Deductively-Inductively

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Fohr (ILN, ii.2) gives an account of deductive arguments that is designed to be compatible with the following claims: a) There are invalid deductive arguments, and b) No arguments are both deductive and inductive. He succeeds in his objective but I think there are compelling reasons for rejecting his account. He can find a place for the deductive-inductive distinction but the terms involved apply to arguings not arguments.

Fohr states that:

1. "Real arguments. . .are given by people to convince someone of something."
2. ". . .arguments do not exist in vacuo but are person-related."
3. ". . .an example on a page of a logic textbook is not strictly speaking an argument. . . . We should call this example a 'possible argument'."
4. "If a person intends that his premises necessitate his conclusion he is giving a deductive argument."

As they stand 1-4 are confusing. For example, 1 and 2 taken together suggest that you can give something that does not exist. The use of "possible" in 3 is confusing. Presumably, possible arguments are actual somethings, just as possible statements are actual somethings, viz., actual sentences. But what are the actual things that possible argument are? To avoid such puzzles let us rewrite 1-4 as follows:

1'. An argument is a try by an A to convince a B that C by offering as evidence E.
2'. The A and the B are crucial to the definition in 1'.
3'. The ordered pair E;C with constituents mentioned in 1' is not an argument.
4'. A deductive argument is a try by an A to convince a B that C by using evidence E given that A construes E as necessitating C.

1'-4' are compatible with a) and b). An invalid deductive argument is a deductive argument in which the E does not necessitate the C. An argument cannot be both deductive and inductive since it is impossible for somecne simultaneously to construe E as necessitating and not necessitating C.

The problem with 1'-4' is that this notion of an argument does not accommodate what "politicians, lawyers, housewives, historians, economists, psychologists, and others" (Govier, ILN, ii.3) know: someone's argument can be the same as someone else's; someone's argument at one time can be the same as this person's argument at another time. A try by A to convince is not the same as a try by B to convince any more than a try by A to levitate is the same as a try by B to levitate. (And A's earlier try is not the same as his later try.) Of course, people can try to do the same thing but the tries are not the same.

So let us modify 1'-4' in order to be able to say with justification that A's argument is the same as B's and also preserve a form of the deductive-inductive distinction.

1". A is arguing iff A is trying to convince B that C by offering as evidence C.
2". "Arguings" do not exist in vacuo but are person-related.
3". The ordered pair E;C with constituents mentioned in 1" is an argument (but it is not an "arguing").
4". A is arguing deductively iff A is trying to convince B that C by offering as evidence E and A construes E as necessitating C.

Since the same ordered pair E;C may be involved when A is arguing as when B is arguing, A's arguments may be the same as B's. Couple 4" with the claim that A is arguing inductively iff A is arguing and is construing E as providing only partial evidence for C and we have a form of the deductive-inductive distinction.

Our "approved terminology" includes: "arguings," "arguments," "arguing deductively" (or "deductive arguings"), but not "deductive arguments." It is tempting to instate the latter familiar term by agreeing that A's argument is deductive iff A is arguing deductively. This would be a pedagogical mistake. Talking about deductive arguments to our students would have the same effect as talking about happy houses and emphatic beliefs to people who are in the first stages of learning our language. My hunch is that people in the latter category would think we are talking about features of houses and beliefs rather than features of persons, and our students would think we are talking about features of arguments rather than features of persons.

It does not follow that there are not other methods of instating the "deductive argument" terminology. I will mention only one more, which is discussed by Hitchcock (ILN, ii.3). He takes seriously (to my surprise) a remark by Weddle (ILN, ii.1) that "what distinguishes deductive arguments from inductive arguments is the sections of logic books in which they happen to be found." We can extract the following definitions from Hitchcock's remarks:

> E;C is a deductive argument iff the relation between the premises and the conclusion of E;C is best explored by using a truth-functional calculus, or a first order predicate calculus, or S5, or. . . .
>
> E;C is an inductive argument iff the relation between the premises and the conclusion of E;C is best explored by considering the structures of analogical arguments, or the structures of arguments with causal conclusions and premises justified by controlled experiments, or. . . .

The definitions refer to a bundle of calculi and a bundle of structures? But what makes the two bundles two? In which bundle do fuzzy logics occur? Isn't it possible that there is a valid argument whose propositional calculus mate is invalid-in-the-propositional calculus, whose S5 mate is invalid-in-S5 and, in general, whose X mate is invalid-in-X, where X is any calculus found in the first bundle? Would such an argument be inductive? Would we ever be in a position to assert that the relation between the premises and the conclusion of an invalid argument would not be best explored by looking at the structures referred to in the definiens of the definition of "inductive argument"? (That is, would we ever be in a position to say that an invalid argument is deductive?) We do not even need to begin to try to answer these questions without recognizing that students in our informal logic courses should not labor over this definition of a deductive-inductive distinction. ✱