**Outline of SEP entry *Natural Language Ontology***

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**The topic**

Metaphysics in the past was considered mainly a pursuit of philosophers, asking questions about being in most general terms. Many philosophers, though, throughout the history of philosophy, have appealed to natural language when arguing for a metaphysical view or notion. Others have rejected such an appeal arguing that the ontology reflected in language may diverge significantly from what there really is, from any philosophically acceptable ontology. The view in fact has emerged that natural language presupposes its own ontology (or metaphysics), possibly distinct from the ontology a philosopher may be willing to accept or a nonphilosopher when thinking about what there is. While there are different justifiable choices for a philosopher to make, with the development of theoretical linguistics the ontology of natural language has come to be recognized as an important field of study in itself. Theoretical linguistics permits a more systematic study of the ontology implicit in natural language providing relevant semantic and syntactic generalizations and theoretical considerations.

 Natural language ontology raises a great range of issues and challenges, though. One of them is how it situates itself in relation to other branches of metaphysics. For one thing, natural language metaphysics is continuous with both descriptive metaphysics and ordinary language philosophy. In addition, it may be viewed as part of what Fine calls the ‘metaphysics of appearances’ which is indispensable for pursuing foundational metaphysics, as Fine (to appear) has recently argued. Another issue is the kinds of linguistic data that could reflect the ontology implicit in language. Philosophers that have appealed to natural language for the purpose of a metaphysical argument have followed an implicit methodology appealing to certain types of expressions and constructions. It is important to make this methodology explicit and discuss what may justify it. Finally, there are questions such as the question of the roles entities play in the semantic structure of sentences and the ontological status that may go along with them and the ontological content of syntactic categories (nouns, adjectives, verbs, singular count, plural, mass), and the potential metaphysical content of light verbs (have be, lake) and functional categories, with their central role in generative syntax. Finally, the skeptical view of Chomsky needs to be addressed that natural language does not involve the reference to real’ objects and thus semantics and ontology would be irrelevant for it. Chomsky’s arguments in fact could lead to quite different conclusions on a proper understanding of descriptive metaphysics and natural language ontology in particular.

**Sections**

**1. The metaphysics of natural language as the subject matter of a branch of metaphysics**

This section will discuss the ways philosophers throughout the history of philosophy have appealed to natural language in order to support a metaphysical view. It also presents arguments for recognizing the ontology of natural language as a subject matter in itself.

Subsections:

1.1. This subsection will give examples of appeals to natural language for the purpose of metaphysical arguments throughout the history of philosophy as well as examples of different philosophers taking language seriously to different extents: Aristotle, medieval philosophers (Ockham, Aquinus, Buridan etc), Frege Twardowski, Austin, Fine etc.

1.2. This subsection will give examples showing discrepancies between what is considered a philosophically acceptable ontology and the ontology reflected in natural language, as well as discrepancies between the reflective ontology of ordinary speakers and the ontology reflected in natural language.

1.3. This subsection will discuss how the ontology reflected in language should be characterized. It will go through several options: such as

- as the ontology of ‘ordinary’ speakers?

- as the ontology speakers implicitly accept

- as the ontology speakers accept when they use the language in an ordinary way, or rather the core of language (Section 2.2.)

1.4. This subsection will present Strawson’s distinction between descriptive and revisionary metaphysics, its historical context and its influence and discuss how it relates to natural language ontology

1.5. This subsection will present Fine’s recent distinction between naïve and foundational metaphysics. Natural language ontology would be (a proper) part of naïve metaphysics

It will also critically discuss Fine’s view that naïve metaphysics should be done first without considerations from foundational metaphysics. It will address the question whether descriptive metaphysics and foundational metaphysics be pursued separately, or whether they depend on one another. It will also discuss how considerations of truth and what is real may have to play a role for naive metaphysics (and natural language ontology).

1.6. This subsection discusses how natural language ontology situates itself with respect to established disciplines, such as metaphysics, linguistics and cognitive science. It presents the view that it should be viewed as part of all three disciplines, more specifically as part of descriptive (or naïve) metaphysics and of natural language semantics

It also discusses whether natural language ontology can be based strictly on linguistic data or whether it should go -- or in fact goes along -- with philosophical motivations that are not based on language. It will present the view that natural language ontology must give priority to linguistic intuitions, but need not be entirely based on them. It will give examples of analyses within natural language ontology that make use of linguistic data as well as language-independent philosophical theorizing.

1.7. This subsection discusses Chomsky’s skepticism regarding semantics and thus natural language ontology. It presents Chomsky’s (1998) critique of the view that natural language terms refer to objects, his rejection of both semantics and the notion of reference, and his view that referential NPs in natural language could only be investigated with respect to a lexical-conceptual structure deployed on an occasion of reference and thus with respect to another level of syntax. Chomsky’s critique will then be contrasted with Fine’s notion of the metaphysics of appearances, which may involve a rich ontology of derivative objects that are not real’ in a relevant sense.

**2. The methodology of natural language semantics**

This section aims to make explicit the methodology that philosophers relied upon when they appealed to natural language for the purpose of a philosophical argument relied upon as well as linguists when pursuing work within natural language ontology. This methodoloy concerns especially the sorts of linguistic data can be considered revealing as regards the ontology implicit in language. The section will mention various examples from Aristotle, medieval philosophers, early analytic philosophy (Frege, Twardowski), and ‘ordinary language philosophy’, as well as perhaps a few examples from linguists.

Subsections:

2.1. Assertions, presuppositions, specific quantification

On important distinction that plays a role is between assertions and presuppositions. Only presupposed not asserted ontological generalizations can reflect the ontology implicit in natural language (*there are numbers* cannot motivate numbers as objects, for example). Prime examples of presuppositions are sortal correctness conditions, but there are other types of presuppositions as well, for example the existence presuppositions of referential noun phrases.

The restriction to presuppositions distinguishes the ontology of natural language from folk physics, for example, and it will be discussed why that could be so. In addition to presuppositions, quantification over particular objects, rather than quantification over the entire ontological category plays a role (*there was an accident* can motivate events as part of the ontology of natural language, but not *there are events* or *events exist*).

2.2. Another important distinction that plays a role is that between something like the core of language, which involves nontechnical, nonphilosophical terms, and the periphery of language, which includes philosophical terms and reifying terms like number eight or the truth value true. Without that distinction natural language would reflect any sort of metaphysical view that has been developed by introducing new technical terms. The notion of the core of language is somewhat related to the notion of the ordinary use of language in ordinary language philosophy, to which it will be compared. It is also related to a distinction of the same name made by Chomsky (1986). The Chomskyan distinction is the analogue for syntax of the one needed for natural language ontology.

2.3. This subsection discusses how developments in linguistic semantics and syntax provide more data and theoretical generalization that can be taken account for natural language ontology. This includes developments in lexical theory, of the sort pursued by Pustejovsky and Asher and by syntacticians such as Hale/Kayser, and Borer, which bear rather directly on questions of ontology (such as the question of the relation of ontological categories to syntactic categories and features).

**3. The roles of objects in the semantic structure of natural language.**

Objects play various roles in the semantic structure of sentences, most obviously as semantic values of referential terms, but alsoas implicit arguments of predicates and as parameters of evaluation. These roles are sometimes viewed as going along with different sorts of ontological status of entities.

3.1. Referential terms and quantifiers

This is about two ways for objects to be involved in semantics: as semantic values of referential referential terms (noun phrases) and as part of the domain quantifiers.

To be the semantic value of a referential term (or noun phrase) is generally considered the most important important criterion for objects to be part of the ontology of language. Frege had the even stronger view that it makes up the criterion for objecthood itself).

In addition there is the Quinean criteria of ontological commitment, according to which bound variables provide the criterion for objecthood.

The section will discuss linguistic criteria for referential noun phrases from bth the philosophical literature (Frege, Hale) and the linguistic literature (especially generative syntax). It will also discuss difficulties for the criterion of referential noun phrases, the use of such noun phrases in negative existentials and with intentional transitive verbs.

The section will also discuss issues with the Quinen criterion, such as ‘non-nominal’ quantifiers, quantifiers taking the place of nonreferential occurrences of expressions: *something, everything etc*.

3.2. Implicit arguments

This section will discuss the semantic role of objects as implicit arguments.

It will present the main examples of implicit arguments that have been posited in philosophical and semantic analyses: Davidson’s view of events as implicit arguments of verbs, tropes as implicit arguments of adjectives, contextual standards for relative adjectives, modes of presentation as implicit arguments of attitude verbs etc.

The section will also discuss apparent differences between semantic values of referential NPs and implicit arguments and the question whether the use of a referential term makes an ontological difference. For example, only semantic values of referential terms could be ‘nonexistent’ entities, but not so for entities that only act as implicit arguments.

3.3. Nonreferential indexicals

This section will briefly discuss the often neglected semantic role of being an entity indexicals make reference to that themselves have a nonreferential function, for example adverbials such as *so, thus,* etc. Also the role of situations in Austinian propositions is of that sort. Again, it will be discussed whether that role may go along with a particular ontological status.

3.4. Parameters of evaluation

An important semantic role for entities to play in the semantics of natural language is that of being a parameter of evaluation. Entities that play that role are times (for the semantics of tense), worlds or situations (for the semantics of modals and conditionals) as well as perhaps contextual standards. The section will go through various types of approaches that make use of entities as parameters of evaluation. It will also present a related semantic role, that of truthmakers on Fine’s recent truthmaker semantics.

 Entities as parameters of evaluation raise an important issue, namely whether there is a difference in ontological commitment between parameters of evaluation on the one hand and semantic values of referential terms and implicit arguments of predicates. The section will discuss the common view according to which parameters of evaluation are mere posits in the semantic theory as well as the view according to which parameters of evaluation have same ontological status as arguments of predicates.

**4. Some topics of metaphysics reflected in natural language addressed in the literature**

This section will briefly present a range of topics and analyses that have been pursued in the philosophical and linguistic literature and that belong to natural language ontology. These include part-whole relations and the associated topics of the mass-count distinction and plurality, reference to kinds and universals, the semantics of existential constructions and of existence predicates, the semantics of causation (causative constructions, the light verb *make*), and the semantics of predication (for example whether predication is achieved by way of nominal constructions or by non-non-nominal adjectival constructions)

**5. Crosslinguistic concerns and the perspectives for a cognitive ontology being part of linguistics**

Natural language ontology raises the important issue to what extent its analyses have crosslinguistic generality. On the one hand, this raises the question whether the ontology of natural language can be put on a par with universal grammar (syntax), given the generative linguistic perspective. On the other hand, it presents a future perspective for crosslinguistic research on natural language ontology. In addition, there is a significant literature around the Sapir-Whorf hypothesis, which will also be addressed.

**6. Further issues**

This section will discuss a number of further issues that natural language ontology raises. This includes the question of what sorts of topics in metaphysics natural language ontology could bear on and what sorts of topics it could not bear on. The section will also address the question of what may be distinctive of the ontology of natural language, say that it may in part be language-driven (as on pleonastic views of abstract objects and artifacts)

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