

i.e.  $p \rightarrow (p \vee q)$ . It is clear that relatedness logic is different from relevance logic --see Walton (1979).

#### References

- Otto Bird, "The Formalizing of the Topics in Mediaeval Logic," Notre Dame Journal of Formal Logic, 1, 1960, 138-149.
- Richard L. Epstein, "Relatedness and Implication," Philosophical Studies, 36, 1979, 137-173.
- R. H. Johnson and J. A. Blair, Logical Self-Defense, Toronto and New York, McGraw-Hill Ryerson, 1977.
- Norman Kretzmann, trans. and ed., William of Sherwood's Introduction to Logic, Minneapolis, University of Minnesota Press, 1966.
- Douglas N. Walton, "Philosophical Basis of Relatedness Logic," Philosophical Studies, 36, 1979. 115-136.
- Douglas N. Walton, "Why is the Ad Populum a Fallacy?" Philosophy and Rhetoric, to appear, 1980.
- John Woods and Douglas Walton, "Argumentum ad Verecundiam," Philosophy and Rhetoric, 7, 1974, 135-153.
- John Woods and Douglas Walton, "Ad Hominem," The Philosophical Forum, 8, 1977, 1-20.

arguments be established on the grounds of the intentions of the person putting forward the argument. Arguments, he says, are people's arguments; they are put forward in order to convince other people. People may intend either that their arguments provide conclusive reasons for what they are trying to demonstrate, or that they provide less than conclusive reasons. In the first case, an arguer's intentions establish his argument as deductive. In the second case, they make it inductive. A desirable consequence of this approach is that it provides for both good and bad arguments in each category. Most of the time, Fohr thinks, we are able to tell what an arguer's intentions are, or were. If we cannot, we must judge the argument "both ways".

This proposal does not strike me as very satisfactory. I am surprised that Fohr, who says that he cannot accept "purportedly valid as a definition of 'deductive argument', can rest content with an appeal to intention here. I have the following difficulties with his proposal:

1. Either there will be evidence for the arguer's intentions regarding conclusiveness in the wording of his argument, or there will not. In the first case, intentions and "purported validity" or "involving a claim to validity" (Copi) will amount to much the same thing. There are numerous examples, as Fohr admits, where wording is not helpful. After all, conclusiveness in the sense of logical entailment is a philosopher's concept, and even such English words as "must", "therefore", and "shows conclusively" will not provide a reliable basis for inferring that the arguer is claiming conclusiveness in the sense that the premises are supposed to logically entail the conclusion. If, on the other hand, we seek to avoid these difficulties with wording--making the author's sayso and that alone the criterion for determining his intention--we will find ourselves unable to apply the distinction to many cases where authors are dead or absent. This is absurd if the inductive/deductive distinction is supposed to be a fundamental tool in the assessment of argument. We can, of course, look at the indeterminate arguments "both ways", as Fohr suggests; but the more often we do this, the more often we are bound to wonder why all of logic should have been erected around this fuzzy distinction in the first place.

2. If we really take Fohr seriously on the over-riding importance of intention, then we will have to accept the peculiar consequence that there are inductive arguments which are deductively valid, and deductive arguments which are inductively strong. For instance, suppose someone argues:

1. Either Lévesque will be defeated at the next election, or he will win and call another referendum.
2. Since Quebecers are fond of Lévesque, he will not be defeated at the next election.
3. Thus, there will in all likelihood be another referendum.

This argument is deductively valid, but the conclusion contains the tentative expression "in all likelihood". If the arguer is a

# responses

## More on Deductive and Inductive Arguments

Trudy Govier  
Trent University

The existence of confusing material in textbooks has not been enough to convince Samuel Fohr that the distinction between inductive and deductive arguments should be relinquished. (See "The Deductive-Inductive Distinction", Informal Logic Newsletter, ii.2.) Fohr proposes, following a definition in Olson's Meaning and Argument, that the distinction between deductive and inductive

logically untutored person, he may deem himself to have provided only some good reasons for thinking there will be another referendum; he may not realize that his statements contain a perfect disjunctive syllogism, which, of course, is deductively valid. (A perfectly sensible reason for such a person to take this view would be the fact that the first premise is by no means certain; sensing this, one might express his conclusion hesitantly.) Thus the intention will be 'inductive', despite the fact that the argument is deductively valid. This consequence seems counter-intuitive. Fohr might reply that we can assess an inductive argument by deductive criteria, and conversely, but: (a) his stress on intention suggests that he would not move in this direction, and (b) if he did, that in itself would cast doubt on the importance of the inductive/deductive distinction for practical criticism. If a deductive argument can be assessed by inductive standards, or an inductive argument by deductive standards, what is the point in calling them deductive or inductive in the first place?

3. Ordinary language is not nearly as strict with words like "conclusive" "shows", or even "deduce" as is philosophical and logical

tradition. I think that this may be the explanation for Conan Doyle's description of Sherlock Holmes as a great master of deduction. We sometimes use "deduce" loosely enough so that it means more or less what is meant by "infer" or "conclude from". I might, in that sense, deduce from your irritable disposition that you are tired today. I doubt that Conan Doyle ever meant to claim that Holmes's conclusions followed with logical necessity from the bits of evidence he had.

Now I do not wish to propose here that ordinary language is entirely all right and that philosophers and logicians have been guilty of a pernicious distortion of it. The problem for Fohr is that the traditional notion of deductive logical validity or--as he puts it--conclusiveness or necessary implication is one which philosophers and logicians have constructed. It requires, first, a concept of logically necessary connection, and second, a distinction between considerations of truth and those of the connection between the premises and the conclusion of an argument. All of us know from teaching experience that it can be very difficult to convey these notions to philosophically untutored people; in fact, some never succeed in grasping them. Who is missing something here--us, or them? As a philosopher who values my own education, I am of course inclined to think they are, but in view of the doubts of Duhem, Quine, Waismann, and others, there are some grounds for scepticism here. If arguers' intentions are to provide the basis for a distinction between deductive and inductive arguments which will be anything like the traditional one, those arguers will have to formulate their intentions with a knowledge of the difference between logical and empirical connection, and the distinction between considerations of truth and those of validity.

Now Fohr, like others interested in informal logic, wants to attend to real arguments put forward by real people. This means not

only philosophers and logicians writing textbooks, but politicians, lawyers, housewives, historians, economists, psychologists, and others. Fohr says that the reason the inductive/deductive distinction should be preserved is that arguers should know whether they intend to offer conclusive (in the logician's sense) reasons for their claims, or not. But in view of the background which such intentions require, I am not sure that this is an entirely reasonable norm for the arguing public. Even if it is, the world at present is far from being in a condition where it could be realized. Most people who are out there constructing arguments do not have an acquaintance with logic and philosophy. And as far as the logical/contingent aspect of the necessary background is concerned, philosophers do not have a sufficient consensus on this matter to launch an education program for the general public.

Despite all of this, I confess that there is something in me which shares Fohr's reluctance to scrap the distinction between inductive and deductive arguments. This reluctance may be purely the product of caution and education; one naturally hesitates to think that a distinction which has been around for so long, and around which so much teaching of logic has been organized, could simply be ill-founded. Those with doubts may be missing something--but what is it? Not, I would argue, a norm for arguers' intentions.

Referring to a suggestion of Carl Wellman's which I forwarded to the editors of the Newsletter in 1979, Fohr remarks that he can see no good reason to have more than two categories of argument. I do not wish to commit myself to Wellman's concept of a "conductive argument", but contra Fohr, I can see a reason for moving to more than two categories. (In categorizing one will, of course, have to ask what the categories are for, and their purpose should have something to do with how many we need.) The common modern sense of 'inductive' is so broad that all non-conclusive arguments are classified as inductive and hence in the same category. Yet inductive logic deals exclusively with the confirmation/disconfirmation of empirical hypotheses by empirical data on particulars. Now this combination of definition and focus can make people think that all arguments are either deductive or scientific-empirical-inductive.

Such a belief we inherit from positivism, and it is this legacy which makes people think that there cannot be arguments in support of moral judgements. The broad modern sense of induction found in, say, Copi and more or less endorsed by Fohr will leave the "inductive" category as a grab-bag holding everything from legal arguments, consequentialist moral or prudential reasoning, and scientific confirmation to philosophers' paradigm case arguments, transcendental arguments, and infinite regress arguments. To say that an argument is inductive in the broad modern sense tells us virtually nothing about it and it is for this reason, I think, that the move to more than the two categories would be tempting.

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