

Philosophy 125 — Day 16: Overview

- First Papers and SQ's due **Today** – please turn them in
- I added some links to stuff on the Sea Battle Argument. These include both “logical” (Prior) and “semantic” (MacFarlane) approaches.
- Agenda: Propositions (Cont'd)
 - Realism about Propositions (Cont'd)
 - * Meaning/Reference of linguistic expressions & Liar Paradox
 - * Opacity of statements, thoughts, and propositional attitudes
 - * Are propositions just *complexes of meanings*?
 - * Summary of realist conception(s) of propositions
 - Nominalism About Propositions
 - * Quine, Sellars, and Prior's Metalinguistic Approaches
 - * Loux's Objections to Metalinguistic Approaches
 - * Russell's Multiple Relation Theory



Prelude: Meaning and Reference of Linguistic Expressions

- We have already seen that (Quine/Russell) not all meaningful linguistic expressions have referents: *e.g.*, “The present King of France”.
- Expressions with different meanings can have same referent (coreferential). *E.g.*, “The 19th State of the Union” and “Indiana”. [Can expressions with the same meaning have different referents? Loux: “that I am here now”?]
- That-clauses are (in some ways) more peculiar referring expressions. [In some ways *less* peculiar – can a that-clause be meaningful without referring *at all*?]
- In any case, it does seem that some grammatically well-formed declarative sentences fail to express propositions. For instance, consider the following:
 - (i) Sentence (i) is not true. [\therefore (i) is true iff (i) is not true – no proposition!]
 - (ii) Nonselfexemplification is nonselfexemplifying. [similar to (i)]
and *perhaps*:
 - (iii) There will be a sea battle tomorrow in the Persian Gulf. [future contingent]



Digression: A Realist/Fregean Resolution of the Strengthened Liar Paradox?

- Realist: \lceil Sentence s is true (untrue) \rceil is loose talk for \lceil The proposition *that-s*, expressed by sentence s , is true (untrue) \rceil . So, (i) should really be written as:
 (i) The proposition expressed by sentence (i) is not true.
- But, we just proved there can be no proposition expressed by sentence (i). So, the definite description “the proposition expressed by sentence (i)” is empty.
- Applying Russell’s theory of descriptions yields the following paraphrase:
 (i) There exists a unique proposition p expressed by (i), and p is not true.
- (i) is true \Rightarrow (i) is not true. This is not enough to make (i) *paradoxical*. Can we show that (i) is not true \Rightarrow (i) is true? Perhaps not. On Russell’s theory, (i) can be untrue *just because* “*that-(i)*” is *empty*. So, we *seem to* have shown that (i) is not true \nRightarrow (i) is true, which *seems to* block the paradox. BUT: on Russell’s theory, if “*that-(i)*” is *empty*, then (i) is *false*, and (i) *denotes a false proposition* — the paradox returns! Frege: sentences with empty subjects are *neither true nor false*. This works! But, not for “weak liar”! [See handout.]



Propositions IV: Realism about Propositions 4

- Realist: that-clauses are complex singular terms that denote propositions. But, their referential behavior seems to be different than that of other complex singular terms. What a that-clause denotes seems to depend not only on the *referents* of its constituents, but on the *meanings* of its constituents as well.
- Consider the following complex singular term (definite description)
(1) “The tallest man in Indiana”
Assume that (1) denotes a 7' 7" Indiana native named “Sam Small”.
- If we substitute “The 19th state in the Union” for “Indiana” in (1), we get:
(1') “The tallest man in the 19th State in the Union”
- Note: (1) and (1') are coreferential – they both (*in fact*) denote Sam Small. In this case, substituting coreferential constituent terms preserves the reference of the complex singular term. That is, the reference of (1) and (1') seems to depend *only* on the *reference* of their constituent referring expressions.



- Now, consider the following that-clause (complex singular term):
(2) “That Sam Small has been admitted to Harvard”
- And, assume that “Harvard” and “The most illustrious American university” are coreferential. Now, if we substitute the latter for the former in (2), we get:
(2′) “Sam Small has been admitted to the most illustrious American university”
- Note: (2) and (2′) are *not* coreferential. It is possible for the proposition denoted by (2) to be true, while the proposition denoted by (2′) is false.
- Identity conditions for *propositions*: For propositions p and q , if $p = q$, then p must be *logically equivalent* to q , i.e., p and q must have the same truth-value *in all possible worlds*. Intuitively, (2) and (2′) have different *meanings* (or *truth-conditions*), because their *constituents* have different meanings.
- This is a useful feature of that-clauses, since it allows the realist to explain what is sometimes called the *opacity* of the propositional attitudes.
- Someone can believe that Sam Small has been admitted to Harvard, without believing that the tallest man in Indiana has been admitted to Harvard (other examples of *opacity*: Lois Lane’s beliefs about Clark Kent & Superman).



Propositions V: Realism about Propositions 5

- Realists are divided on whether propositions are complexes or organic wholes. Some have suggested that propositions are just *meanings of sentences*.
- Since the meanings of sentences are *compositional* (built-up from the meanings of *parts* of sentences), propositions will have *parts* on this view.
- There are some good reasons for taking propositions to be meanings.
 - It allows for a *semantical* explanation of the opacity of that-clauses.
 - If that-clauses refer to meanings of declarative sentences, and such meanings are *compositional*, then substitutions with coreferential terms will only preserve reference if they *have the same meaning* (intuitive!).
 - We've seen that expressions with the same referent can have different meanings [*e.g.*, “Harvard”/“The most illustrious American university”].
- Loux: (a) Do speakers assert or deny meanings? Do thinkers believe, hope, or fear meanings? Are meanings true or false? (b) “that I am here now” has a single meaning – used by different speakers to assert different propositions.



Propositions VI: Realism about Propositions 6

- Realists agree that propositions are abstract entities with these characteristics:
 - They're the objects of acts of asserting/denying and acts of thinking.
 - They're contingently asserted/thought, but necessarily *assertible/thinkable*.
 - They exist eternally and necessarily, and are intersubjectively available.
 - Hence, propositions constitute the materials necessary for the public communication of a shared conception of the world.
 - They are essentially truth vehicles, the primary bearers of truth values.
 - They are the things that primarily enter into logical relations.
 - They are the referents of that-clauses. Each is a unique representation of the world, which explains why that-clauses and propositional attitudes are *opaque* (not referentially invariant across coreferential substitutions).
- Realists disagree on some things, including:
 - Do all propositions have their truth-values *eternally*? [Sea Battle stuff]
 - Are propositions *complexes* like the sentences that express them? [Meanings stuff]



Propositions VII: Nominalism about Propositions 1

- One of the Realist's challenging examples is the following sentence:
(3) "I am going where you have just been."
- The realist claims that, since (3) is true in some situations and false in others, if one takes *sentences* as the primary bearers of truth, then (3) comes out both true and false, which is absurd – truth bearers cannot be both true and false.
- Nominalist Reply: all this shows is that sentences do not have their truth-values *absolutely* (*not* that they don't have truth-values at all). Lesson: Sentences only have truth-values *relative to contexts of utterance*.
- Contexts of utterance include information concerning who is uttering the sentence to whom, where, when, *etc.* Contextual information is required to fix the meaning/reference of *indexicals* like "I". We *assume* context relativity.
- Generally, nominalists want to do all the work realists do, without positing these abstract entities the realist calls "propositions". Some strategies:



Propositions VIII: Nominalism about Propositions 2

- Quine suggests that statements which appear to be about propositions are really just statements about people and sentences. *E.g.*, Quine’s paraphrase:
 “John believes *that* $2 + 2 = 4$ ” \mapsto “John believes-true ‘ $2 + 2 = 4$.’”
- Quine’s ‘believes-true’ predicate is supposed to eliminate that-clauses (and reference to propositions). But, what does ‘believes-true’ *mean*? It seems that $\lceil X \text{ believes-true } s \rceil$ just means $\lceil X \text{ believes } \textit{that } s \textit{ is true} \rceil$. Will that do?
- Perhaps Quine could give a purely behavioristic (austere) account of ‘believes-true’. Or, he could always take it as such predicates as *primitive*. Quine, ultimately, rejected this approach, which seems wise, since:
 “John believes-true ‘two plus two equals four’” *is not equivalent to*
 “John believes-true ‘Deux et deux font quatre.’”
- In this sense, Quine’s account of the propositional attitudes is like Carnap’s account of abstract reference – it is *language bound* (or *language variant*).



Propositions IX: Nominalism about Propositions 3

- Recall: Sellars introduced *dot quotation* to rescue Carnapian metalinguistic nominalism (about universals) from the problem of language relativity.
- Sellars does the same thing in this context, to rescue the naive Quinean metalinguistic nominalistic account of the propositional attitudes (and *that's*).
- Here, we dot-quote entire declarative sentences to yield things like:
 - ·Two plus two equals four·s are true declarative sentences. [paraphrase of the realist's sentence "That two plus two equals four is true"]
 - John assertively utters a ·two plus two equals four·. [paraphrase of the realist's sentence "John says that two plus two equals four"]
- The case of belief is more complicated. Sellars posits a *language of thought* called "Mentalese" (*i.e.*, acts of "speaking to oneself" in a natural language):
 - John tokens (or is disposed to token) a Mentalese ·two plus two equals four·. [paraphrase of "John believes that two plus two equals four"]



Propositions X: Nominalism about Propositions 4

- Arthur Prior has an alternative (and ingenious) way to approach propositional attitudes and that-clauses from a nominalistic perspective.
- Prior adopts Ramsey's *redundancy theory of truth*, according to which asserting \lceil that s is true \rceil is equivalent to asserting s (full stop). So, *e.g.*,

“That grass is green is true” \mapsto “Grass is green.”
- This *eliminates that-clauses* in a very elegant, general, and unified way. But, what about the propositional attitudes like belief, assertion, *etc.*?
- Here, Prior suggests that the logical form of statements like “John believes that two plus two is four” is not $\lceil X$ believes *that- p* \rceil , but $\lceil X$ believes *that p* \rceil .
- *I.e.*, it is not that X bears the believing relation to a proposition *that- p* , rather X has the *property believing that p* . [Believes(X,p) versus Believes $_p$ (X)]
- So, “believing that p ” is simply a *psychological property of a person*. And, we don't need to postulate any mind-independent propositions to explain *that*.



- There are some tricky cases for Prior's account, such as the following:
 - (4) "John believes some falsehoods."
 - (5) "Sam believes everything Peter says."
- Prior introduces *sentence variables* $p, q, \text{etc.}$, and then *quantifies over them*.
 - (4') For some p , not- p and John believes that p .
 - (5') For every p , if Peter says that p then Sam believes that p .
- For this to work, the right sorts of linguistic expressions must *exist*, in order to make (*e.g.*) (4') true. In cases such as these, it is plausible that such expressions will exist (*some* falsehood John believes can be *expressed*).
- What about *undesigned* truths – truths not expressible in (a) language (L)?
 - (6) There are truths which are not expressed by any sentence (in L).
- On Prior's account, (6) would get paraphrased (roughly) as follows:
 - (6') For some *sentence* p (in L), p and no sentence (in L) expresses p .
- But, (6) is true (according to Loux), and (6') is false. Prior seems unable to explicate the truth of such "inexpressible (in L)" truths. Is this a real problem?



Propositions XI: Nominalism about Propositions 5

- Russell (between 1900-1919) was a realist about universals, but *not* about propositions. He had deep worries about *objective falsehoods* (false propositions), which led him to abandon postulating propositions *altogether*.
- Russell thought that there must be objective *facts* which undergird – by correspondence – the truth-values of judgments (or propositions). In the case of false judgment, *there is no fact* to which the judgment can correspond.
- For instance, if Othello falsely believes that Desdemona loves Cassio, there is no fact to which this belief corresponds. There is no such thing as “objective falsehood,” (or “false proposition”) since an *absence* of fact is *nothing at all*.
- But, if there are no false propositions, then how can there be *any* propositions? Propositions are supposed to be the bearers of *both* truth *and* falsity.
- Russell rejected propositions as the bearers of truth-values in favor of *judgments* as their bearers. On his *multiple relation* view, judgments are relations between persons, objects, and universals (in certain orders).



- For instance, “Othello’s believing that Desdemona loves Cassio” can be expressed as $B(o, d, L, c)$. Because Othello might also have believed Cassio loves Desdemona, the relation $B(o, c, L, d)$ must also exist (there need to be *many* such relations B , hence the name “multiple relation theory”).
- This construction abstracts out what a number of occurrences of a belief have in common, a believer and various objects and universals, in a certain order.
- The analysis also no longer contains propositions (as units of analysis), since no constituent in the analysis of “ x believes that p ” corresponds to “ p ”.
- Certain orderings of objects and universals (e.g., $\langle d, L, c \rangle$) appear *only* in the context of a belief. While there *is* a fact that the *judgment* can correspond to $[B(o, d, L, c)]$, there is *no fact* underlying the “part” of this judgment that one might choose to call a proposition [“Desdemona loves Cassio”, “ $\langle d, L, c \rangle$ ”].
- One can’t take “ $\langle d, L, c \rangle$ ” out of a judgment “ $B(o, d, L, c)$ ” and expect *it* to be a complete bearer of truth or falsity (or even a whole semantic unit). If $\langle d, L, c \rangle$ occurs *in some fact*, Othello’s belief is true. If not, Othello’s belief is false.



- The various “believe-ings” (B 's) will be radically different kinds of things (4-place vs 3-place vs 100-place relations). Why are all of these *believe-ings*?
- How can (*e.g.*) “Loving” play *both* the role of a *term* in a belief relation [$B(o, c, L, d)$], and a *relation* which *in facts* [$\langle d, L, c \rangle$] relates persons?
- If it is *mental acts of judging* rather than propositional objects that are the bearers of the truth values, what sense can we give to the enterprise of logic, which seems to treat the truth values as properties of *abstract things* that are the contents or objects of mental acts and acts of statement making?
- Specifically, when we say that “John is a lawyer and an engineer” entails “John is a lawyer”, we do not seem to be talking about *judgments* at all. This is especially true in mathematical demonstrations, for instance.

