

PROBLEM SET 4
due Thursday, Oct. 21 in class

PHILOSOPHY OF
LANGUAGE

Exercise 1 (16 pts.) Using Venn diagrams in “logical space”, show how the propositions expressed by the following sentences would be represented and related by a truth-conditional theorist. [Draw them all together, in the same logical space (same box).]

- (a) Jones broke the window and ran.
- (b) Jones broke the window but didn't run.
- (c) Jones baked a cake earlier today.
- (d) Jones baked a cake earlier today and $2+2=4$.

Exercise 2 (12 pts.) Say how many propositions you think a truth-conditional theorist, a Russellian, and a Fregean (all on the ‘naive’ versions I presented in class) would say are expressed by the sentences below. (“Mark Twain” was the pen name of Samuel Clemens and “being an eye-doctor” for our purposes expresses the same property as “being an ophthalmologist”). Explain each of your three answers.

- (a) Mark Twain was an ophthalmologist.
- (b) Mark Twain was an eye-doctor.
- (c) Samuel Clemens was an ophthalmologist.
- (d) Samuel Clemens was an eye-doctor.

Exercise 3 (12 pts.) In class we saw how one could informally state the conditions on truth conditional propositions diagrammed in logical space to represent their logical relations. For example we saw that for p and q to be *compatible* p and q needed to have overlapping truth-conditions. In the same manner, state what conditions on the representation of propositions (p , q , r , etc.) would be required for the following relations to hold. (Don't actually diagram anything in your answer—just state the conditions in English in the way I did for compatibility just now). Be clear and precise.

- (a) p entails (q and r).
- (b) p is inconsistent with (not q).
- (c) p , q , and r are pairwise compatible with each other, but it is impossible for all three of p , q , and r to be true at the same time.

Exercise 4 (10 pts.) Consider the following sentence.

- (X) Most Americans believe that Donald Trump is a former real-estate mogul and reality TV star, is married to Melania Trump, and has his name on a giant tower in New York City.

Suppose for now that (X) is actually true (after all, it seems like it easily could be). Consider a Fregean who thinks the “that”-clause in (X) picks out a *single* Fregean proposition and the sentence to report that a majority of Americans each believe *that very* proposition. So (X) should only be true if that condition actually holds. This seems like it might be problematic because of the ‘finesses’ of Fregean propositions. Explain why. Then say whether the particular problem you discuss will be avoided on a naive Russellian view.