Course "The Ontology of Predication"
ENS, Fall 2008/9 - Handout 2

Historical part: a survey

- The two main topics I want to talk about in this course: (1) the **paradoxes of predications** attributing properties to **nonexistent objects**, and (2) the problem of the **unity of propositional content**. On both topics I will begin with a historical survey.

(1) The first phenomenon dates back to Parmenides and involves such issues at the interface between ontology and semantics as:

- The traditional distinction between **various senses of the copula** (systematized by Frege), and the opportunity of coining **new kinds of predication** when speaking about nonexistent objects (as suggested by contemporary "dual copula" metaphysical approaches, such as Zalta's axiomatic metaphysics) ;

- The issue whether **existence is a property of individuals** (as claimed by Avicenna, Leibniz, Meinong, and various subscribers to the Ontological Argument) **or not** (as claimed by Hume, Kant, Russell, Quine, van Inwagen, etc.);

- The analysis of sentences pertaining to **fictional discourse** and talk of fictional characters, such as Pegasus, Sherlock Holmes, or Gandalf.

(2) The second phenomenon has been at the core of the reflection of such classic philosophers as Kant and Hegel, and has been revived within contemporary analytic philosophy by Russell, and above all Frege with his doctrine of predication as saturation of a concept-function by an object. The main question at issue is: **how do we explain the unity of propositions**? Important sub-issues are:

- What is the **difference** between a mere ordered sequence of items, such as <Socrates, motal>, and a proposition, such as that Socrates is mortal?

- Which entities play a role in the explanation of propositional content? And supposing the latter is something structured, **how can the entities composing it combine metaphysically to each other**?

1. Parmenides on what is not

1.1.   The paradox of negative predications and negative existentials

- The ἀρχὴ κακῶν is Parmenides' prohibition to speak about what is not (and even to think about it):

   "Come now and I will tell thee – Listen and lay my word to heart – the only ways of inquiry that are to be thought of: one, that [That which is] is, and it is impossible for it not to be, is the Way of Persuasion, for Persuasion attends on Truth.
   Another, that It is not, and must not be – this, I tell thee, is a path that is utterly undiscernible; for thou couldst not know that which is not – for that is impossible – nor utter it. […]
   What can be spoken of and thought must be: for it is possible for it to be, but it is not possible for 'nothing' to be." (Parmenides fragments 2, 3 and 6).

- A negative existential proposition is just a proposition expressed by a statement to the effect that something does not exist – either a singular statement of the form "*x* does not exist", or a plural statement of the form "the *x* do not exist".

- The **Paradox of Non-Being** or of **Negative Existentials** is simply the following: some negative existential propositions seem to be true (such as that Pegasus does not exist, or that unicorns do not exist); on the other hand it seems that *no* meaningful existential proposition can be true, and therefore **everything exists**.

- Take the proposition that Pegasus does not exist. If it's about anything, it's about Pegasus. But it can be about something only if *there is* something for the proposition to be about. So the proposition that Pegasus does not exist is either false (if Pegasus exists) or self-defeating (for it denies a precondition of its being meaningful): it's like saying "Never say never", or "Nobody can refer to Paris".

- The argument goes as follows (see M. Fitting and R.L. Mendelsohn [1998], *First-Order Modal Logic*, Kluwer, Dordrecht):

  (P1)   To deny the existence of something, one has to refer to that thing;
  (P2)   But one can only refer to things that exist;
  (C)   Therefore, to deny the existence of something, that thing has to exist.

  From (C) easily follows that all negative existential statements are false or self-refuting, therefore everything exists.

- The logic required to run the argument is minimal: one only needs transitivity for the conditional (if A then B, if B then C, therefore if A then C). By contraposition (if A then B, therefore if not-B then not-A) one has from (P2) that **one cannot refer to things that do not exist**. To "refer to" should be taken both as linguistic reference and as mental, intentional reference: Parmenides has it that one cannot *speak of* and *think of* what is not.

- By the same token, it seems that **no property at all can be truly ascribed to nonexistents**. For how can the proposition that Pegasus is a flying horse be true of Pegasus if there is nothing for it to be true *of*?

- Also Parmenides' notorious rejection of **multiplicity** and **becoming** follows from his refusing to predicate non-being of being…

1.2.   Five senses of "is": identity, predication, subsumption, existence, mention

- The received view has it that Parmenides' paradoxical claims are merely **linguistic tricks**. The ancient Greeks were at an embryonic stage of linguistic analysis – see Plato struggling to make such basic grammatical distinctions as those between noun and verb in the *Cratylus*. In particular, Parmenides' point equivocates on the copula "is" (Russell claimed that the ambiguity of the copula was a disgrace for the human race!)

- After Frege and Russell, we have five different meanings of "is": existence, identity, predication, subsumption, mentioning:

1) "Socrates is": $\exists x(s = x)$, in canonical notation.
2) "Batman is Bruce Wayne": $b = w$.
3) "Socrates is a man": $M(s)$.
4) "Man is animal": $\forall x(M(x) \rightarrow A(x))$
5) "'Cicero' is a six-letter word": $S('c')$

The existential use (1) is rather peripheral in English and Italian (what about French?), but the Greek ἔστι is particularly prone to it (see e.g. C.H. Kahn [1973], *The Verb"Be" in Ancient Greek*, Kluwer, Dordrecht).

- People say that Plato in the *Sophist* had the merit of distinguishing the "is" of predication from the "is" of identity (according to some, also the "existential "is", but that's more controversial). He distinguished between absolute non-being (ἐναντίον, the opposite of being), and non-being in the sense of the ἕτερον, that-which-is-different. The latter is just negative predication: negative propositions to the effect that something is not something mean that something lacks a certain property ("Socrates is not a jelly fish"), or something is not identical with something ("OJ Simpson is not his wife's murderer"), this does not entail that something *is not simpliciter*, is nothing.

1.3.   Paradox regained: Plato's Beard

- **However**, things are not so simple. Once the various kinds of predication have been distinguished, the problem of the ἐναντίον remains unsolved: how one can meaningfully claim of something that *it is not* in the absolute sense, that is, that there is no such thing.

- Quine regains the paradox in *On What There Is*, calling it "Plato's Beard". Quine calls a "Platonist" someone who admits certain kinds of entities we might consider unwelcome (Platonic ideas, or universals, or properties, any other thing you might not like to include in your inventory of the world). How can Quine express his disagreement with the Platonist without self-contradiction?

"When *I* try to formulate our difference of opinion, on the other hand, I seem to be in a predicament. I cannot admit that there are some things which [the Platonist] countenances and I do not, for in admitting that there are such things I should be contradicting my own rejection of them. It would appear, if this reasoning were sound, that in any ontological dispute the proponent of the negative side suffers the disadvantage of not being able to admit that his opponent disagrees with him.
This is the old Platonic riddle of nonbeing. Nonbeing must in some sense be; otherwise what is it that there is not? This tangled doctrine might be nicknamed *Plato's Beard*; historically, it has proved tough, frequently dulling the edge of Ockham's razor" (W.V.O. Quine [1948], "On What There Is", in *From a Logical Point of View*, Harper&Row, New York, p. 32).

- The Paradox of Non-Being runs through the centuries. Here is a classic formulation by Richard Cartwright:

"To deny the existence of something – of unicorns, for example – we must indicate what it is the existence of which is being denied; and this requires that unicorns be referred to or mentioned; the negative existential must be about them. But things which do not exist cannot be referred to or mentioned; no statement can be about them. So, given that we have denied their existence, unicorns must after all exist. The apparently true negative existential is thus either false or not really a statement at all; and, since the argument applies as well in any other case, we seem forced to conclude that there are no true negative existentials." (R. Cartwright [1960], "Negative Existentials", *The Journal of Philosophy*, 57, p. 630)

- Non-denoting singular terms pose particular problems to Kripke's **theory of direct reference**: for if the meaning of a proper name is exhausted by its bearer, then empty names provide no semantic contribution to the sentences in which they occur. How can these sentences, then, express complete propositions? (See A. Everett and T. Hofweber (eds.) [2000], *Empty Names, Fiction, and the Puzzles of Non-Existence*, CSLI, Stanford-CA).

- As we shall see in the theoretical part of the course, most philosophers (Russell, Quine, van Inwagen) **accept (P2): one cannot refer to nonexistents**, and truly ascribe properties to them. So they solve the paradox by **denying (P1): one does not need to refer to something** (by standard referential devices, such as names or referential quantification) **to deny its existence**.

- And **most analytic philosophers are (neo-)Parmenideans**: they subscribe to the view that everything exists – e.g., Quine begins *On What There Is* by claiming that the fundamental ontological question ("What is there?") can be answered in one word: "Everything".

- Existential Generalization, which is a basic inference in elementary classical logic:

  $P(a)/ \exists xP(x)$

  supports the thought that we can always infer from an object *a* having a property *P* of some kind, that *there exists* something which has *P*.

- Next, the so-called **Principle of Predication** (see E. Reicher [2006], "Nonexistent Objects" *The Stanford Encyclopedia of Philosophy*, CSLI, Stanford-CA) , also classically valid,

  $P(a) \rightarrow \exists x(x = a)$

  supports the idea that if *a* has any property *P*, then *there exists* something which is *a*, i.e., *a* exists. This is usually called **serious actualism**: a famous serious actualist is Plantinga (see A. Plantinga [1983], "On Existentialism", *Philosophical Studies*, 44, pp. 1-20).

- In the theoretical part of the course, we'll talk of the neo-Parmenidean tricks to explain away negative existentials and attributions of properties to nonexistents: Russell's treatment of definite descriptions, the standard, Quinean account of existential commitment through quantification, and the correlated thesis (going from Kant to Frege and Russell) that **existence is not a (first-order) predicate**, but is completely captured by the existential quantifier $\exists$.

- We will also investigate Edward Zalta's axiomatic metaphysical theory of abstract objects which is based on a **new kind of predication**, called **encoding**, in order to account for true predications of nonexistent and abstract objects (E. Zalta [1983], *Abstract Objects: an Introduction to Axiomatic Metaphysics*, Reidel, Dordrecht, and [1988], *Intensional Logic and the Metaphysics of Intentionality*, MIT Press, Cambridge).

2. The propositional unity

2.1. Frege: concepts and objects

- As is well-known, the "mature" Fregean view has it that singular terms, predicates and sentences have a *Sinn* and a *Bedeutung*… The *Sinn* of a sentence, such as "Socrates is mortal", is the thought it

expresses – the thought that Socrates is mortal. And Frege's thoughts are objective, abstract entities which look very much like what we nowadays call propositions.

- It is not very clear what the *Sinn* of a predicate is (more on this later), but the *Bedeutung* is certainly a **concept**. Now a concept is just a specific **function**, that is, a function whose outputs are truth-values (see *Über Begriff und Gegenstand*).

- In *Concept and Object*, Frege makes the example "2 is a prime number", and claims that if we take both the subject and the predicate as denoting objects, we will not explain the **unity of propositions**: we won't understand the difference between the proposition that 2 is a prime number, and an ordered couple of objects <2, prime number>. Frege adds that if we try to claim that the proposition expressed by "2 is a prime number" is that 2 falls under the concept *prime number*, but we think this as an external link between two **objects** (the number 2, the concept *prime number*), now we have three elements: (a) the number 2, (b) the relation of falling under a concept by an object, and (c) the concept *prime number*, and we haven't explained the propositional unity yet.

- **Russell** mentions a similar problem in *The Principles of Mathematics*:

"A proposition, in fact, is essentially a *unity*, and when analysis has destroyed the unity, no enumeration of constituents will restore the proposition. The verb, when used as a verb, embodies the unity of the proposition, and is thus distinguishable from the verb considered as a term, though I do not know how to give a clear account of the distinction." (§ 52)

- This is a variant upon **Bradley' argument of regress**, often identified with the so-called **paradox of the third man** (see Plato's *Parmenides*, 132a-133a). If one claims that the proposition expressed by

      (1) Socrates is mortal

is distinct from <Socrates, mortal> because there's a relation that connects its two elements, namely – say – the object Socrates and the property of being mortal (the relation variously called by philosophers of *exemplification* – or *participation*, or of *having*, or of *falling under* – that holds between an object and its properties), then (1) amounts to

      (2) Socrates exemplifies mortality.

But now one has three entities, (a) Socrates (b) the relation of exemplification (c) the property of mortality. What binds *them* together now? If one resorts to "second-order" exemplification:

      (3) Socrates and mortality co-exemplify$_2$ exemplification$_1$,

One is on the way of an infinite regress. Bradley thought the argument showed the unreality of relations (see F.H. Bradley [1893], *Appearance and Reality*, Clarendon, Oxford, Ch. 2), but Frege has a different solution.

- Frege claims that concepts, the *Bedeutung* of predicates, have to be taken as "**unsaturated entities**". Frege obscurely thinks of the saturation of a concept … *is mortal* by an object, Socrates, as a dynamic process like a chemical reaction.

- This holds for functions in general, to begin with: One obtains the function denoted by "$2 \cdot x^3 + x$" by considering patterns of similarity between such expressions as "$2 \cdot 1^3 + 1$", "$2 \cdot 4^3 + 4$", "$2 \cdot 5^3 + 5$", etc. The function designated by "$2 \cdot (\ )^3 + (\ )$", says Frege, is "incomplete" or "unsaturated", as the empty place in its expression makes clear. And "This is the fundamental difference between functions and numbers".

- This holds also for that particular function which is a concept, that is, the *Bedeutung* of a predicate. Atomic sentences such as "Socrates is mortal" are decomposed in two parts, of which one, "is mortal", designates an entity (the concept) which is by itself ontologically incomplete, or unsaturated.

- But if the concept, i.e., the function, is the *Bedeutung* of the predicate, what is its *Sinn*? There's nothing clear in Frege's published works. In the *Nachlass*, Frege claims (in the *Introduction to Logic*) that:

- the *Sinn* of a sentence is a "complete thought" – e.g. the *Sinn* of "Socrates is mortal" is the complete thought that Socrates is mortal; and Frege's thoughts, as we have said, are objective, abstract entities.
- The *Sinn* of a predicate is an "unsaturated thought", or an "incomplete thought" – seemingly, a part of the thought which is completely expressed by the sentence.

- What does this mean? Some have claimed (e.g. R. Brandom [1994], *Making It Explicit*, Harvard U.P., Cambridge, Mass.) that there's a certain **holism** underlying Frege's conception: one can grasp the *Sinn* of a predicate only by abstracting it from the already grasped *Sinn* of a complete sentence.

- This would fit well with Frege's **context principle** that subsentential expressions have a meaning only in the context of a sentence, but poses problems for compositionality and accounts of language-learning.

- **Is the concept *horse* not a concept**? Frege's maintaining what he calls an "absolute difference" between concept and object poses a famous problem. "Varenne is a horse", in the Fregean view, is analyzed into "Varenne", whose *Bedeutung* is an object, and "is a horse", whose *Bedeutung* is a concept. But of course we can talk *of* concepts to claim that they (in Fregean jargon) fall under (second-level) concepts – "The concept *horse* has changed through the ages". Does "the concept *horse*" here not stand for a concept?

- Frege says that concepts are "essentially predicative", that is, essentially unsaturated. So when the expression appears as the subject of an atomic sentence **the concept has somehow *turned into* an object**. Frege,'s famous admission that "The concept *horse* is not a concept" according to many gets close to a paradox. How do we explain such an ontological change – concepts becoming objects – out of metaphor?

- Now few people know that the antecedents of the Fregean conception are the German idealists, specifically **Kant** and **Hegel**… [TBC]