December 4, 2020

**Natural Language Ontology**

Friederike Moltmann

CNRS and Ca’ Foscari, Venice

Issues to address:

* What is the ontology of natural language?
* How is it reflected in natural language?
* What is the discipline that has the ontology of natural language as its subject matter?
* How does natural language ontology situate itself, in relation to philosophy and in relation to linguistics?
* What sorts of ambitious are there for natural language ontology?

-------------------------------------------------------------------------------------------------------------

**1. Natural language ontology as a practice and as a discipline**

The ontology of natural language - preliminary characterization

The ontological categories, notions and structures implicit in natural language

Appeal to natural language by philosophers throughout the history of philosophy

- Medieval philosophers when arguing for nominalist or platonist views of universals

- Frege when arguing for numbers being objects

- Frege and many contemporary philosophers of language when arguing for propositions being the objects of attitudes (referents of *that*-clauses).

- Vendler when arguing for a distinction between facts and events and many other things

Natural language ontology or natural language metaphysics:

The discipline whose aim is to uncover the ontological categories, notions, and structures implicit in natural language

**-----------------------------------------------------------------------------------------------------------**

**2. The *ontology of natural language* and the *reflective ontology* of speakers**

The emerging view

Natural language involves its own ontology, an ontology that may be different from the one a philosopher may be willing to accept, or a non-philosopher when thinking about what there is.

Cases of discrepancy

[1] Existence (Hacker 1982, Cresswell 1986, Fine 2006, Moltmann 2013b):

(1) a. The house still exists.

 b. The largest prime number does not exist.

(2) a. ??? The protest still exists.

 b. ??? The cat’s death existed yesterday.

 c. ??? The birth of Venus did / does not exist.

(3) a. The protest is still taking place.

 b. The cat’s death occurred yesterday.

 c. The birth of Venus did not occur / happen.

Existence predicates

A predicate that can gives a true sentence with an empty subject and negation (when sortally suited for the sort of thing the subject would stand for).

Other existence predicates: *obtain, hold, is valid*

[2] Variable objects (Fine 1999, Moltmann 2013a, 2020 a)

(4) a. The president of the US is elected every four years.

 b. The water in the container has increased.

 c. The quality of her writing has improved.

 e. The book John needs to write must be short.

Criteria for referential NPs (terms), occurrences of expressions that stand for objects

anaphora support, replaceability by (ordinary) quantifiers, application of predicates

-----------------------------------------------------------------------------------------------------------------

**3. Situating natural language ontology with respect to metaphysics and linguistics**

Strawson (1959)

Descriptive metaphysics: aims to uncover our shared conceptual scheme, or better the ontological categories and structures we implicitly or ordinarily conceive

Revisionary metaphysics: aims to conceive of a ‘better’ ontology, for particular purposes

Fine (2017)

Naïve metaphysics

the *metaphysics of appearances*, reflected in language or common sense judgments

has as its subject matter what there appears to be, not what there really is.

Foundational metaphysics

the metaphysics of what there ‘really’ is / of what there is fundamentally.

Fine’s points

* Foundational metaphysics presupposes naïve metaphysics, must take naïve metaphysics as its starting point.
* Naïve metaphysics should be pursued without considerations of foundational metaphysics.

[‘Naïve’ is misleading: not the ontology the speakers accept when naively reflecting upon what there is (‘folk metaphysics’): ordinary speakers may engage in reflections upon what there is and the nature of things and accept ontological views not compatible with that reflected in natural language. Better use ‘descriptive metaphysics’.]

Characterization of the ontology of natural language

 (5) a. First proposal

 The ontology of natural language is the ontology accepted by ‘ordinary’ speakers

 (nonphilosophers).

 b. Second proposal

 The ontology of natural language is the ontology speakers *implicitly* *accept*.

 c. Third proposal (Moltmann 2017a, 2019 b)

 The ontology of natural language is the ontology a speaker *implicitly* *accepts* *when*

using natural language.

Why relativization to language

[1] Part of the ontology of natural language may be driven by the meaning or use of natural language itself.

Examples:

* definite NPs that define variable objects
* mass-count distinction (*the rice - the rice grains - the heap of rice*)
* nonworldly facts (*the fact that John or Mary won the race*, …)
* discourse referents

[2] Different languages may involve different ontologies

[3] The ontology implicit in natural language may be driven by language-specific conditions, rather than general cognitive conditions

Natural language ontology as a branch of metaphysics

Natural language ontology as part of descriptive metaphysics:

as the branch of metaphysics that *gives priority* to what is reflected in natural language (but is not only based on what is reflected in natural language).

The philosophical importance of natural language ontology:

- Rectify philosophical views that may have been based on a mistaken, naïve linguistic analysis (e.g. the use of propositions)

- clarify our intuitions: natural language ontology may help uncover implicit notions, reflected in natural language constructions or categories

- Natural language ontology may uncover philosophical views that are implicit in language, whether or not they may be right

Situating naturalLlanguage ontology relative to linguistics

Natural language ontology as part of semantics?

Not quite: purely ontological and conceptual considerations also come into play

Natural language ontology as a discipline that is a branch of metaphysics and overlaps with semantics.

--------------------------------------------------------------------------------------------------------------

**4. What sorts of linguistic data reflect the ontology of natural language?**

**4.1. Ontological assertions do not count**

For example assertions explicitly involving the ontological category (sortal) itself:

Sortal quantification

(6) a. There are propositions.

 b. There are events.

Sortal predication

(7) a. Numbers are objects.

 b. Three is a number.

 c. John’s arrival is an event.

Linguistic data that may count:

 (8) a. There is a war in this country.

 b. John arrived yesterday.

Specific identity statements

 (9) a. The number of planets is eight. (Frege)

 b. John’s belief is that 2 is prime.

(10) a. ??? The number of planets is the number eight.

 b. ??? John’s remark is his belief. (Moltmann 2013a)

Lexical presuppositions reflecting ontological categories

- Semantic selectional requirements of existence predicates

Predicates distinguishing facts and events (Vendler 1967)

(11) a. John observed Bill’s arrival.

 b. ??? John observed the fact that Bill arrived.

Other ways in which ontological categories are (may be) reflected in natural language: syntactic categories, functional (i.e. non-lexical) elements

**4.2. The core-periphery distinction**

Irrelevant identity statements

(12) a. The number nine is the number nine.

 b. The proposition that it is raining is what John believes.

Irrelevant referential terms: reifying terms

(13) the number nine, the value true, the property of being wise, the proposition that S

‘Reifying’ terms do not reflect the ontology of natural language, nor do technical (philosophical) terms or predicates or non-ordinary uses of terms or predicates.

The necessity of distinguishing between the (ontological) periphery and core of language

(14) The ontology of natural language is reflected in the (ontological) *core* of language, not its

 *periphery*.

----------------------------------------------------------------------------------------------------------

**5. Real and conceived objects**

Should the ontology of natural language include *conceived objects*?

Yes, as objects *acknowledged* as potentially merely conceived objects by the speaker: referential and quantificational NPs in natural language are not as such ontologically committing.

Problematic data -- statements of a philosophical view

(15) There are things that do not exist.

Relevant data

(16) a. The building mentioned in the guide does not exist.

 b. ??? The building does not exist.

*Compositional semantics* of NPs modified by relative clauses with intentional verbs requires merely conceived objects as semantic values (Moltmann 2016).

-------------------------------------------------------------------------------------------

**6. Prospect for natural language ontology**

Natural language ontology may set itself the same sorts of ambitions as syntax: universality, explaining learnability, appreciating the deep and surprising nature of the involvement of ontology (the ontology of appearances) in natural language.

-----------------------------------------------------------------------------------------------------------

**References**

Bach, E. (1986): ‘Natural Language Metaphysics’. In R. Barcan Marcus et al. (eds): *Logic,*

 *Methodology, and Philosophy of Science* VI , North Holland, Amsterdam et al., 573-595.

Chomsky, N. (1986): *Knowledge of Language. Its Nature, Origin, and Use*. Praeger,

 Westport (Ct) and London.

Chao, W. / Bach, E. (2012): 'The Metaphysics of Natural Language(s).' In Kempson et

 al. (eds.): *Philosophy of Linguistics, 14.* North Holland, Elsevier, Amsterdam, 175-196.

Cresswell, M. J. (1986): ‘Why Object Exists, but Events Occur’. *Studia Logica* 45, 371-5.

Fine, K. (1999): ‘Things and Their Parts’. *Midwest Studies of Philosophy* 23, 61-74.

---------- (2017): ‘Naïve Metaphysics’. *Philosophical Issues* (vol. 27), ed. by J. Schaffer.

Moltmann, F. (2013b): ‘The Semantics of Existence’. *Linguistics and Philosophy* 36.1.,

 31-63.

----------------- (2017a): ‘Natural Language Ontology’. *Oxford Encyclopedia of Linguistics*,

 Online

--------------- (2019): ‘Natural Language and Its Ontology’. In A. Goldman / B.

 McLaughlin (eds): *Metaphysics and Cognitive Science*, Oxford UP, New York.

---------------- (2020): ‘Variable Objects and Truthmaking’. To appear in M. Dumitru

 (ed.): *The Philosophy of Kit Fine*, Oxford UP, New York.

Strawson, P. (1959): *Individuals. An Essay in Descriptive Metaphysics*. Methuen, London.

Vendler, Z. (1967): Linguistics in Philosophy. Ithaca, NY: Cornell University Press