

Philosophy 324A
Philosophy of Logic

2016

Note Sixteen

Please note that #16 brings our coverage of B&R to a close. Note seventeen are Professor Simchen's class-notes for his lecture on Thursday, November 3rd, on semantic indeterminacy. Note eighteen is a copy of chapter 6 of my forthcoming book on the semantics of literary discourse, Section 1 is a discussion of names and naming generally, not only in fiction. Section 2 – also of more than fictional import – contains my answer to Ori Simchen's NR principle. Notes 16 and 17 are examinable. So is section 2 of note eighteen.

COMMENTS ON THE OBJECTIONS AND REPLIES IN CHAPTER 8 OF B & R

Objection 1 (pp. 87-88)

- If you're a logical realist and also a relevantist, then you *could* accept that *ex falso* is provable by rules of classical logic, but you *couldn't* accept that classical implication is a *species* of a *bona fide* relation of logical implication. Why? Because you are a relevantist about how logical implication *actually* is.
- *Monism* is nowhere defined in B&R. Are we to take it, then, that it is the contradictory of the conjunction of pluralism's stripped down conditions on p. 35. We'd better not think so. The five conditions are logically independent of one another, leaving five different and inequivalent ways of being a monist on the present assumption. Wouldn't that land us in a *pluralism of monisms*?
- If there are different and (realistly) incompatible *species* of logical implication, their genus would be either inconsistent or free of all properties in pluralistic conflict. In the first instance, logical implication would be inconsistent at its core, and in the second it would be a weak and puny "*incompletia*", wholly devoid of interest. See objection 6 below.
- If you adopt the first position and wish to rid yourself of its inconsistency, you might *plead* ambiguity. If it's actually there, you haven't found an *ambiguous* genus. What you've found are two or more unambiguous *genera*.
- Better to drop all this species-genus talk for once and all. If you think that there are genuinely different but perfectly kosher relations of logical implication, the better metaphor is one of a *family resemblance*. Each individual *bona fide* relation of logical consequence will be *recognizable to the others as members of this same family*.¹

¹ Yes, but what if someone disagrees about the membership conditions? Good! See objection 5 below.

Objection 2 (pp. 88-89)

- It might have been better for B&R to say that, because they are pluralists about logical implication and logical implication is the heart of logic, then they are also pluralists about logic. Moreover, why not allow that, since *different* theories will implement these respective core relations, these theories form a pluralism of nonrivalrous logics?

Objection 3 (89-90)

Geoffrey Goddu makes the point that B&R leave the notion of *case* undefined. They reply (weakly) that cases “are ‘things’ in which claims may be true.” This *might* hold for worlds and situations, but it holds only *equivocally* for models. (Recall, a formal sentence is true in Tarski’s formal semantics just in case it has a model in an interpretation, i.e., every denumerably infinite sequence of individuals in the domain of interpretation is satisfied on that interpretation.) But that’s not what “true” means in everyday English. The same is true of “predicate-satisfaction” in English.

Objection 4 (90-91)

B&R completely miss Goddu’s further point that if pluralism is taken in their way, then “logically implies” in predicate logic means something different from what it means in propositional logic. His point is that this isn’t the least uninteresting. Why? Because it is false on its face, hence a *reductio* of the B&R position.²

Objection 5 (91)

B&R pluralism excludes logics in which logical implication is intransitive and/or irreflexive “Yep”, they say, “we can’t invite everyone to the party”. Well, la-di-da!³

Objection 6 (92)

B&R concede that if the one true logic were the intersection of all the logics captured by their pluralism that would likely leave $A \vDash A$ as the sole truth of this universal logic. What they should have done is re-summon the family resemblance metaphor. There is *no* one true logic, but there *is* (or *might* be) one true *family* of logics.⁴

Objection 7 (93)

We needn’t bother with this.

Objection 8 (94)

² Note that the objection and reply are surfeited by torts of the sort that Tarski committed upon “semantics”.

³ Casimir Lewy, late of Cambridge, and Jonathan Strand presently of King’s College Edmonton are transitivity deniers. They are not fools.

⁴ But it might not be the B&R family. See footnote 3 below.

Basically the question is this. Suppose that R is a relation that preserves truth. Suppose that its antecedent is “warranted” (= justifiably believable/assertable). Then is R’s consequent also guaranteed to be “warranted”? The answer is absolutely not. The deductive closure of a truth-preserving R is at least as large as the number of natural numbers. It would greatly exceed the heat death of the universe before a human being couldn’t even entertain, much less assert, all the items in this closure. (Note well that this is an *infinitely understated* observation.)

B&R seem not to have heard of Gilbert Harman’s 1970 paper “Induction”, in Marshall Swain, editor, *Induction, Acceptance and Rational Belief*, Dordrecht: Reidel. See also Harman’s *Change in View*, Cambridge, MA: MIT Press 1986; chapter one. It is here that Harman makes the point that the conditions on *logical implication* can’t serve as general rules for *deductive inference*. Recall the point in today’s lecture about how *modus ponens*, which virtually everyone thinks is valid for English consequence-statements, but not for deductive inference. Recall as well that *modus ponens* can set up an *option-space* for deductive inference in *modus ponens* contexts.

Objection 9 (95-97)

Both the objection and the reply are entangled in an insufficiently recognized difference between inference and implication. We needn’t waste our time with them.

Objection 10 (97-99)

Here is another case (no pun) in which the whole discussion is swamped by torts committed on “truth condition” and “meaning”. This tells us that our worries about formal representability presumptions travel well. What I mean is that they (the presumptions) cause trouble all over the place, or at least the risk of it.

Objection 11 (99)

B&R are right, but could have said it more directly: “For the premiss-conclusion reasoning we plan to do on the island, we think that first-order classical logic would provide the best formal representation.”

Objection 12 (99-100)

See above.

Objection 13 (100-102)

Does pluralism about logical implication give us a like pluralism about logical truth? Of course, it depends on particulars of the system’s operating manual. But say that it does. Who cares? “Well”, this would mean that ‘ $A \vee \sim A$ ’ is ambiguous!” Damned straight it does. That’s what you get from the fiction that *T-conditions* fix the *meaning* of ‘ \sim ’ and ‘ \vee ’. You made your bed, so stop blubbing and go lie in it.

Objection 14 (102)

B&R are right to reject Carnapian tolerance as irrelevant to their own pluralism.

Objection 15 (102-104)

Largely beside the point. On the family view of consequence-pluralism, there simply *is* no consequent that is the REAL consequent of those premisses. It might be *one* of them.

Objection 16 (104-106)

All the going paraconsistent systems, including the relevantist and dialethic ones, give convincing (enough) formal representations of one fact of major importance namely, that *ex falso* fails for *deductive inference*. However, B&R's pluralism is about *logical consequence*, and it allows for systems in good standing in which *ex falso* holds true. So all this back and forth with nervous paraconsistentists is largely a waste of space.