

## Course “The Ontology of Predication” ENS, Fall 2008/9 - Handout 8

### 0. *Résumé*

- We have seen that naïve Meinongianism, as based on the Unrestricted Comprehension Principle for objects:

(UCP) For any condition  $\alpha[x]$  with free variable  $x$ , some object satisfies  $\alpha[x]$ .

leads to unacceptable consequences – particularly to two troubles, stressed by Russell: (1) the objection from inconsistency, and (2) the claim that the UCP allows us to show that anything exists.

- One strategy proposed by neo-Meinongian theories of objects consists in **restricting the class of conditions  $\alpha[x]$  that may be used to characterize objects**: only some (sets of) predicates will give us the corresponding objects. *The* main problem of Meinongianism is: which ones?
- There are three main kinds of neo-Meinongian strategies available – we could label them as Meinongianisms of the First, Second and Third kind. The Third kind the most recent, and is my favourite one, so I’ll deal with it last.

### 1. *Meinongianism of the First Kind: the nuclear-extranuclear distinction*

#### 1.1 *The basics of the theory*

- Meinongianisms of both the First and Second kind are due to the work of Meinong’s pupil Ernst Mally (Mally E. [1912], “Gegenstandstheoretische Grundlagen der Logik und Logistik”, *Zeitschrift für Philosophie und philosophische Kritik*, 148, Ergänzungsheft, Leipzig).
- The First kind of Meinongianism is based upon (a) distinguishing between **two kinds of predicates, called *nuclear* and *extranuclear*** (The terminology is due to J.N. Findlay; Meinong talked about *konstitutorische* and *ausserkonstitutorische* predicates), and (b) claiming that **only nuclear predicates can be used to characterize objects** in a condition  $\alpha[x]$ . Such a strategy has been developed by Terence Parsons Richard Routley, and Dale Jacquette (Parsons T. [1980], *Nonexistent Objects*, Yale University Press, New Haven, Conn.; Parsons T. [1982], “Are There Nonexistent Objects?”, *American Philosophical Quarterly*, 19, 365-71; Routley R. [1980], *Exploring Meinong’s Jungle and Beyond*, Australian National University RSSH, Canberra; Routley R. [1982], “On What There Is - Not”, *Philosophy and Phenomenological Research*, 43, pp. 151-78; Jacquette D. [1996], *Meinongian Logic. The Semantics of Existence and Nonexistence*, De Gruyter, Berlin-New York).
- The Comprehension Principle is then restricted to nuclear predicates:

(NCP) For any *nuclear* condition  $\alpha[x]$ , with free variable  $x$ , some object satisfies  $\alpha[x]$ ,<sup>1</sup>

---

<sup>1</sup> One can express (NCP) in a second-order language as follows: if  $P!$  is a predicative variable ranging on nuclear properties, and  $\alpha$  a condition on properties with no free occurrences of  $x$ , then (NCP) goes like this:  $\exists x \wedge P!(P!x \leftrightarrow \alpha)$ .

Where by “nuclear condition” we mean precisely a condition embodying only nuclear predicates.

- But which predicates would be the nuclear ones? Here are a few examples, taken from Terence Parsons’ classic works:

NUCLEAR PREDICATES: “is blue”, “is tall”, “kicked Socrates”, “was kicked by Socrates”, “kicked somebody”, “is golden”, “is a mountain”, ...

EXTRANUCLEAR PREDICATES:

*Ontological*: “exists”, “is mythical”, “is fictional”, ...

*Modal*: “is possible”, “is impossible”, ...

*Intentional*: “is thought about by Meinong”, “is worshipped by someone”, ...

*Technical*: “is complete”, “is consistent”, ...

- Neo-Meinongian theories provide *criteria of identity* for nonexistent objects, to reply to Quinean objections based on the “No entity without identity” motto. Typically, the basic notion of the theory is included in the criterion. The nuclear criterion of identity goes thus:

(NI)  $x = y$  iff  $x$  and  $y$  satisfy the same *nuclear* predicates.

The criterion entails that not only, thanks to the NCP, some object satisfies each nuclear condition, but exactly *one* does, for given NI **there are no two distinct objects exemplifying exactly the same nuclear properties.**

## 1.2 The niceties of the theory

- The idea is that nuclear predications express properties constituting the nature of an object – its *Sosein* – whereas extranuclear properties supervene on the nuclear ones.

- Parsons introduces his theory by building a one-to-one correlation between existing objects and non-empty sets of nuclear properties. For instance, the (existing) Friederike can be mapped to the set of her nuclear properties – say, the set  $\{P \mid \text{Friederike is } P\}$ . Now we can arrange *all* the existent objects,  $o_1, o_2, \dots, o_n$  in a list, by building a one-to-one correspondence with the set of the respective nuclear properties:

$o_1$   $\{P \mid o_1 \text{ is } P\}$

$o_2$   $\{P \mid o_2 \text{ is } P\}$

.

.

$o_n$   $\{P \mid o_n \text{ is } P\}$

We have, thus, a theoretical catalogue of everything that exists. Now we *extend* it in a Meinongian fashion by adding items to the right-hand side of the list: one just adds sets of nuclear properties that no *existent* object instantiates, such as  $\{\text{being a mountain, being made of gold...}\}$ . The NCP tells us that some object – and, given NI, exactly one object, say,  $o_{n+1}$  – instantiates the relevant package of properties:

$o_{n+1}$   $\{\text{being a mountain, being made of gold...}\}$ .

The object (let us call it “the golden mountain”, again) is a nonexistent object, since it comes after the totality,  $o_1, \dots, o_n$  of the existent objects. By extending the list via all the packages of nuclear predicates available, we will have an exhaustive catalogue of *all* (concrete) objects.

- Another, transversal distinction is the one between **constitutive** and **consecutive** predicates. This is just relative to the way in which objects can be picked via characterization through the NCP: the constitutive (nuclear) predicates are the ones explicitly embodied in the relevant condition  $\alpha[x]$ , whereas the consecutive predicates are *entailed* by the constitutive ones, given a suitable notion of entailment plus meaning postulates. So if for instance  $\alpha[x] = “x \text{ is golden} \wedge x \text{ is a mountain}”$ , the object so characterized has as its constitutive properties those of being a mountain and of being made of gold, but may also have such consecutive properties as being a material object, having such and such a mass, having at least one property, etc.

### 1.3 Replies to the Russellian objections

- To The Russellian objection from inconsistency, nuclear Meinongianism replies thus: the *negation* of a nuclear property  $P$ ,  $\text{not-}P$ , is not itself a nuclear property; so the round square has the nuclear properties of being round and square, but from this it does not follow that it has the nuclear properties of being round and not-round.
- To the Russellian objection to the effect that the Comprehension Principle for objects allows one to prove the existence of anything whatsoever, nuclear Meinongianism replies, crucially, **by treating existence as an extranuclear property**: because of this, the NCP avoids Russell’s second objection and does not allow one to prove the existence of anything. The NCP grants that something has the properties of being a mountain and being made of gold, but does not deliver an existent golden mountain such a condition as  $\alpha[x] = “x \text{ is golden} \wedge x \text{ is a mountain} \wedge x \text{ exists}”$ , is not a nuclear condition, for “exists” is a first-order predicate, but not a nuclear one.
- Problem: what does such a description as “the existent golden mountain” denote, then? One option is to claim that it designates nothing. So some definite descriptions are non-denoting; this is the route followed by Terence Parsons; but it apparently conflicts with the thoroughly referential motivations of Meinongianism – its commitment to the idea that any singular term, name or description, must denote.
- Alternatively, one can retain the idea that any term and specifically any description denotes an object, but some description denote, so to speak, the “wrong” object, that is one that does not fully satisfy the description. So some object is denoted by “the existent golden mountain”, but it has in its *Sosein* only the nuclear properties of being a mountain and being made of gold, not the extranuclear property of existence (this idea is explored by Routley in *Exploring Meinong’s Jungle*). It has the advantage of respecting the intuition that we can refer to, think about, envisage, objects of any kind whatsoever, although the object envisaged will not always consistently have all the properties ascribed to them.
- Though the second option sounds more palatable, the first one is not that bad. Meinongianism as such is the denial of the Parmenidean thesis that everything exists: some things do not exist. Now this is entailed just by the fact that *some* singular terms (even some singular terms in *some* circumstances of use) designate nonexistents, not all of them.
- Besides, the claim that all singular terms denote is compatible with Parmenidism and the second-order view of existence. For instance, in some Fregean theories of descriptions “non-denoting” descriptions are conventionally taken as denoting a dummy object (say, the empty set  $\emptyset$ ).

## 1.4 ... And some troubles

- The first and main problem of nuclear Meinongianism is: **how do we give a principled distinction between nuclear and extranuclear predicates?** Parsons *et al.* provide only lists of examples and short explanations. Without a principle that partitions the class of all predicates, the distinction appears to be gerrymandered – introduced *ad hoc* in order to solve the problems of naïve Meinongianism (see Priest G. [2005], *Towards non-Being. The Logic and Metaphysics of Intentionality*, Oxford U.P., Oxford).
- Second problem: one of the main motivations for Meinongianism is that **we can conceive, imagine, envisage, refer to, objects characterized by any condition whatsoever** – not only nuclear ones. And the objects referred to or imagined should in some sense have the properties they are characterized as having. This should hold also for *existence*.
- For instance: take an object, *a*, characterized as an existing evil demon, and an object *b*, characterized as a merely fictional evil demon. One could fear *a*, but not *b*, precisely because the former, but not the latter, is assumed to exist. This suggests that also extranuclear properties do make a difference between objects, and especially that existence does (as we shall see, this intuition is accounted for much more straightforwardly in the Meinongianism of the Third kind).

## 2. Meinongianism of the Second kind: the “dual copula” strategy

### 2.1 The basics of the theory

- The Neo-Meinongianism of the second kind is also based on an intuition by Ernst Mally. Instead of distinguishing two kinds of predicates, this approach distinguishes two kinds of predication, or of ways in which an object can be related to its properties: (a) a standard one, and (b) one introduced *ex novo* by the theory.
- The terminology is not uniform:

*Mally:*

The golden mountain is *determined by* the property of being golden and by the property of being a mountain.

The golden mountain *satisfies* the property of being incompletely determined. (Mally E. [1912], “Gegenstandstheoretische Grundlagen der Logik und Logistik”, *Zeitschrift für Philosophie und philosophische Kritik*, 148, Ergänzungsheft, Leipzig.)

*Van Inwagen:*

The property of being golden and the property of being a mountain *are ascribed to* the golden mountain.

The golden mountain *has the property of* being incompletely determined. (Inwagen P. van [1977], “Creatures of Fiction”, *American Philosophical Quarterly*, 14, pp. 299-308)

*Rapaport:*

The golden mountain *is constituted by* the properties of being golden and being a mountain.

The golden mountain *exemplifies* the property of being incompletely determined. (Rapaport W. [1978], “Meinongian Theories and a Russellian Paradox”, *Noûs*, 12, pp. 153-80.)

*Zalta:*

The golden mountain *encodes* the property of being golden and the property of being a mountain.

The golden mountain *exemplifies* the property of being incompletely determined. (Zalta E. [1983], *Abstract Objects: an Introduction to Axiomatic Metaphysics*, Reidel, Dordrecht.)

- I'll follow Zalta's [1983] terminology, for Zalta's is the most developed and formally refined account of Meinongianism of the Second kind. According to Zalta, when one claims "x is P", one has to distinguish an ordinary sense of predication, that is, x **exemplifies** property P. But the copula can also have a special meaning called **encoding**. This is why the Meinongianism of the Second kind is called the "dual copula" approach: it postulates **a fundamental ambiguity in the copula**.

- Now in this theory nonexistent objects are **abstract objects** that:

- (1) **can encode properties**, and are thus somehow **determined** by them;
- (2) Abstract, nonexistent objects can also **exemplify** properties, but, most importantly,
- (3) They can **encode properties they do not exemplify**.

- The distinction between the two kinds of copulas is taken as primitive, and highlighted in Zalta's formalism by reversing the order between terms-variables and predicate letters: "Px" is to be read "x exemplifies P", whereas "xP" is to be read "x encodes P".

- Ordinary, existing objects can only exemplify properties, not encode them. Abstract objects are neither mental representation nor concrete, spatiotemporally located objects. And they are *nonexistent*, in the sense that they *exemplify* this property.

- Now the Comprehension Principle for objects can be expressed with **no restriction to specific kinds of predicates, but with reference to encoding** as opposed to exemplification:

(DCCP) For any condition  $\alpha[x]$  with free variable x, some abstract object encodes precisely  $\alpha[x]$ .<sup>2</sup>

- So expressed, the Comprehension Principle entails that there is an abstract, nonexistent object which encodes precisely the properties exemplified by any ordinary, existing object. So pick Friederike. The theory entails that some abstract object – call it FRIEDA – encodes precisely Friederike's properties. In Zalta's terminology, FRIEDA is the "blueprint" of Friederike.

- Now FRIEDA is quite different from Friederike: Friederike is a concrete, existing, spatiotemporally located object, (and also, she is German, a *Directrice de recherche* CNRS, etc.); FRIEDA, on the other hand, *encodes* these properties but does not exemplify them (FRIEDA is an abstract object so it cannot be German or spatiotemporally located). Of course, FRIEDA also *exemplifies* properties: for instance, the property of being an abstract object, the property of being Friederike's blueprint, or the property of being thought about by us now.

- Now according to the dual copula strategy, our beloved nonexistent objects (Pegasus, Holmes, Vulcan, etc.) are abstract objects that encode the properties ascribed to them by the relevant characterizations: Pegasus is the abstract object that encodes the properties of being a flying horse, captured by Bellerophon... Vulcan is the abstract object encoding the properties of being a sub-mercurial planet, ... And Holmes is the abstract object that encodes the properties of being a smart detective, living in Baker St, ..., and so on for all the other features ascribed by Doyle's stories.

---

<sup>2</sup> Also (DCCP) is formally expressible as a second-order principle: if "A" denotes the property of being abstract,  $\alpha$  is any condition on properties (expressible in the language) with no free occurrences of x, (DCCP) goes thus:

$\Sigma x(Ax \wedge \Lambda P(xP \leftrightarrow \alpha))$ .

- Also the Neo-Meinongianism of the Second kind has its **criterion of identity for nonexistents**, employing again the basic notion of the theory, the notion of encoding:

(DCI)  $x = y$  iff  $x$  and  $y$  encode precisely the same properties,

Where the variables range on abstract objects.<sup>3</sup>

- This entails that for *any* package of predicates  $\alpha[x]$ , there is exactly one abstract object encoding  $\alpha[x]$ .
- Zalta's theory has a modal development: in the modalized version of the theory, (DCI) says that  $x = y$  (where  $x$  and  $y$  are abstract objects) iff they *necessarily* encode the same properties. This is not great news, though, for it is an assumption of the theory that all encoded properties are necessarily encoded (see Zalta [1983], p. 13 and p. 73).

## 2.2 Replies to the Russellian objections

- As for the Russellian objection from inconsistency: the round square is not an inconsistent object for it *is* not a round square in the ordinary sense of the copula "is", that is, it does not *exemplify* those properties but only encodes them. In general, inconsistent characterization (Quine's round square cupola of Berkeley College, etc.) are allowed by the (DCCP), and they do deliver objects. But **these are not inconsistent objects, for they do not exemplify the relevant contradictions, but only encode them.**
- As for the second Russellian objection: the condition  $\alpha [x] = "x \text{ is golden} \wedge x \text{ is a mountain} \wedge x \text{ exists}"$  delivers an abstract object that *encodes* precisely the properties of being a mountain, being made of gold, and existing; but this does not entail that the object is existent in the sense of *exemplifying* the (perfectly normal, first-order) property of existence: it is an abstract, *nonexistent* object. So (DCCP) does not allow one to prove the existence of anything whatsoever.
- What's the connection between the Meinongianisms of the First and Second kind? Here's a characterization provided by Kit Fine, which is also the sketch of a "translation manual" between the nuclear and dual copula approaches:

"There is a way in which the two approaches can be brought closer together. We may treat the encoder's assertion that  $x$  exemplifies  $P$  as tantamount to the nuclear theorist's assertion that  $x$  has  $P$ ; and we may treat the encoder's assertion that  $x$  encodes  $P$  as tantamount to the nuclear theorist's assertion that  $x$  has the nuclear property  $NP$  associated with  $P$  (of which more will be said later). This then leads to a two-way translation between the languages of the encoder and the nuclear-theorist. The difference between the two might be put in the following way. Each subject-predicate statement is first expressed in neutral fashion as  $(P, t, \pi)$ , where  $\pi$  indicates the status of the predication as 'ordinary' or 'special'. The encoder then thinks of the status-indicator as attaching to the *copula* in ordinary subject-predicate statements, while the nuclear theorist conceives of it as attaching to the *predicate*. Under such a translation, the theories on one approach will be interpretable as theories on the other approach." (Fine K. [1984], "Critical Review of Parsons' *Nonexistent Objects*", *Philosophical Studies*, 45, pp. 94-142.)

---

<sup>3</sup> Or, formally and by employing the "abstractness" predicate:  $Ax \wedge Ay \rightarrow (x = y \leftrightarrow \Lambda P(xP \leftrightarrow yP))$ .

### 2.3 ... And some troubles

- The first problem with the dual copula approach is that **the encoding predication looks strongly *ad hoc***. Of course, there are various kinds of predication recognized in the literature (identity, exemplification, subsumption, etc. – we know them). But the encoding predication has simply been stipulated in order to account the fact that nonexistents must somehow “have” the properties they are characterized as having, or be “determined” by them, whereas they cannot actually exemplify them, on pain of falling back to the paradoxes of naïve Meinongianism.
- A second problem is with the status of nonexistent objects as abstract objects: for this makes of them **objects quite different from what we intuitively think of when we think about nonexistents**. For instance, we expect Pegasus or Holmes to be somehow “concrete” objects – a detective, a winged horse – only, ones that do not exist. But in the dual copula approach, these are abstract entities, more similar to mathematical entities than to *concreta*. In particular, for instance, Zalta’s Holmes *is not* a man or a detective (in the ordinary, “exemplification” sense of “is”), but an abstract object that encodes those properties.
- And this raises problems concerning the fallibility of our intended reference to existents. Recall Vulcan: Leverrier aimed at referring to a concrete object – a planet – with the name “Vulcan”, and the astronomer who discovered Uranus aimed at referring to a concrete object – another planet – with the name “Uranus”. But only the latter succeeded in doing this; the former actually named (not knowingly) an object which is neither a planet nor concrete (in the ordinary sense of “is”); it is an abstract object that encodes those properties. Could empirically failed reference to a concrete, existent object be actual unintentional reference to an abstract object?

### 3. Close encounters with Meinongian objects of the Third Kind

- The two Russellian problems can be addressed together more efficiently, via the double move of (a) **building a modal semantics which includes (logically) impossible worlds**, besides possible ones, and (b) **admitting a comprehension principle for objects in unrestricted, but qualified form**, following suggestions by Daniel Nolan (Nolan D. [1998], “An Uneasy Marriage”, talk given at the Australasian Association of Philosophy), Nick Griffin (Griffin N. [1998], “Problems in Item Theory”, talk given at the Australasian Association for Logic), me (Berto F. [2008], “Modal Meinongianism for Fictional Objects”, *Metaphysica*, 9(2008), pp. 205-18.), but especially Graham Priest (Priest G. [2005], *Towards non-Being. The Logic and Metaphysics of Intentionality*, Oxford U.P., Oxford.) The combination of (a) and (b) produces a new form of Modal Meinongian Metaphysics (MMM).

#### 3.1 Impossible worlds at work

- What are impossible worlds?
  - (1) A common first definition has it that impossible worlds are **worlds where the laws of logic are different**. This definition is logic-relative: given some logic L, an impossible world is one in which the set of truths is not one that holds in any acceptable interpretation of L.
  - (2) A more restrictive definition claims that **impossible worlds are worlds where the set of things that hold is not the set of things that hold in any classical interpretation**. A classical logician can consider a world where the Law of Excluded Middle (LEM) fails as a logically impossible world, since she takes classical logic as the correct logic.

(3) A still more specific definition claims that an impossible world is a **world where some contradictions are true**, that is, where sentences of the form  $\alpha$  and  $\neg\alpha$  hold, against the Law of Non-Contradiction (LNC).

- Why should we admit such turbulent guys as impossible worlds in modal semantics and ontology? Because we are capable of considering logically impossible situations, and of making discriminations about what goes on at them. Worlds semantics for minimal logic includes non-normal worlds in which the LEM and ex falso quodlibet (that is, the law according to which a contradiction entails everything) fail. The former also fails in standard Kripke semantics for intuitionist logic. Now, it seems that we refer to these worlds when we evaluate such conditionals as “If intuitionist logic were the correct logic, then the LEM would fail” (true!); and “If intuitionist logic were correct logic, then ex falso would fail” (false!). Anyone who understands intuitionism, or minimal logic, or quantum logic, etc., knows how things would be if one of these logics were correct (assuming they are not).

- And even those who are not willing to question the general and unconditioned validity of the LNC at all may admit that, just as there are various ways the world could be, there are **various ways the world could not be**:

“If you thought ‘if all things were possible then it would be possible that  $p \wedge \sim p$ ’, then you were in fact reasoning from an impossible antecedent. So you can reason about ways that things couldn’t be! The idea, then, is that “ways” talk goes both ways (as it were): If ways things could be represent possible worlds, then ways things couldn’t be represent impossible worlds, the latter being “entities” of a recalcitrant bent...” (Beall J.C. and van Fraassen B. [2003], *Possibilities and Paradox. An Introduction to Modal and Many-Valued Logic*, Oxford, Oxford University Press: 86)

- This line of argumentation (to be found also in Greg Restall’s works [1997] and [1999]) does not establish, of course, the ontological status of such “entities of recalcitrant bent” as impossible worlds. But it shows that discourse on ways things couldn’t be has its own logic in a broad sense: some reasoning in it is correct, some is not.

- And impossible worlds are nowadays proposed by various authors as a natural extension of possible worlds theories, having useful applications in the study of the notions of propositional content, intentional state, belief management, etc. For instance, if one holds, as some philosophers do, that mathematical and metaphysical truths have the same status as logical truths, that is, they hold unrestrictedly at all possible worlds, also reasoning on these subjects may require impossible worlds. Take the following claims:

(1) I can square the circle

(2) Fermat’s Last Theorem is false.

Standard possible worlds semantics notoriously has a “granularity problem” (Barwise [1997]) with these: if a proposition is identified with a set of possible worlds, these two very different claims are reduced to expressing one proposition, being true at the same possible worlds, namely none. Instead, take an impossible world,  $w_1$ , where Fermat’s Last Theorem is false (an hypothesis people have engaged with for centuries, indeed – before Andrew Wiles’ breakthrough) but there are no Meinongian square circles; and take an impossible world,  $w_2$ , with square circles in it, but at which Diophantine equations behave wisely. According to impossible worlds theorists,  $w_1$  and  $w_2$  are two different ways the world could not be. This intuitively suggests that the kingdom of the absurd is not like Hegel’s night, in which all cows are black.

[... To be continued...]