

## Phil. 125: Philosophy of Science

### First Assignment (Paper Version)

#### Instructions

The paper (6–10 pages long) is due Tues., Oct. 31, in class. Note that there is also a take home exam version of this assignment, which you may choose to do instead of this one.

The below topics are suggestions. If you want to write on another topic, feel free to do so. It might be a good idea, however, in that case, to check with me first.

The main focus of the paper should be, one way or another, on texts we've read for this class, though you're welcome to use other material also if it seems useful/relevant. If you do use outside sources, it should go without saying that you must cite them, and provide enough bibliographical information that I can figure out what they are. (For sources from the recommended or required reading, title and page number should be sufficient.)

I recommend an attempt to interpret (understand/explain/make sense of) the views of the authors we've read, rather than, say, an attempt to make an argument of your own against them. (I recommend this *particularly* if one or more of these authors rubs you the wrong way or seems obviously wrong or uninteresting.) All of the suggested topics below are along those lines. This is only a recommendation, however: I suspect that an effort in this direction is most likely to produce a good paper, but if you think you have a good idea along other lines, go ahead and try it.

#### Suggested Topics

1. What is the importance, according to the authors we've read, of using the proper concepts (or: the proper terms, with the proper definitions)? How (if at all) can we be sure we have the right ones? (Is there only one way or are there more than one?) What happens if we have the wrong ones? (The wrong concepts, that is, or: terms improperly defined, terms without proper definitions—are all of those the same?) What happens to science in that case? To philosophy? Pick at least two authors to discuss, one of whom should presumably be Carnap of the *Aufbau*. (You might regard earlier and later Carnap as different “authors” for these purposes).
2. What, according to the authors we have read, is the relationship between science and language, and/or between philosophical interest in science and

in language? What, if anything, makes language into an object of special interest for philosophy and/or science? You may want to contrast different authors, or to trace changes in a single one (unless you've done additional reading, that would pretty much have to mean Carnap). (If you do contrast different authors, the contrast need not be simply between Carnap and one of his critics. Neurath, Putnam, and Quine all attack Carnap in different ways, though there are also similarities between all three. What role do views about or attitudes towards language play in this?)

3. Discuss the meaning of and/or relationship between some of the following things, according to authors we've read: (scientific) theory, observation(s), common or everyday knowledge, experience, sense data. How (if at all) do they define them? Which do they consider most certain/reliable, or more justified, or otherwise better, and why? (In what sense are they or are they not "empiricists"?) How and on what grounds do they disagree with each other about these issues? (How, if at all, is it possible to disagree about the *definitions*? Can't everyone define the terms as he or she likes? What would our various authors say about that?)
4. What was really important to Carnap, and what wasn't (in general and/or at the various stages we've seen)? How does this explain the adjustments in his project as time went on, and/or his response to (one or more of) his critics? To help with this, you may want to look at the Preface to the second edition of the *Aufbau* (which is in your book), also at his "Intellectual Autobiography" and possibly other items on the recommended reading list.
5. Carnap was an Old Left democratic socialist, Neurath was a Marxist, Quine was an extreme right wing conservative, and Putnam was (in the period when he wrote "What Theories Are Not") a New Left activist. Discuss the relationship between the political views of these authors (i.e., one or more of them) and their views in philosophy of science. (I hinted at some things about this in class, but there's a lot more to be said.) (Note: to do this well you need to understand and deal carefully with the philosophy of science aspect, not just take off on the politics.)