under consideration by someone, and that the primary context in which premiss/conclusion relations occur is the context of inference. And *my* view, of course, would be that an inference with true premisses could not be a good one if no one is or would be justified in accepting that premiss.

It seems to me that until this counter-suggestion is disposed of, A1 remains doubtful and Allen's case for truth as a necessary condition of premiss adequacy is does not go through.

Jim Freeman

Freeman (2000) explicitly endorses Allen's distinction between logical and epistemological goodness, and attempts to clarify the relationship between them.

In the course of his exposition, Freeman also presents an argument to support the contention that acceptability must be supplemented by truth is as a “condition” of premiss adequacy. His argument has two phases, the first of which bears a slight resemblance to Allen’s argument and might seem to address the problem that I’ve just tried to call attention to in that argument.

First phase of Freeman’s argument

Freeman writes:

If our epistemic goal is the acquisition of truth and the avoidance of falsehood and error, and if we have no reason to believe that from false premisses we can reliably infer true conclusions, truth of premisses will be a desideratum in arguments.

Though that sentence has the form of a conditional, it is intended, I think, to present something like the following argument:

- F1) Our epistemic goal in accepting an argument or making an inference is the acquisition of truth and the avoidance of falsehood
- F2) We have no reason to believe that false premisses lead reliably to true conclusions.

Therefore

- F3) Truth of premisses is a desideratum in inferences or arguments – i.e., we ought to prefer arguments with true premisses to arguments with false premisses.

This argument is interesting because it attempts to link the requirement that premisses be true to the goals of argument or of argument appraisal. And this may indeed what Allen was intending to do in his OSSA paper.

But how successful is Freeman’s argument, as I’ve reconstructed it? I don’t think that (F2), even in conjunction with (F1), is strong enough to get us to (F3). To get even *close* to (F3) we need something stronger than (F2), for example:

- F2a) An argument/inference with true premisses is more likely to have a true conclusion than an argument with one or more false premisses.

That is to say, the second premiss must offer a reason for thinking that we will do *better* with true premisses than with false ones. But even given such a stronger premiss, one doesn’t quite get to (F3). The relevant conclusion that can be drawn from (F1) and (F2a) is not (F3) but is

- F3a) *In general*, truth of premisses is a desideratum in inferences or arguments – i.e., *other things being equal*, we ought to prefer arguments with true premisses to arguments with one or more false premisses.

We need the emphasized qualifiers in F3a because in *some* classes of arguments containing one or more false premisses the relative frequency of true conclusions greater than the relative frequency of true conclusions among arguments having only true premisses.¹¹

Let me give two sorts of examples in which there is a high probability that arguments with false premisses have conclusions which are true.¹²

- (a) We often argue and reason from simplifying assumptions that we know to be false when we think that conclusions drawn from those assumptions have a high probability of being correct and when the simplifying assumptions will permit us to arrive at conclusions quickly and straightforwardly. Thus, for example, in most engineering applications where there is a need to calculate gravitational force, competent practitioners use Newton's inverse square law, not the more accurate formulae drawn from the general theory of relativity.¹³
- (b) Compare two arguments/inferences that turn on inductive extrapolation of a relative frequency from a class of data points to a population. Suppose that the first contains just a dozen data points which are accurately described and that the second contains several thousand data points of which all but one or two are accurately described. The impact of the data errors in the second case will have little effect on the on the likelihood that conclusion is true,¹⁴ but the size of the sample in the first case will mean a low probability that its conclusion is true. In other words, the probability that its conclusion is true is much greater for the inference with a few false "premisses" than for the inference all of whose premisses are true. Moreover, in general the greater the number of data points on which an inductive extrapolation is based, the greater the likelihood that a few of those data points are inaccurately described.

In the first sort of case, falsity of a simplifying assumption should not, I submit, be considered a defect in reasoning. In the second sort of case, falsity of one or two premisses – inaccuracy in the description of a few data points – might well be considered a defect, but it is not a defect that significantly increases the risk that the conclusion is false, and is not I submit a defect that cancels the probative force of the argument.

The moral is that even where we acknowledge that a central goal of argument is to arrive at true conclusions, or that promoting arguments with true conclusions is a central goal of argument appraisal, that does not give us grounds for an absolute prohibition on arguments with one or more false premisses.

In addition, though it is clear that in appraising *some* arguments, our goal is to endorse only arguments whose conclusions are true, when it comes to the appraisal of deliberative arguments, our goal may turn out to be not accepting propositions that are true, but making decisions that are good.

Nevertheless, the first phase of Freeman's argument does bring into play the importance of considering the effect of tolerating premiss falsity when our goal is encourage arguments whose conclusions are true. At this point it seems likely we should want a criterion of premiss adequacy that tolerates false premisses in certain cases, but on the whole renders a negative verdict in the case of premisses that are false. But notice that that that might be achieved by making rational acceptance our criterion of premiss– if indeed premisses which it is reasonable to believe¹⁵ are for the most part true. Moreover, I have argued elsewhere that the acceptability criterion of premiss

adequacy would *effectively* exclude more false beliefs than would the truth criterion (see Part 2 of Appendix A).

Second phase of Freeman's argument

Freeman continues by distinguishing between the cases in which we can judge the premisses of an argument to be true or false “from our background knowledge or other available information,” and cases in which we cannot. He continues:

[In the former cases, if we should] recognize the premisses as false, we would reject the argument. Our goal of truth would require truth to be a condition of premiss adequacy. In those cases where we might not know that a premiss is true but would have a justified belief that it is true, we could appeal to the acceptability criterion to judge whether the premisses were adequate. We might then recognize both criteria——truth and acceptability——as being legitimate.

It seems to me that this argument fails as an attempt to show that we need a truth criterion *in addition* to an acceptability criterion, at least as interpreted in light of what Freeman has said about acceptability, namely:

Acceptability amounts to justification; more precisely a premiss is acceptable *to me as critical challenger or assessor of an argument* just in case I am justified in accepting that premiss [emphasis added].

Freeman's reasoning is that where we as evaluators can judge the truth value of premisses on the basis of background knowledge or “other available information,” we should require truth as a condition of premiss adequacy, but that in cases where we don't know the truth value, we can appeal to the acceptability criterion. But of course if I am in a position to determine that a premiss is false on the basis of “background knowledge or other information,” then that premiss is *not* acceptable to me as “critical challenger or assessor” – in other words, the premiss can be rejected on the basis of the acceptability criterion, without any independent appeal to a “truth criterion.”¹⁶ So even if we were to grant what is contained in or implied by the first phase of Freeman's argument, the second phase of the argument as stated does not succeed in establishing what Freeman set out to establish – that we need to introduce a truth criterion over and above the acceptability criterion.

If anything Freeman's argument might be taken to show that the truth criterion is not sufficient for purposes of argument appraisal. For the points he raises may be taken to show that where we don't know whether a premiss is true or false, we should reject the premiss for that very reason. (Derek Allen [1998] had pointed out that we can sometimes determine that a premiss is unacceptable even when we can't form a reasoned opinion as to its truth.)

However, the very failure of the second phase of Freeman's argument highlights what may be the limits of acceptability criteria. Freeman is addressing the question of when a “critical challenger or evaluator” should embrace or reject an argument or proposed inference – he is thinking of the case in which the assessor is asking: should *I* embrace this argument (and

presumably its conclusion). In *this* sort of case, an evaluator is in a position to judge the truth of a premiss if and only if either it is reasonable for the evaluator to accept that premiss or else it is reasonable for the evaluator to accept the negation of the premiss. In *this* sort of case, any effective space between truth criteria and acceptability criteria tends to disappear, since if I can judge a premiss false, then it is not acceptable to me, and if it is acceptable to me then I cannot *reasonably* judge it false.¹⁷

But a significant space between the two criteria opens up just when the evaluator and the person to whom an argument is addressed do not coincide. In just such cases, a premiss which the evaluator reasonably judges false *can* be acceptable to an addressee. But such divergence between considerations of truth and considerations of acceptability will happen only when the evidence base available to the evaluator differs from the evidence base available to the addressee. I call these cases of *evidentiary asymmetry*. One of the issues that must be explored is the effect of evidentiary asymmetry on criteria of argument appraisal.

I conclude then that the arguments offered by Allen and by Freeman do not establish (a) that truth is a necessary condition of premiss adequacy, or (b) that an argument containing a false premiss cannot provide a good reason for its conclusion, or (c) that in formulating criteria for premiss adequacy the acceptability criteria must be supplemented by a truth criterion. At the same time, I think those arguments make us aware of two issues to be faced in forming an account of premiss adequacy: first, the effect of false premiss on the goal of reaching true conclusions and, second, the implications of evidentiary asymmetry in evaluating arguments addressed to someone else.

Ralph Johnson

Ralph Johnson's *Manifest Rationality* contains a discussion of the pros and cons of "the truth requirement" (Johnson 2000, 195-199). I relegate an examination of that discussion to an appendix, since it does not in my view issue in any clear-cut answer to the question of whether truth is a necessary condition of premiss adequacy.

As see it, Johnson does address the latter question when he considers what he calls "the integration problem" (Johnson 2000, 338-339). The integration problem is the problem of what to do when the "truth requirement" and the "acceptability requirement" lead in different directions. Most pertinent to the issue at hand is what Johnson says about the evaluative verdict that should be rendered in cases where we judge a premiss to be false but acceptable (pp. 338-339). Johnson considers this question both from the point of view of the arguer and from the point of view of a third party who is evaluating an argument. When he considers the question from the point of view of the arguer, he is concerned with whether an arguer is at fault in putting such a premiss forward. Since that is not what at issue here,¹⁸ there's no need to address what Johnson says on that front.¹⁹ But his consideration of the issue from the point of view of an evaluator goes to the heart of the problem I am trying to deal with. On this point, Johnson argues as follows:

... we are supposing that the arguer has put forth an argument containing a premise that the evaluator takes to be false (we assume the arguer and the audience hold that it is true) but is also acceptable. Suppose the argument is otherwise impeccable. How good is this argument? I believe that the evaluator must deliver a negative verdict. If he or she believes the premise is false, the evaluator has a compelling reason for not accepting the premise, especially in the absence of any argument for it—which was the case on the

approach to acceptability taken in chapter 7. There is no problem for my theory of evaluation. In this case, the truth requirement outweighs the acceptability requirement and the evaluator must deliver a negative verdict on the premiss.

In other words, *mere belief* that a premiss is false is supposed to give an evaluator “a compelling reason for not accepting the premiss.” But what about the case in which the evaluator believes a premiss false despite the fact that it isn’t reasonable for him or her to do so? Surely an unreasonable prejudice against a premiss does not justify one in judging every argument containing that premiss to be a bad one. *Mere belief* that a premiss is false does not warrant the verdict that a premiss is defective or an argument a bad one.

There are two sorts of case in which it is *reasonable* for the evaluator not to accept a premiss. The first is the case in which it is reasonable for her to remain agnostic about it because she lacks convincing evidence in favor of the premiss and also lacks convincing evidence in favor of its negation. In this sort of case, the evaluator would presumably be justified in not accepting the premiss or any argument that depended crucially on the premiss. Refusal to accept the premiss or the argument would be not motivated by a judgment that the premiss is false. In this sort of case it would be normal to explain one’s refusal to accept the argument by saying that there aren’t grounds for accepting a crucial premiss – this may be the sort of case in which Freeman would have us employ the acceptability requirement.

The second is the case in which it is reasonable for the evaluator to hold the premiss to be false. I suspect that this is the kind of case Johnson actually had in mind. In this sort of case it would be normal to explain one’s refusal to accept the argument by saying that a crucial premiss is false.

The difference between these two sorts of case may well be important, because what would be required to rehabilitate the problem premiss is different in the two cases.²⁰ And I suspect that those who urge a crucial difference between acceptability and truth are trading on the difference between these two sorts of case.

But I would observe that the difference between them comes down to this: in the first sort of case, neither the premiss nor its negation is supported by the evidence available to the evaluator; in the second, the negation of the premiss is supported by evidence available to the evaluator. In other words, the fundamental difference between these two sorts of case hinges on epistemic rather than alethic factors. In both sorts of case, a negative evaluation of the premiss and of the argument is called for because the premiss is *not acceptable to the evaluator*.

What is at stake here comes more clearly to the fore when we examine what Johnson says about the situation in which the evaluator judges a premiss false, but concedes that some “Other” would be justified in accepting it.

Such an argument (one with a false premise that is, however, acceptable to some Other) may succeed, in the moment, in achieving its goal because the audience may accept the false premise. It may be that the audience is justified in acceptance of the premise.... What this means is that people can be justified in accepting bad arguments.... A bad argument does not, however, cease to be a bad argument just because it is an argument that some people may be justified in accepting.

In the situation imagined, the “Other” is justified in accepting the premiss, and is assumed to be justified in accepting the argument which depends on that premiss - and presumably also justified in pronouncing that argument good. At the same time, if the “evaluator” has good

grounds for judging the premiss false, she is justified in rejecting the argument and calling it bad. But notice that the “Other” is *also* an (actual or at least potential) evaluator of the argument. What we have here is a situation in which two evaluators differ in their evaluation of the argument. And of course such a difference is perfectly understandable and perfectly rational where there is evidentiary asymmetry – where the two evaluators rely on different evidence bases.

How should we view the implications - for argument appraisal and for the criteria that guide such appraisal - of evidentiary asymmetry? For starters, two readings should be firmly rejected:

- 1) It would be indefensible to suppose that in every such situation, there is simply a “standoff” - to suppose the final word to be that the argument in question is OK in the eyes of one evaluator but not OK in the eyes of the other. For one thing, the evidence base of one of the evaluators may “trump” the evidence base of the other: for example, evaluator A may have evidence evaluator B doesn’t have, which is consistent with the evidence B has, and which is such that should B acquire it, B would no longer be justified in accepting the premiss in question.
- 2) It would also be indefensible to suppose that in every case where *my* reasonable evaluation of a premiss differs from another’s reasonable evaluation of it, *my* evaluation is right and the other’s is wrong. That supposition is indefensible because it arbitrarily rules out the possibility that the other’s evidence trumps the evidence on which my evaluation is based.

Faced with a situation where my evidence warrants the judgment that a premiss is false and unacceptable, while another’s evidence makes it reasonable to accept that same premiss, I must somehow assess (reassess?) that premiss taking into account the evidence available to *both* of us. The lesson to be learned from Johnson’s type of example is not that “the truth requirement outweighs the acceptability requirement,” it is rather that the acceptability requirement is more complex than it might at first be imagined to be.

In my TISIL paper (Pinto 1995a, 118) I considered an objection to the acceptability criterion due to Ann MacKenzie.²¹ I said:

MacKenzie’s objection has merit as an objection against making our criterion of premiss acceptability the epistemic status of a premiss for just anybody at any time. The objection may be viewed as raising the issue of which person or group to use as a standard. For example, one might judge the acceptability of premisses in terms of what it is reasonable for well-informed individuals of the discursive community to believe.

I think today that the moral to be drawn from the effects of evidential asymmetry is of a piece with the moral to be drawn from MacKenzie’s objection. It is not that we should revise our criteria for premiss adequacy by adding truth as necessary condition; it is rather that we should broaden our conception of acceptability to reflect the social (and perhaps dialectical) context within which argument, reasoning and argument appraisal take place.

I do not have a detailed account of the form such a broadened conception of acceptability should take. I have recently suggested (Pinto 2001, 131) that “normative consideration of any inference must take into account how that inference would fare if members of the broader cognitive community were invited to make it.” And indeed the preferred version of the acceptability criterion might turn out to be something like this: a premiss should be judged acceptable if and

only if it is sustainable within the cognitive community to which the evaluator belongs.²² But at this point, that is mere speculation.

Conclusion

In this paper I've tried to make two main points:

- 1) First, one and perhaps two of the arguments in the recent literature which purport to show truth to be a condition of premiss adequacy succeed only in showing the criteria of premiss adequacy must be such as to minimize the acceptance false premisses in cases where false premisses would be a defect. *That* conclusion, I have argued, may well be consistent with making acceptability a sufficient condition of premiss adequacy.
- 2) Second, in the appraisal of arguments, the truth condition can be significantly at odds with the acceptability criterion only in cases of evidential asymmetry. And, I have urged, the moral to be drawn from such cases is not that the acceptability criterion be supplemented with a truth requirement, but that we should broaden our conception of acceptability to reflect the social context within which argument and inference occur.

I don't think that the case I've made on either of these fronts is final or conclusive. But I do hope that I've advanced the discussion of these matters and called attention to dimensions of the issue which might otherwise be overlooked.

Appendices

A: The case *against* truth as a necessary condition of premiss adequacy

In my 1992 TISIL paper (published as Pinto 1995a), I offered two arguments against truth as a necessary condition of premiss adequacy. For the most part, those arguments have not been addressed in the literature and are, I think, worth restating here.

Part 1

The first argument appeals to the intuitively plausible principle

(AP2) An argument which it would be unreasonable not to accept is a good argument.

In Pinto 1995a I argued as follows (p. 119):

Sometimes an argument has false premisses which it is not reasonable *not* to accept; that is to say, its premisses, though false, are beyond any reasonable doubt. And, of course, sometimes the premisses of such an argument clearly and unmistakably support its conclusion. It would, in other words, be unreasonable *not* to accept such an argument. But then, by AP2, it would have to count as a good argument with false premisses, thus demonstrating that truth is not a necessary condition of premiss acceptability.

Ralph Johnson is the only person who has, to my knowledge, taken note of this argument. He offered two criticisms of it (Johnson 2000, 280). (i) He objected first that it is too abstract to be fully satisfying, and asked for an illustration to exemplify the possibility appealed to in the argument. (ii) He argued that premiss truth might still be a criterion of good argument, even if it is not a necessary condition thereof. I don't consider the first objection (i) particularly troubling, since it is a commonplace of contemporary epistemology that there can be overwhelming evidence for a false proposition. Moreover, in another context Johnson himself (2000, 339) alludes to "the well-known epistemological result that a person may be justified in believing *p* even though *p* is false." I agree that it would be illuminating to work out one or two examples in detail. But the fact that this hasn't been done is not evidence that there is a defect in the argument presented.

The second criticism (ii) is simply not relevant to the adequacy of the argument under consideration, since that argument aimed only to show that truth was not a necessary condition; it was not intended to prove that the concept of truth had no role whatsoever to play in the appraisal of arguments.

Thus I don't think Johnson's criticisms give serious reason for putting this argument aside, and I am still inclined to suppose that it has more than a little force. Nevertheless, as I pointed out in my TISIL paper, arguments that judge criteria of argument appraisal against "intuitively plausible principles" are inferior to arguments that depend on clarifying the contexts, goals and circumstances of appraisal, and that determine which criteria best serve those goals under the circumstances in which they will be used.²³

Part 2

A second argument, which emerged in the attempt to respond to a possible objection to the argument discussed in Part 1 of this appendix, does turn on the question of which criteria best serve the goals of appraisal. The objection urges that standards which countenance acceptability as a sufficient condition of premiss adequacy are too lax, on the grounds that "[s]tandards of

appraisal which countenance false premisses will most likely countenance arguments with false conclusions” and hence “might seem to frustrate rather than to promote the ends of argument and the point of argument appraisal.” To that objection I responded (119):

Standards which countenance premisses that are reasonable to believe (though false) will be counterproductive only if (1) a very significant portion of the beliefs countenanced by those standards are false and (2) some alternative standard is available the application of which would effectively produce fewer false beliefs without significantly reducing the number of true beliefs.²⁴

I questioned whether any such alternative is available. In particular, I suggested that the injunction to use only premisses which are true would not *effectively* produce fewer false beliefs than the injunction to use only premisses for which one can cite a warrant. In defense of that suggestion I said,

... the injunction "Use [or accept] as a premiss only what is true" seems effectively to reduce to the injunction "Use [or accept] as a premiss only what you believe" and therefore excludes *less* than the injunction "Use [or accept] as a premiss only what you can produce a warrant for."

As formulated in Pinto 1995a, this line of argument appears to take into account only two proposals: the proposal that acceptability be sole criterion of premiss adequacy and the proposal that truth be the sole criterion of premiss adequacy. What about proposal that premiss adequacy requires both truth and acceptability? I am inclined to think that the injunction ‘Use [or accept] as a premiss only what you can produce a warrant for *and* that you judge true’ (a) is unlikely to approve substantially fewer false premisses than the acceptability criterion alone and (b) could well reduce the number of true premisses that are rejected (i.e., if the evaluator’s *unwarranted* judgments about truth were more often wrong than right).

B: Johnson on truth and premiss adequacy

It is not easy to pinpoint Ralph Johnson’s position on truth as a requirement of premiss adequacy. In *Manifest Rationality*, he acknowledges that there are good reasons for questioning the truth requirement (Johnson 2000, 196-97) – among them the fact that “in some arguments with a welter of premises, the mere presence of one false premise is not really sufficient to wreck the argument if the other true premises are sufficient to cover for it.” Moreover, when Johnson (2000, 280) criticizes an argument I had offered to show that premiss truth is not a necessary condition of good argument (Pinto 1995a, 119), his main parry is to counter that something can be a criterion *without* being a necessary condition. Finally, when he argues that there are “good reasons for maintaining the truth requirement” (pp. 197-199), the core of his case is that “it is hard to imagine doing the work of argument evaluation without some recourse, explicit or implicit, to it” (p. 197). He illustrates his point with reference to Johnson and Blair’s *Logical Self-defense*, about which he says in summing up (p. 198):

Thus, although truth is not included among the logical criteria that the premisses must satisfy, it still appears to be highly functional in their theory of evaluation.

All of this seems to suggest that Johnson is not claiming truth to be a *necessary* condition of premiss adequacy, but only that truth has an important role to play in argument appraisal

nonetheless. At any rate, it seems to me that the arguments offered in the passages I've just referenced do not warrant a conclusion any stronger than that.

On the other hand, when Johnson addresses the "integration problem," and considers (pp. 338-339) what we should say about an argument with a premiss that is false but acceptable, he concludes that truth that requirement outweighs the acceptability requirement and that "the evaluator must deliver a negative verdict on the premiss" (p. 338). His resolution of the integration problem strongly suggests that he is committed to the position that truth is a necessary condition of premiss adequacy after all.²⁵

Notes

¹ I have suggested elsewhere (Pinto 1995b, 276) that arguments be thought of as invitations to inference.

² See the suggestion in Goldstick (1999) that this notion of soundness originates with Copi; see also the correction in Hitchcock (1999) that traces this use of "soundness" back to Max Black's 1946 *Critical Thinking* and that finds a precedent for it in the definition of proof offered by Cohen and Nagel in their 1934 textbook, *An Introduction to Logic and Scientific Method*.

³ In *Prior Analytics* I, 1, Aristotle recognized two types of syllogistic premisses: demonstrative premisses and dialectical premisses. Demonstrative premisses must be both true and known to be true (on this point see especially *Posterior Analytics* I, 3). In *Prior Analytics* I, 1 two sorts of dialectical premisses are recognized: a dialectical premiss is "the giving of a choice between two premisses, when a man is proceeding by question, but when he is syllogizing it is the assertion of that which is apparent and generally admitted, as has been said in the *Topics*." Similar distinctions are found in *Topics* I, 1 – though in addition to demonstration (whose premisses are "primary and true") and dialectical reasoning (whose premisses consist of opinions that are generally accepted) the *Topics* adds two further kinds – contentious reasoning (where premisses seem to be genuinely accepted but are not really so) and a fourth kind that relies on premisses which are *neither* generally accepted nor true. In general, the criteria of premiss adequacy for dialectical arguments in the *Topics* appears to be "opinions that are generally accepted" and the criteria of premiss adequacy for demonstrative arguments in the *Posterior Analytics* is that the premisses are known to be true and are "better known" than the conclusion.

⁴ Allen's words were: "Suppose next that at the time the argument was made there was no reason to think that its premisses were false, but strong reasons to think they were true, but that later it is discovered that the premisses were in fact false. When this discovery is made it remains the case that the argument, when it was advanced at White's trial, was a good one relative to its intended audience, but it is now evident, as earlier it was not, that it was not a logically good argument..."

⁵ I say "in most cases" rather than "in all cases" because, for reasons that will become evident below, I think that sometimes we're willing to approve of arguments that employ simplifying assumptions which are not literally true. And I say "reverse or qualify" rather than simply "reverse" because, again for reasons that will become evident below, I think that we will sometimes judge that a few minor inaccuracies in the premisses of an argument weaken it but do not cancel its probative force.

⁶ Even Hamblin (1970) - in the very chapter in which he advocates dialectical criteria for argument in which premiss adequacy is merely a matter of acceptance – says that "*in practice* we like our premisses to be true" (p. 232).

⁷ If we make deductive validity a necessary condition of logical goodness, and say that an argument is logically good iff its premisses are true and entail its conclusion, then we might well have a conception of logical goodness that abstracts from epistemological considerations altogether. But as soon as we recognize good arguments that aren't deductively valid, we need to acknowledge an acceptable premiss/conclusion link besides entailment – Freeman (2001) suggests probability of the conclusion on the premisses, Allen (1998) cites Goldman's definition of logical goodness, which uses "inductively strong" support as such a link (Goldman 1995). But it is not at all clear to me that such proposed links can be elaborated in ways that render them independent of epistemological considerations. For one thing, the concept of probability appealed to may turn out to be the epistemological concept of credibility under a different name. For another, it may turn out that, as I have argued elsewhere (Pinto 1995a), we cannot appraise the

support premisses offer a conclusion without taking account of the epistemic status of those premisses and of collateral information that might defeat the support those premisses offer the conclusion.

⁸ Or at least that arguments containing *false* premisses are from an important point of view bad or defective. There is a secondary issue concerning whether, given a noncognitivist reading of ethical statements, we must recognize that premisses can be good without being true. Allen (1995) addresses this by tolerating the conclusion that an argument with a premiss that is neither true nor false cannot be logically good.

⁹ In his Amsterdam paper, Allen (1995, 219-220) offered a positive defense of the truth-criterion that rested on the argument presented in the following brief passage (1995, 221):

The goodness of an argument may be assessed from different points of view. I am therefore inclined to think that there is no such thing as a good argument *simpliciter*. There is, however, such a thing as a *logically* good argument. For an argument to be logically good it would seem to be necessary at a minimum that its premisses should support its conclusion. Monroe Beardsley says that “false premisses give no support for the conclusion” of an argument (Beardsley 1975: 37). I agree. Thus, I hold, the premisses of a logically good argument must none of them be false....

The argument as presented there is less than fully satisfactory, since the key claim that false premisses give no support for a conclusion remains undefended, and is one that many of us to whom the argument is addressed are not inclined to accept. In the more developed version of this reasoning that is presented in Allen 1998, the claim that false premisses give no support to a conclusion is presented as a consequence of the claim that an argument with false premisses fails to give good reasons for its conclusion. He says there, “If an argument fails to give good reasons for its conclusion, it fails to *support* its conclusion,” and on the basis of this endorses Beardsley’s claim.

¹⁰ Nor are there explicit grounds for what appears to be an unstated assumption – namely that if something is a good reason, then it tends to show that its conclusion is true. But for purposes of this exposition, we can let that pass.

¹¹ If we limit our consideration to deductively valid arguments, this will not happen--since among deductively valid arguments with true premisses, the relative frequency of arguments with true conclusions is 1. And of course there cannot be a class of arguments for which the relative frequency of arguments with true conclusions greater than 1. But we are talking here about arguments generally, and not just about deductively valid arguments.

¹² As Allen (1995, 222) pointed out, arguments whose form is indirect proof might also be taken to be examples of good arguments with false premisses (a point that might also be made about conditional proof). Allen dealt with indirect proofs by suggesting they could be reconstructed so as not to contain false premisses. I don’t want to get into such matters in this paper. My own view is that these classes of arguments do not shed light on the issues I’m discussing here because such arguments don’t require one to *accept* their premisses, but only to *suppose* them to be true.

¹³ In this example, even though it is may not be reasonable to *believe* that the inverse square law is true, I maintain that it is reasonable to *accept it as a basis for reasoning in such contexts*. That is why I am now inclined to think that the criterion of premiss adequacy ought not to be formulated in terms of reasonable *belief* but in terms of reasonable *acceptance* – and in particular should turn on whether a premiss is reasonable to accept as a basis of reasoning in a particular context.

¹⁴ Provided that (1) the relative frequency being projected does not approach 1 or 0 and (2) the conclusion is to the effect that the relative frequency in the population falls within the range of plus or minus e of the relative frequency among the data (where e is a small number that may be considered the “margin of sampling error” of the projection). When I say that a few “measurement” errors will have little effect on the likelihood that the conclusion is true, I mean that the likelihood barely changes if (a) we subtract the erroneous data or (b) we substitute correct data for the erroneous data.

¹⁵ Derek Allen points out in his commentary on this paper that my reference here to what it is “reasonable to believe” appears to be at odds with what I say in note 13 above. It *is* at odds with what I say in that note, and I should have referred here to what it is reasonable to *accept*, *not* to what it is reasonable to *believe*.

¹⁶ In a rather different context – and to support the point that showing a premiss to be true is not more difficult than showing it to be acceptable - Derek Allen (1998) has noted the connection between reasons for p and reasons that

show that p is acceptable: “Suppose that S has no doubt that premise p is true. Moreover, S considers it reasonable for her to accept p , for she has strong evidence for p . If she were to try to show that it is reasonable for her to accept p , she would do so by presenting her evidence for p . But this would be for her to present evidence for p 's truth. Thus, in attempting to show that it is reasonable for her to accept p , she would at the same time be making a case that p is true. The general point here is that a case for the acceptability of a premise may at the same time be, at least in part, a case for its truth, despite the fact that acceptability is not the same thing as truth. In a case where this is so (that is, where a case for the acceptability of a premise is at the same time at least in part a case for its truth), it will be no easier for someone who finds the premise acceptable to show that it is acceptable, *for her* at any rate, than to make a case for its truth.”

¹⁷ I am assuming it cannot happen that p is acceptable to me at the same time that not- p is acceptable to me. This assumption strikes me as perfectly safe, so long as we agree that p is acceptable to me only if my evidence for p outweighs my evidence for not- p . (The converse does not hold, by the way. From the fact that my evidence for p outweighs my evidence for not- p it does not follow that p is acceptable to me. For even if my evidence favors p over not- p , it still may not be strong enough to warrant the acceptance of p .)

¹⁸ In Pinto 1995b (276-277), after suggesting that arguments are invitations to inference, I pointed out that “...an important evaluative question will always be: ought the addressee to make the inference which the argument invites? And that will be quite a different question from: ought the arguer to have offered this particular argument to this particular audience. Moreover, this latter question can be considered from variety of different points of view. Was the argument likely to be effective? Was it morally right to offer such an argument? Was it in the arguer's interest to offer that argument at that time? Was it a good argument to offer from the point of view of advancing the goals of negotiation, or of critical dialogue, or of pedagogical dialogue? And so on.” I suggested there that “[l]ogical appraisal of an argument deals... with the issues raised by the question of whether the inference invited by an argument is an inference that ought to be made—and, more particularly, ought to be made by [a] person to whom it is addressed.”

¹⁹ His verdict is that it would be contrary to the requirement of manifest rationality, and therefore improper, for an arguer to put such a premiss “into play.” I'm not at all convinced that Johnson is correct on this score; a case could be made for saying that an arguer has an obligation to call to his audience's attention any arguments he is aware of that his audience might find it reasonable to accept.

²⁰ In the second sort of case, but not in the first, rehabilitating the premiss would require finding evidence that would reverse the import of existing evidence.

²¹ The objection was that “it would be a mistake to substitute an epistemic for an alethic criterion in pedagogical contexts, at least if the epistemic criterion is acceptability to the one evaluating the argument. To do so... would be to teach students that an argument is defective unless its premisses are reasonable for them to believe, and that would encourage students to dismiss good arguments on grounds of their own ignorance, whereas they should be encouraged to repair that ignorance by, say, going to the library and finding out whether the premisses are true.”

²² Compare Pinto (2001, 133): “What makes membership in a cognitive community so fateful is this: ultimately what constrains one's judgements and lends them an air of ‘objectivity’ is the possibility of securing agreement from the rest of one's cognitive community – an agreement that creates an air of objectivity only insofar as it can be obtained through dialogue or dialectical interchange. To invoke a variation on a Kantian theme: ‘objectivity’ is a matter of intersubjective validity. But intersubjective validity is not something that can be ascertained by applying a fixed and unambiguous standard. Rather, the intersubjective validity of a judgement is something demonstrated — shown, *displayed* — by the resilience of that judgement in an intersubjective *process* of argument and counter-argument – a process whose ‘real world’ components are dialectical interchanges.”

²³ And I fleshed out the reference to the goals and circumstances of appraisal as follows, “two prominent contexts in which criteria of good argument will be employed are (1) the management of our individual and collective cognitive affairs and (2) the teaching of such things as critical thinking and reasoning skills. Among the most prominent goals operative in such contexts are the acceptance of arguments whose conclusions are true and the avoidance of arguments whose conclusions are false. The circumstances under which we operate are those of incomplete information, restricted resources and limited time.”

²⁴ I pointed out in Pinto 1995a (note 9) that "a standard which permitted only premisses that are certain and indubitable would presumably eliminate false premisses altogether," but only at the price of eliminating an enormous number of arguments with less than certain premisses and true conclusions. Such a price, I suggested, is not a reasonable one to pay.

²⁵ Johnson maintains (p. 339) that in the case of a true premiss that is not acceptable, the acceptability requirement takes precedence, and the premiss should also be judged defective. This has the effect, it seems to me, of making *both* truth and acceptability necessary conditions of premiss adequacy.

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