

The Ontology of Natural Language(s) and Linguistic Relativity

A Deflationary Approach

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ABSTRACT Despite the fact that natural language has always been one of the most important resources for the study of ontology, many authors continue to regard it as a deceptive guide to the inquiry into what there is. The notion of natural language as a trap is carried over into contemporary metaontological studies, which typically reject natural language as ontologically committing. From a deflationary perspective, this paper aims to argue that ontological commitment occurs in natural languages, with implications for the linguistic relativity hypothesis. To this end, a view based on naturalized epistemology and other aspects of Quine's philosophy is presented. The perspective of Natural Language Ontology proposed by Moltmann is also introduced, with the goal of offering a new approach that allows a specific analysis of the ontological commitments of natural languages. While Moltmann herself indicates some motivations for this, its potential attractiveness for the study of linguistic relativity will be emphasized here. Finally, it will be suggested that there may be a linguistic bias around the proposed criteria of ontological commitment.

KEYWORDS linguistic relativity; natural language; naturalism; ontological commitments; ontology

INTRODUCTION

Traditional epistemology has raised problems such as that of our epistemic access to the world. By proposing a naturalized epistemology in which knowledge begins in the medium of theory, Quine turns the philosophical tradition on its head. This situated epistemology breaks the epistemology-ontology dichotomy by proposing a naturalized ontology: there is no possibility of cosmic exile. Such a step allows for the revival of ontological research, buried under the influence of positivism, by making an important meta-ontological turn: ontology is concerned with what theory says there is, not with what there independently is.

Today, this Quinean shift is identified with what is called *ontological deflationism*. The main aim of this paper is to present a deflationary way in which ontological commitments stemming from ordinary language can be analyzed. In Section 2, the basic Quinean position is outlined. Given Quine's position, Section 3 argues that he is obliged to admit that natural languages are ontologically committing—from which consequences for the hypothesis of linguistic relativity can then be derived. A brief overview of the linguistic relativity hypothesis will be provided in Section 4.

Nevertheless, in order to provide a comprehensive overview, it is not enough to show that natural languages carry ontological commitments. It is also important to suggest a way of analyzing them and, moreover, to assess the value of this analysis from a philosophical perspective. *Natural Language Ontology*, which will be discussed in Section 5, proposes that to examine the ontological commitments enclosed in natural language we should focus on the entities implicit in the formal structure of language.

After presenting, in Section 6, the reasons for considering NLO to be of interest put forward by Moltmann, an additional motivation for the analysis of the ontological commitments of natural languages will be proposed: namely, its compatibility with existing studies of linguistic relativity. Quine's and Moltmann's positions constitute an attractive perspective for the Linguistic Relativity Hypothesis.

Finally, in the Conclusion (Section 7), it is argued that since the ontological commitment criteria proposed in philosophy are usually formulated in English and by English-speaking authors, they seem to lose sight of the peculiarities of their own language. A future study of the interlinguistic application of ontological commitment criteria will examine whether these criteria really have universal results, or whether they are linguistically biased.

1. THE QUINEAN BACKGROUND

Quine advocated a naturalized approach to epistemology, on the basis of his strong belief that it is impossible to have *a priori* knowledge of things (Quine 1969a). His naturalism led him to reject the idea of a foundational philosophy that claimed to provide a rational reconstruction of reality and serve as the basis for scientific inquiry. Instead, he argued that knowledge arises from existing scientific theories, so that epistemological inquiries are essentially scientific inquiries. The natural philosopher begins with science and seeks to refine it by addressing any areas of concern. In this way, epistemology is grounded in scientific ontology.

The rejection of first philosophy precludes approaching ontological research in the classical way. There is no deep split between epistemology and ontology, and therefore ontology can only be approached from epistemology. In this sense, there is a metaontological turn: ontology deals only with what theory says there is. Empirical epistemology is embedded in ontology, which is prescribed by natural science as a part of psychology. In return, ontology is embedded in epistemology, because the latter provides the methodology for analyzing and constructing natural science itself. Specifically, Quine speaks of a “reciprocal containment” of epistemology in ontology and vice versa:

The old epistemology aspired to contain, in a sense, natural science; it would construct it somehow from sense data. Epistemology in its new setting, conversely, is contained in natural science, as a chapter of psychology. But the old containment remains valid too, in its way. We are studying how the human subject of our study posits bodies and projects his physics from his data, and we appreciate that our position in the world is just like his. Our very epistemological enterprise, therefore, and the psychology wherein it is a component chapter, and the whole of natural science wherein psychology is a component book—all this is our own construction or projection from stimulations like those we were meting out to our epistemological subject. There is thus reciprocal containment, though containment in different senses: epistemology in natural science and natural science in epistemology (Quine 1969c, 83).

Thus, the questions of what exists and how we know it are inextricably linked. What Quine is really referring to when he discusses ontology is ontological commitment, or the entities that our theories recognize as existing. There is no reality outside what the theory implies, no cosmic exile.

At present, this tendency is commonly regarded as a form of *ontological deflationism*,¹ as opposed to *ontological realism*. The former is an attitude toward ontology in which ontological questions are not considered substantive; the latter is the opposite view, in which ontological questions are taken seriously as being about substantive matters.

Apart from Quine's ontological deflationism, there are also other deflationary perspectives, such as neo-Fregean alternatives along the lines of Hale and Wright (2003; 2009) or neo-Carnapian ones such as that of Thomasson (2007; 2015). All ontological deflationists, however, have one thing in common that is worth emphasizing: they all claim that ontology cannot be discovered by purely rational means. This is the position whose developments are consistent with Quine's legacy and which, I think, fully understands ontology from the standpoint of ontological commitment. Such deflationary philosophers, even though many of them would not be considered neo-Quineans (at least by themselves), are more in line with Quine's ontological project than those who pretend to arrive at an ontology from *a priori* considerations.

Quine's perspective, which can be called *naturalistic deflationism*, is understood as a position that analyzes the ontological commitments of theories (later, we will consider these as languages) from the viewpoint of a naturalized epistemology. Since ontology is presupposed by epistemology, and since epistemology consists in our global theory of the world (i.e. our knowledge), this leads to the conclusion that what a speaker thinks exists (i.e. their ontological commitments) is somehow dependent on some acquired (linguistic) theory. In the ensuing sections I will argue that if we accept a deflationary perspective such as this, and if we recognize that there are different linguistic theories of the world (i.e. epistemologies), then each language (i.e. linguistic theory) can generate ontological commitments on its own.

1. In the contemporary literature, neo-Quineans often self-identify as simple realists (Sider 2011; Inwagen 1990). This point needs some clarification. Quine did not intend to revive classical metaphysics. On the contrary, he gave the Carnapian approach an even more pragmatic twist (Price 2009). Quine, like Carnap, is an ontological deflationist with respect to existence, but in addition he criticizes the analytic-synthetic distinction, so that he does not consider it possible to distinguish between internal and external questions. When Quine puts forward his criterion of ontological commitment, "to be is to be the value of a variable," coupled with the identity principle, he takes a further step toward deflationism. He does not try to find a criterion that connects language with raw experience. From the viewpoint of his naturalism, entities are theoretical postulates.

2. NATURAL LANGUAGE

Having established the background, it is necessary to give some consideration to natural language. Recall that our main goal is to offer a proposal of ontological commitment for natural languages. The importance of natural language in relation to thought and reality has been emphasized in the West since Aristotle, who, in “On Interpretation” (2010), underlines the role of language in “deciphering” reality. From the Eastern side, it is also worth mentioning the scientist and linguist Pānini, who stressed the influence of language not only on thinking but also on the vision of the universe (Pānini 1898).²

Nevertheless, the ontological reliability of natural language has also been questioned by many authors, especially after the rejection of romanticism that came with the positivist current in the first half of the 20th century. The ontology of natural language is sometimes far from what the philosopher would like to accept. So, it is worth asking whether natural language really reflects ontology: i.e. whether the proposed perspective is really viable. Even Quine, who laid the groundwork for the deflationary approach pursued here, denies that natural language is ontologically committing and thus distances himself in effect from what we are seeking to propose.

Despite the doubts, there are several reasons to argue for the committing nature of natural language(s), which Quine himself should ultimately have accepted. When Quine speaks of theory, what he means is a stronger thesis than the mere assertion that science uses linguistic structures. Fogelin (2004, 30) points out that this philosopher, despite his attack on logical empiricism, still shares certain features with that current of thinking. One of these is that the philosophy of empirical science consists in the study of the *language* of that science itself. In this way, Quine seems to identify science with its linguistic theories:

What sort of thing is a *scientific theory*? It is an idea, one might naturally say, or a complex of ideas. But the most practical way of coming to grips with ideas, and usually the only way, is by way of the words that express them. What to look at in the way of theories, then, are the sentences that express them. (Quine 1981, 24)

2. Whorf himself, one of the precursors of the linguistic relativity hypothesis, points to Pānini as the founder of linguistics as we know it, going so far as to claim that modern scientific linguistics arose from the rediscovery of Pānini by the Western world in the 19th century (Whorf 1940, 232).

Scientific theories are linguistically conveyed, and when it comes to improving them philosophy can only do so through the words that express them. And, since science is also understood as theoretical and as furnishing the standard for knowledge, “science,” “theory,” “language” and “world system” are seen by him as interchangeable. For Quine, language itself is presented as a theoretical system.

Science, in the Quinean sense, is our general theory of the world (i.e. our epistemology), and since a theory is a set of sentences, our general theory of the world is linguistic. Here the notion of “theory” needs some clarification. When Quine speaks of scientific theory, he does so in a very broad sense, encompassing all current developments in the (hard or soft) sciences, and even common sense.³ Scientific theory, then, is something like our global web of beliefs. And since our overall theory of the world is linguistic, following Hylton (2007, 24), it is possible to conclude that knowledge must be treated as a matter of language. One of the consequences of this is that language learning implies knowledge acquisition: it is through language learning that we obtain our theory of the world. Access to language is access to knowledge.

Indeed, for Quine, language is acquired. When Quine puts forward the ontogenesis of reference (Quine 1960a), in which he theorizes about the possible stages through which a child learns a language, what he is really pursuing is the origin of ontology in the child—that is, the origin of her effective commitment with respect to the entities that form the basis of ontology as conceived by our scientific theory of the world. The hypothesis of linguistic acquisition is thus equivalent to the analysis of the ontogeny of scientific theory.

Quine himself, because of his semantic holism⁴ and empiricism, emphasizes the fact that most sentences, beyond the observational,⁵ are in some

3. In the current literature, the scientific restriction of theory postulated by Quine is sometimes criticized. For example, Thomasson argues that the language of our best scientific theory, which is charged with dictating the entities we assume to exist, is only a small part of the totality of our language and neglects a wide range of nonscientific uses of it (2015, 131). But here Thomasson falls into the trap of defining theory as something proper to the hard or highly specialized sciences, whereas Quine, on the basis of his naturalism, accepts various kinds of knowledge, such as linguistics or economics, which collect in detail the available uses of language.

4. For Quine, a scientific theory is a holistic structure that is only properly understood as such. The sentences that make up such a theory have meaning in a coherence-involving sense, acquiring content only as a function of the rest of the sentences and always within the context of the theory. This is what its holism consists in. Quine (1953) is generally considered to furnish the best manifestation of this holism on his part.

5. Observational sentences are those that are closest to observation, and therefore to evidence, and are the ones that serve as empirical support for the rest (i.e. theoretical sentences, etc.), which are more distant from stimulus verification. The language containing a theory

sense theoretical ones (Quine 1969a, 81). In other words, language itself is presented as a theoretical system, so that it is not possible to separate linguistic learning from theoretical learning. Language learning involves the acquisition of knowledge. Since our epistemology (i.e. our theory of the world) is linguistic, and this theory includes such everyday aspects as common sense, the sentences of our language, no matter whether they seem more or less theoretical to us, are always to some extent so.

Moreover, let us recall that naturalized epistemology established a reciprocal containment between ontology and epistemology, so that what there is is what the theory postulates as existing. This conception of language as theory, where theory is also responsible for establishing ontological commitments, allows us to understand that languages are not ontologically innocent. Thus, when the philosopher analyzes the ontological commitments of theoretical discourse conveyed in natural languages, she must accept that natural language is in some sense compromising.

Even taking the above into account, Quine did not really admit that natural languages are ontologically committing. For him, what establishes our ontological commitments is scientific theory, which could be translated into any language without prejudicing the ontological commitments we accept. He argued that there is no implicit ontology in ordinary language itself. The ontological enterprise is artificial—unknown from the point of view of the average speaker. The theory we embrace will be the one that provides the best possible explanation of the world, basing that choice on certain pragmatic criteria of theoretical virtue, and the task of philosophy is that of analyzing this theory. Its main function, in continuity with that of science, is that of theoretical improvement.

Thus, when he translates language into first-order logic, he is already imposing a restriction on the entities admitted in natural language. The goal for Quine is not to describe the commitments of natural language, but to improve scientific theory. And for this purpose, unnecessary entities must be eliminated. According to Quine, natural language does not contain ontological commitments prior to regimentation:

Ordinary language is only loosely referential, and any ontological accounting makes sense only relative to an appropriate regimentation of language.

The regimentation is not a matter of eliciting some latent but determinate

is a network of interconnected sentences, all of which are in contact with the evidence by means of observational sentences. See Chapter 2 of Quine (1960b) for a more detailed discussion of rational classification.

ontological content of ordinary language. It is a matter rather of freely creating an ontology-oriented language that can supplant ordinary language in serving some particular purposes that one has in mind (Quine 1978, 168).

Surprisingly, notwithstanding the fact that language and science are inseparable, natural languages for Quine are not committing by themselves. Following Tahko (2015, 16), the Quinean method of ontological commitment can easily answer ontological questions through the following formula:

1. Take the best scientific theory and assume that its sentences are true.
2. Translate the sentences of your theory into a formal language, typically first-order predicate logic.
3. The domain of (existential) quantification in the translated theory shows the ontological commitments of the theory.

This process, in which there is a semantic ascent to the canonical language of first-order logic, is the one that allows the true ontological commitments of the theories to be revealed. Thus, for Quine, natural language, because of its promiscuity, is not a good guide to what there is, and so it is necessary to translate sentences into a more ontologically parsimonious language (i.e. first-order logic) (Quine 1978).

However, although Quine did deny the compromising nature of natural languages, note that the second step takes the sentences of the theory as they are formulated in a particular natural language (namely, English). We have chosen the method of regimentation that best systematizes our theoretical language, but this method is designed for the analysis of natural language sentences, so that the descriptive project cannot be separated from the clarifying project. Even if we apply a process of entity refinement to the language using logic, the resulting ontology will still be based on what is provided by the selected original sentences of natural language.

If the sentences selected for subsequent logical translation are in English, then the commitments are somehow related to what that language and its global theory of the world assumes to exist. The ontological commitment criteria are somehow based on the grammatical categories of the language. For example, in *The Roots of Reference* (1974), Quine points out that the origin of the reference is to be found in the relative clause. Also, in “Meaning and Translation” (Quine 1969b), he talks about how certain grammatical structures, such as singular or plural markers or articles, are objective reference records. Both the relative clause and plural and singular endings and pronouns are grammatical features of English. Even for him, under the influence of Russell’s theory of definite descriptions (Quine 1948),

it is the pronoun and not the noun that establishes the commitment, since it is the former that occupies the value of a bound variable in quantification. Pronouns are a specific grammatical category of languages like English.

Quine's criterion of ontological commitment therefore depends on the grammatical structure of English. Although he holds that the philosopher's task is to eliminate unnecessary entities, the ultimate entities with which commitment is established also rely on the structure of natural language.

One of the problems that arise from emphasizing that the criteria of ontological commitment depend on the structures of natural languages is precisely their cross-linguistic application. In languages other than English, whose grammars do not provide for certain structures such as the relative clause, problems will arise for their claim to universality. Recall that Quine does not regard natural language as compromising in itself, but holds that it is necessary to employ translation into first-order logic.

Thus, regardless of the language spoken, logical analysis would allow for the same ontological commitments in all societies that share the best scientific theory of the world. Given the great linguistic diversity in the world, however, languages whose formal structures differ markedly from English will pose problems for the application of the ontological commitment criterion, regardless of the overall theory of the world they embody. This seems to imply certain consequences that speak in favor of diversity in respect of ontological commitments and, if we take into account that linguistic learning is theoretical learning, the hypothesis of linguistic relativity generally.

Apart from Quine, the neo-Quineans and those philosophers who use first-order quantification all rely to some extent on sentences from natural language. Since ontological commitments are usually taken from natural language, there must be at least some part of it that encapsulates entities from reality—i.e. that reflects to some extent the ontological commitments of theories.

Similar arguments are made by Bricker (2016), who claims that Quine is unable to refute the ontological commitments inherent in theories contained in common languages. In setting truth conditions for the quantifiers of first-order logic, Quine explicitly uses the quantifiers of natural language (see, e.g., Quine 1986). Moreover, Quine sometimes states that natural language is *vaguely referential* (which is different from *non-referential*).⁶

6. An example can be found in the passage from Quine (1978, 168) cited earlier in this section.

From a realist point of view, it is possible to apply some methods of analysis to natural language in order to decide which commitments are really authentic or substantial. Indeed, the second step of the method, in which languages should be translated into first-order logic, would be an example of this ontological restriction. It is possible, however, to dispense with such an application, since the ontological restriction is guided by pragmatic principles of simplicity or indispensability that need not be universally shared. The main point is that Quine, and all those who study ontology on the basis of language, are obliged to admit that natural languages are ontologically committed in some sense, since that is what provides them with the background required for deepening their analysis in terms of ontology itself.

Note that not every philosopher denies the ontologically loaded character of natural language. Some recent authors, such as Hofweber (2005), acknowledge that quantification in natural language, such as “there is” or “some,” can occasionally be ontologically committing—for example, when we quantify abstract entities. In any case, it must be admitted that natural language carries ontological commitments, even if they are not serious or fundamental, since it is already the basis of most of the studies developed so far in ontology. Even philosophers belonging to different philosophical currents, such as Heidegger, recognize the relevance of natural language to the study of ontology.⁷

In sum, Quine’s perspective, taken at face value, is convenient because his theoretical conception of language and naturalized epistemology provide a consistent background for defending the way in which ontological commitment comes about in the context of natural languages. All he has to do is accept that natural languages are ontologically committing—which, by the way, is also just what is required for his ontological commitment criterion to work.

3. QUINE AND LINGUISTIC RELATIVITY

It seems that if we admit that language is theoretical (i.e. that it is knowledge), and that ontological commitments are delineated in natural language, then different languages may be committed to different entities, affecting what the speaker thinks of as existent (i.e. their worldview). This is extremely attractive from the viewpoint of contemporary developments

7. For an account of the importance of natural language in ontological studies, see Duranti (2023), in which the author explains the centrality of language in Heideggerian philosophy, as well as its parallels with the work of other authors, including Austin and Whorf.

surrounding the thesis of linguistic relativity. Following Blanco Salgueiro (2017), such a hypothesis can be defined as the idea that languages differ from each other in non-trivial ways, and that these differences somehow affect the way we think. This can be broken down into two main premises:

- (LD) Linguistic diversity—that languages differ from each other in relevant ways.
- (CIL) The cognitive impact of language—which assumes that language, regardless of the language spoken, affects thinking.

Based on the defense of LD, there will be languages that differ significantly in their theories, establishing different postulates and encouraging reflection on whether these differences permeate the way individuals think CIL. It seems that once it is accepted that epistemology and language are inseparable (in that language *is* theory), knowledge or certain aspects of thought will depend to some extent on the language of the subject.

Sean O’Neill echoes the same idea, pointing out that words contain knowledge (“wise words”) that influence the speaker’s worldview. According to Sapir, language is “heuristic”: we learn from it, and part of what we learn is ontological—that is, it has to do with frames and relations to the world (O’Neill 2019). Language is therefore theoretical: it contains knowledge, and part of this knowledge is related to ontological commitments. Since language is transmitted from generation to generation, its knowledge is also transmitted, exerting an influence epistemologically on new generations. For this reason, naturalist deflationary theories seem best suited to supporting the linguistic relativity hypothesis, as they bridge the gaps between ontology and epistemology. And, as was argued in the previous section, if we admit that natural languages are also ontologically committing, then each language will carry ontological commitments of its own, affecting the worldview of its speakers. This is nothing more than a version of CIL: specifically, one that focuses on the impact of the ontological dimension of language on thought.

From the deflationary perspective proposed here, we must admit not only that ontology is understood as ontological commitment, but also that natural language is ontologically committing. However, if natural language embodies some theory of the world (by virtue of its ontological commitments), and there are non-trivially different languages (LD), then there must be different ontological commitments depending on the language spoken. And if we accept that what a speaker takes to exist is somehow dependent on the (linguistic) theory acquired, as was already argued, then different speakers will think about the world in different ways, depending on their respective linguistic ontological commitments (CIL).

Thus, Quine's background position allows us to understand how language learning is also epistemic acquisition, including with respect to the entities that are assumed to exist. On the other hand, while he defends a version of CIL for scientific theories pertaining to the world, we should recall that he does not agree that natural language is ontologically committing. Therefore, he does not accept the first premise of linguistic relativity—i.e. LD—because, as we have seen, he is not open to pluralism.

And yet, as was discussed above, Quine's rejection of the compromising character of natural languages is hardly justified within the terms of his own philosophy. In this respect, despite the affinity with Quine in terms of naturalized epistemology and the conception of language as theoretical, it is necessary to emphasize two aspects of his theory that differ from what is being defended here.

Firstly, as was already pointed out, for Quine ordinary language itself does not provide a reliable guide to ontology. The Quinean ontological project is conceived as artificial, unknown from the point of view of the average speaker. In the previous section, however, we argued among other things that, since the criterion of ontological commitment depends on the grammatical structure of English, it must be admitted that natural language is in some sense ontologically committing. For Quine, the notion of the best scientific theory in the world is understood in broad terms as including common sense, so that all sentences are theoretical in some way, including those of everyday speech.

Furthermore, as a consequence of the previous thesis, his understanding of the study of ontological commitments is not that of descriptive analysis. Hence, the second difference here has to do with his rejection of pluralism. For him, the theory that is accepted will be the one that provides the best possible explanation of the world, basing that choice on certain pragmatic criteria of theoretical virtue, so the task of the philosopher is to analyze that theory. The goal is not to describe the commitments of different theories or natural languages, but to improve the scientific theory. Only one theory is considered, the best scientific theory in the world, regardless of the language in which it is conveyed.

Nevertheless, once it is admitted that natural language is in some sense ontologically committing, linguistic diversity comes into play. Because of Quine's translation-based position, it is therefore necessary for him to admit that natural language carries ontological commitments. And since there is not a single natural language, but a plurality of them, the diversity of ontological commitments in different natural languages should also be admitted as a possibility. Non-trivial differences between natural languages,

such as the absence of pronouns or relative clauses in other languages, provide evidence for the pluralism of ontological commitments.

Some interesting consequences for the linguistic relativity hypothesis can be derived from the above. It is Quine's lack of interest in natural language and in considering different theories (i.e. natural languages) that poses certain challenges to the linguistic relativity hypothesis. But if, as argued, Quine were to admit the ontologically loaded character of natural languages, this would be resolved.

On the one hand, regarding the first premise (LD), since Quine is not interested in every language (or theory), but only in the best available scientific language, diversity would be overlooked. Undoubtedly, the analysis of a theory that postulates phlogiston does not seem to have much scientific relevance today, unless it is done from a historical point of view. But like it or not, Quine has to accept that natural language is in some sense committing, and since there are different natural languages, the Quinean perspective indicates the starting point for the analysis of the different ontological commitments of natural languages. So, while it is true that Quine would not be interested in analyzing the ontological commitments of other theories or languages, his naturalistic deflationism, which establishes a continuum between knowledge and reality through language learning, allows us to analyze the ontological commitments implicit in natural language, and consequently in the various languages of the world.

On the other hand, the fact that for Quine ontology is an artificial task also raises problems for the second premise (CIL). Since natural languages do not really contain any ontological commitments, the cognitive effects they may have will not be related to the ontological dimension—that is, to how we conceptualize the world. Perhaps languages will affect thinking in other ways, but since ontology for Quine is given in first-order logic and not in natural language, ontological commitments will not be relevant to the cognitive impact of language. Again, even if he does not think that real ontological commitment could take place in natural language, he has to admit that it is in some sense committing. So, accepting the above, when one learns a language, one learns ontological commitments that affect the speaker's worldview, given that language acquisition is itself also epistemic.

Hence, ontology, starting from Quinean deflationary naturalism, is understood in terms of ontological commitments: that is, in terms of what theory says there is. But theory, broadly interpreted as our entire web of knowledge, is identified with language. Thus, the sentences of language are always theoretical in some sense, including those of ordinary speech. Although for Quine the real ontological commitments are not to be found

in the sentences of natural language, but in the entities that result from their translation into first-order logic, this regimentation starts from the theoretical sentences of natural language themselves, where these ultimately provide the ontological commitments. So, to reiterate, because he uses natural language as the primary guide to ontology, he must admit that natural languages are loaded with ontological commitments. Once this is admitted, his perspective can be seen to provide an interesting framework for research on linguistic relativity.

Quine offers a perspective that maintains a version of the cognitive impact of language (CIL) specifically in relation to ontological commitments. With regard to the other premise, LD, he does not take into account natural language—or, with it, linguistic diversity. However, after defending the effective ontological commitment of natural languages (and Quine's need to admit this for his thesis to hold), it seems that linguistic diversity can come into play. We will address this in more detail in Section 6. First, it is now appropriate to propose a specific approach to analyzing the ontological commitments of natural languages and, incidentally, to argue for the value of pursuing it.

4. NATURAL LANGUAGE ONTOLOGY

As noted above, it is not very common in the field of contemporary ontology to assume that natural language is a suitable tool for unravelling the existence of entities. However, one of the major problems in ontology is, in fact, that of finding out what is the best criterion for ontological commitment. Therefore, natural languages are always involved. *Natural Language Ontology* (NLO), proposed by Moltmann (2022; 2017; 2020), provides a flexible approach to the study of ontologies reflected in natural languages. Its main aim is to search for the entities underlying natural language: i.e. the ontology that is accepted by a speaker in their use of their language (Moltmann 2017, 1).

Rather than *revisionist metaphysics*, which aims to improve the structure of theory, this view is part of descriptive metaphysics, a metaphysical conception devoted exclusively to revealing the implicit commitments of natural languages.⁸ To be able to describe these ontological commitments, it is necessary to have a deep knowledge of the categories and structures

8. The revisionist perspective is the one proposed by Quine. Strawson (1959) originally coined the distinction between these two ways of understanding metaphysics—as descriptive and as revisionist. The former he defines as describing the structure of our thinking about the world, the latter as producing a better structure (Strawson 1959, 9). Note that for Strawson, metaphysics, both descriptive and revisionist, is understood as the analysis of thought

of natural languages. This is why contributions from the linguistic sciences are just as valuable as those from the metaphysical field.

In this way, Moltmann argues that the semantics of natural language contains entities from different ontological categories, depending on its structure and its syntactic and lexical features. It is possible to find references to objects, events, tropes, time, possible worlds, as well as to existence, dependence, constitution, causation, or truth. Since entities are of very different kinds, there is a different criterion of ontological commitment for each kind of entity, depending on the ontological category to which it belongs. Different criteria should be used to analyze different syntactic categories (nouns, definite descriptions, verbs, etc.). Moltmann's approach proposes an interesting way of analyzing entities in natural language based on the study of the structures of natural languages themselves, avoiding translation into logical languages and thus supporting the conception outlined here in the preceding sections.

It is worth noting that NLO is not about what we can do with language, but about what language does with us.⁹ What is relevant is to describe ontological commitments as they occur in natural languages. In light of this, there is a difference between what non-philosophers innocently assume when thinking about what there is, or what philosophers presuppose by setting up a criterion, and the ontology that a speaker implicitly accepts when using language. The former are ontological views based on reasoning; the latter are ontologies implicitly accepted by the speaker. Natural language ontology is neither folk nor revisionist metaphysics (Moltmann 2020, 331).

It would seem that a discipline devoted solely to describing the ontological commitments implicit in natural language, without inquiring into their veracity or consistency, would remain trivial, with no palpable interest for philosophy. There are, however, clear reasons that justify the interest of this discipline. Moltmann (2022; 2017; 2020) highlights two points that make it possible to argue in favor of the study of NLO:

or intuitions derived from the philosopher's methodology. This presupposition limits the distinction to the epistemological field, which is convenient for this research.

9. Leavitt (2010) emphasizes the fact that one of Boas's most important contributions to linguistic theory was to point out that the differences between languages have to do with what language forces one to refer to, and not so much with what it allows one to say. Moltmann's orientation here seems to converge with that of Boas. Leavitt, however, goes further in claiming that different languages have different obligatory grammatical categories that require attention to different aspects of experience, pointing to linguistic relativity. Moltmann's perspective, as we shall see, diverges at this point.

1. Fine (2017) argues that there are good reasons to question the viability of pursuing revisionary metaphysics independently of descriptive metaphysics. Descriptive metaphysics is needed for foundational metaphysics to examine truly foundational commitments. Descriptive metaphysics benefits greatly from the study of natural language ontology. This relates to our point in (3) about the necessary reliability of Quine's criterion of ontological commitment in natural language.
2. Some debates in the history of philosophy can be resolved with the help of the ontology of natural language. For example, those concerning numbers, truth and truth-bearers, ontological categories, and propositions. Part of the inspiration for these discussions came from the study of everyday language.

In summary, Natural Language Ontology can serve as a valuable framework for analyzing the entities encapsulated in natural language. This opens the way for broader ontological investigations, providing a foundation for the discipline and resolving common philosophical disputes. Moreover, it allows for the questioning of implicit assumptions in communication. Finally, for those who are skeptical about the feasibility of establishing a foundational metaphysical framework, it opens up new prospects for research in ontology.

5. NLO AND LINGUISTIC RELATIVITY

I would like to suggest an additional motivation for engaging with NLO, which may attract the attention of all those interested in the hypothesis of linguistic relativity. Moltmann recognizes that because the ontology of natural language is conveyed linguistically, there is some imbrication between it and our cognitive ontology:

The ontology that natural language reflects is a subject matter that is of interest also in itself. It goes along with the way we implicitly conceive certain general aspects of the world and it reflects, at least in part, our cognitive faculty (Moltmann 2017, 27).

Therefore, it seems that a clarification of the ontology of language will at the same time serve to clarify the cognition of speakers, helping to understand how we conceive certain general aspects of the world.

Yet this need not be consistent with linguistic relativity. In fact, what it says is compatible with a view of language as reflecting but not affecting cognitive ontology, or with the ontological priority of thought over

language. It could also be seen as a version of the “epistemological priority” of language over thought: the idea that the ontological commitments implicit in language are more accessible (to us, the theorists) than the commitments implicit in thought, or that the latter are discoverable only through the former, is compatible with the idea that the commitments implicit in language depend on, or are a mere reflection of, cognitive commitments that do not essentially depend on language.

In short, we cannot be sure that NLO accepts that language affects the speaker’s worldview (rather than the other way around), and so maintains CIL, the second of the two premises of the linguistic relativity hypothesis. However, it is possible to say something about the first premise, linguistic diversity (LD).

Regarding LD, Moltmann (2020; 2017; 2022) says that there is no reason to think that there is a single ontology implicit in all natural languages. Hence, her proposal has as its central goal the analysis of different natural languages, and not just an abstract language or a particular theory. What she ultimately proposes as the real object of study of NLO are the different ontologies of natural languages. Since this method is based on a descriptive ontology, not a fundamental one, different ontologies, reflected in different structures, can coexist.

Even if the NLO proposal is mainly oriented to the search for linguistic universals, it is difficult to imagine any other approach than that of basing the study on different concrete languages. This opens the door to the pluralism rejected by Quine: the analysis of ontological commitments must be done by proceeding from the different natural languages. Whether a universal cross-linguistic ontology is then discovered, or whether the results tend toward ontological relativity, is another matter.¹⁰ What is important is that Moltmann’s method makes it possible to analyze the ontological commitments of different natural languages, supporting linguistic diversity (LD).¹¹

With regard to the second premise of linguistic relativity, the cognitive impact of language (CIL), Moltmann does not take a clear position. Nevertheless, since she affirms that clarifying the ontology of language

10. Moltmann’s orientation is more in line with Chomsky’s universalist generativist tendency (Chomsky 1969; 1975; 1980) than with linguistic relativity. But this question is far from settled.

11. It is assumed that Moltmann is to some extent a supporter of linguistic diversity (i.e. that natural languages differ from each other in non-trivial ways), as there would otherwise be no need from her perspective to treat cross-linguistic analysis as an object of study. As has already been said, Quine, who did not take languages to differ in their ontological commitments, rejected the importance of linguistic diversity.

simultaneously clarifies the speaker's conception of the world, it is possible to support the second premise by accepting some influence of language on the speaker's worldview. Thus, while Moltmann is not an explicit advocate of CIL, her perspective does not exclude that possibility.

The proximity of the debates on linguistic relativity to this research is such that Moltmann (2022) even explicitly points out the connection between the possibility of cross-linguistic ontological differences and the Sapir-Whorf hypothesis. Since NLO already supports LD, in order to conduct a linguistic relativity study we need only add the thesis of CIL to Moltmann's position. This would complete the rest of the hypothesis.

It should be recalled here that the Quinean background offered an ontological version of the cognitive impact of language (CIL): i.e. that the propositions of a language are always theoretical in some sense, and therefore their learning always involves theoretical (epistemic) acquisition. So, if we admit this Quinean background, as we and many deflationists do, and implement the NLO project within this philosophical context, then there are some reasons to support CIL.

Once Quine acknowledges that natural languages are ontologically committed, the NLO perspective offers a novel and intriguing approach to analyzing them. As previously stated, NLO is based on the examination of the formal structure of various languages. According to Moltmann (2022; 2017; 2020), this structure reveals the entities to which they are committed. It is important to recall that, as outlined by Quine (1960a), the acquisition of these formal structures by the speaker entails the learning of specific ontological patterns (which consequently influence her worldview). Therefore, the NLO approach, based on Quine's naturalistic deflationism, provides a valuable means of analyzing the ontological commitments of natural languages, offering a compelling perspective for studies of the linguistic relativity hypothesis. Thus, the procedure would be to conjoin Quine's naturalistic deflationism with NLO, which furnishes a good motivation for this way of doing ontology by opening up the possibility of cross-linguistic onto-conceptual analysis.

Different languages, especially the less common ones, may have different ontological commitments, depending on their formal structure. For example, time is encapsulated in the linguistic theory of the world of many natural languages, so it seems interesting to take it into account when analyzing cross-linguistic differences. Languages lacking verb tenses or temporal referential terms, such as Lillooet Salish (Matthewson 2006), will in turn show differences in respect of their ontological commitments from Indo-European languages, including English itself. There are also languages

that lack verbs altogether, like Riau Indonesian (Gil 2013), where these pose an added problem to the above as such languages would not only not commit one to tense but, in principle, would not commit one to events of any kind. Finally, the correspondences between language and ontology are also evident in a language like Navajo, where the syntax itself establishes an obligatory classification of different forms of life according to whether they are more or less animate (Hale, Jelinek & Willie 2003; Witherspoon 1977; Creamer 1974). Thus, the “Navajo animacy hierarchy” is another example of how this language encodes its ontology in a particular way.

It should be kept in mind that, according to the linguistic relativity thesis, linguistic differences have an impact on the thinking of their speakers. So, the fact that different criteria of ontological commitment applied to non-trivially different languages lead to different commitments in respect of entities will have consequences for speakers’ worldviews.

CONCLUSION

In relation to Quine, it was argued that languages are never ontologically innocent. Although he himself did not consider natural languages, it was also argued that he had to acknowledge some degree of ontological commitment in them for his thesis to be valid. As an alternative, a robust proposal for the analysis of the ontology of natural language(s) was identified in Moltmann, offering a viable approach for elucidating ontological commitments across languages. In line with the argument that natural languages are ontologically loaded, Moltmann presents a linguistic methodology for the analysis of ontological commitments. Specifically, the NLO perspective was presented as a means of justifying the feasibility of achieving this task.

Nevertheless, having defended the possibility of analyzing ontological commitment in natural languages, it was also deemed appropriate to emphasize its interest. Moltmann herself has given several reasons that point in this direction, such as its potential to contribute to the debates waged in the history of philosophy, but a further original reason was added here, which at present seems attractive both for the philosophy of language and for linguistics: namely, its potential contribution to the development of the hypothesis of linguistic relativity. Indeed, the main purpose here was to illustrate the potential interest these perspectives might hold for those engaged in linguistic relativity studies.

Moltmann’s perspective leaves open the question of its compatibility with linguistic relativity. Since linguistic diversity is defended within the perspective itself, only the implementation of CIL is needed to make it consistent with linguistic relativity. Quinean naturalistic deflationism, (i.e.

the thesis that epistemology and ontology cannot be separated, so that what there is is what language says there is), combined with that same philosopher's thesis that language is theoretical (such that language learning is knowledge acquisition), provides the background perspective needed to achieve compatibility, since the ontological commitments of natural languages would consequently affect the worldviews of their speakers.

To conclude, one last observation can be made. Recall that Quine, rejecting the compromising character of natural languages, proposes translation into first-order logic to bring ontological commitments to light. This leads to the conclusion that ontology is independent of the natural language spoken. The universalism with which authors like Quine propose their methods of ontological commitment seems problematic when put into practice cross-linguistically. This can favor the thesis that natural languages, with their non-trivial differences, carry ontological commitments of their own.

The fact that the linguistic application of the criteria of ontological commitment relies heavily on certain syntactic categories specific to English (verbs for events, singular terms for nouns, etc.) raises doubts about the possibility of applying them cross-linguistically in languages whose syntactic structure is significantly different from that of English. Formal tools can be used to identify ontological commitments, but the kinds of entities that can be detected seem to be more a matter of studying specific languages.

In general, this argument is not related to deflationism or NLO, but rather to the central point of the paper, which is to defend natural languages as carrying ontological commitments—with their differences. This final remark regarding the potential English bias in ontological commitment criteria is directly related to the fact that, if the criteria cannot be applied cross-linguistically, then it would seem that these commitments cannot properly be sought out within a logical language reflective of scientific theory. With certain languages, this method would not be effective, or would not reveal the desired entities. Consequently, these commitments must be searched for within the natural languages themselves.

The most widely accepted criteria for ontological commitment have been developed by philosophers exclusively concerned with finding such criteria in an English-speaking context. That is, their criteria have been developed from and for English, losing sight of the difficulties that might arise in applying these criteria to other languages. As a result, these criteria do not appear to be language neutral. Davidson (2001), in his response to Lemmon on verb tenses, says precisely this:

My goal was to get clear about the logical form of action sentences. By action sentences I mean sentences *in English* about actions. At the level of

abstraction on which the discussion moved, little was said that would not apply to sentences about actions in many other languages if it applied to sentences in English. The ideal implicit in the paper is a theory that spells out every element of logical form in every English sentence about actions (Davidson 2001, 123).

Davidson makes it clear that his criterion of ontological commitment focuses only on sentences about actions formulated in English. He himself places the emphasis on concrete language, although proceeding from an Anglocentric point of view he assumes that almost everything said in the abstract could be applied to any other language. The problem with the criteria of ontological commitment is precisely this: that their authors believe that the investigation carried out in English is universal, and that extrapolation of the results to the rest of human languages can be taken for granted. In fact, Leavitt (2010, 121) recounts how Boas criticized Reverend Alfred J. Hall's grammar of Kwak'wala precisely because it was an English grammar to which Kwak'wala vocabulary had been added, failing to provide a true manual of its structure.

The profound grammatical differences between languages seem to provide more evidence for ontological diversity than for universalism, yielding a further argument for the compromising nature of natural languages and linguistic diversity. Logical methods of ontological commitment designed from and for a particular language raise suspicions about their possible cross-linguistic application.

The next step should be to apply the proposed method to different languages. The languages chosen for study should belong to societies that differ as much as possible from the Indo-European group, in order to foster maximum linguistic diversity. The differing ontological implications of natural languages can be revealed through their different criteria of ontological commitment, given that diversity. The fundamental structural contrasts between languages will bring to light any differing ontological commitments they may have.

BIBLIOGRAPHY

- Aristotle. 2010. "On Interpretation." In *Translations From The Organon Of Aristotle*, edited and translated by Walter Smith and Alan G. Gibson. Whitefish, MT: Kessinger Publishing.
- Blanco Salgueiro, Antonio. 2017. *La Relatividad Lingüística: (Variaciones Filosóficas)*. Madrid: Akal.
- Bricker, Phillip. 2016. "Ontological Commitment." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. <https://plato.stanford.edu/archives/win2016/entries/ontological-commitment>.
- Chomsky, Noam. 1969. *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.

- . 1975. *Reflections on Language*. New York: Pantheon Books.
- . 1980. *Rules and Representations*. New York: Columbia University Press.
- Creamer, M. H. 1974. "Noun Ranking in Navajo." *The Navajo Language Review* 1 (1).
- Davidson, Donald. 2001. "The Logical Form of Action Sentences." In *Essays on Actions and Events*, 105–48. Oxford: Oxford University Press.
- Duranti, Alessandro. 2023. "If It Is Language That Speaks, What Do Speakers Do? Confronting Heidegger's Language Ontology." *Journal of Linguistic Anthropology* 33 (3): 285–310. <https://doi.org/10.1111/jola.12404>.
- Fine, Kit. 2017. "Naive Metaphysics." *Philosophical Issues* 27 (1): 98–113. <https://doi.org/10.1111/phis.12092>.
- Fogelin, Robert. 2004. "Aspects of Quine's Naturalized Epistemology." In *The Cambridge Companion to Quine*, edited by Roger F. Gibson, 19–46. Cambridge: Cambridge University Press.
- Gil, David. 2013. "Riau Indonesian: A Language without Nouns and Verbs." In *Flexible Word Classes*, edited by Jan Rijkhoff and Eva Van Lier, 89–130. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199668441.003.0004>.
- Hale, Bob, and Crispin Wright. 2003. *The Reason's Proper Study: Essays towards a Neo-Fregean Philosophy of Mathematics*. Oxford: Clarendon Press.
- . 2009. "The Metaontology of Abstraction." In *Metametaphysics: New Essays on the Foundations of Ontology*, edited by David Chalmers, David Manley, and Ryan Wasserman, 178–212. Oxford: Oxford University Press.
- Hale, Kenneth, Eloise Jelinek, and Mary Ann Willie. 2003. "Topic and Focus Scope Positions in Navajo." In *Word Order and Scrambling*, 1–21. Chichester: Wiley-Blackwell. <https://doi.org/10.1002/9780470758403.ch1>.
- Hofweber, Thomas. 2005. "A Puzzle about Ontology." *Nous* 39 (2): 256–83. <https://doi.org/10.1111/J.0029-4624.2005.00501.X>.
- Hylton, Peter. 2007. *Quine*. London: Routledge.
- Inwagen, Peter Van. 1990. *Material Beings*. Ithaca, NY: Cornell University Press. <https://doi.org/10.7591/9781501713033>.
- Leavitt, John. 2010. *Linguistic Relativities*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511975059>.
- Matthewson, Lisa. 2006. "Temporal Semantics in a Superficially Tenseless Language." *Linguistics and Philosophy* 29 (6): 673–713. <https://doi.org/10.1007/s10988-006-9010-6>.
- Moltmann, Friederike. 2017. "Natural Language Ontology." In *Oxford Research Encyclopedia of Linguistics*. Oxford: Oxford University Press. <https://doi.org/10.1093/acrefore/9780199384655.013.330>.
- . 2020. "Natural Language Ontology." In *The Routledge Handbook of Metametaphysics*, edited by Ricki Bliss and J.T.M. Miller, 325–38. Routledge. <https://doi.org/10.4324/9781315112596-25>.
- . 2022. "Natural Language Ontology." In *Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta and Uri Nodelman. <https://plato.stanford.edu/archives/win2022/entries/natural-language-ontology/>.
- O'Neill, Sean. 2019. "Linguistic Relativity in the Age of Ontology: How Language Shapes Worldview and Ways of Being, Even Going Beyond the Human." In *Languages—Cultures—Worldviews*, 19–52. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-28509-8_2.
- Pānini. 1898. *The Ashtadhyayi of Panini Translated into English*. Edited and translated by Srisa Chandra Vasu. Vol. I–VIII. Sindhu charan bose.

- Price, Huw. 2009. "Metaphysics after Carnap: The Ghost Who Walks?" In *Metametaphysics: New Essays on the Foundations of Ontology*, edited by David Chalmers, David Manley, and R Wasserman, 320–46. Oxford University Press.
- Quine, W. V. O. 1948. "On What There Is." *The Review of Metaphysics* 2 (5): 21–38.
- . 1953. *From a Logical Point of View*. Cambridge, MA: Harvard University Press.
- . 1960a. "The Ontogenesis of Reference." In *Word and Object*. Cambridge, MA: The MIT Press. <https://doi.org/10.7551/mitpress/9636.003.0006>.
- . 1960b. *Word and Object*. Cambridge, MA: MIT Press.
- . 1969a. "Epistemology Naturalized." In *Ontological Relativity and Other Essays*, 69–90. New York: Columbia University Press.
- . 1969b. "Meaning and Translation." In *On Translation*, edited by A. Brower. Cambridge, MA: MIT Press.
- . 1969c. *Ontological Relativity and Other Essays*. New York: Columbia University Press.
- . 1974. *The Roots of Reference*. Chicago: Open Court.
- . 1978. "Facts of the Matter." *Southwestern Journal of Philosophy* 9 (2): 155–69. <https://doi.org/10.5840/SWJPHIL19789232>.
- . 1981. "Five Milestones of Empiricism." In *Theories and Things*, edited by W.V. Quine, 67–72. Cambridge, MA: Harvard University Press.
- . 1986. *Philosophy of Logic, Second Edition*. Cambridge, MA: Harvard University Press.
- Sider, Theodor. 2011. *Writing the Book of the World*. Oxford: Oxford University Press.
- Strawson, Peter F. 1959. *Individuals: An Essay in Descriptive Metaphysics*. London: Methuen.
- Tahko, Tuomas E. 2015. *An Introduction to Metametaphysics*. Cambridge: Cambridge University Press.
- Thomasson, Amie L. 2007. "Ordinary Objects." *Analysis* 69 (1): 173–174. <https://doi.org/10.1093/ANALYS/ANN024>.
- . 2015. *Ontology Made Easy*. New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199385119.001.0001>.
- Whorf, Benjamin Lee. 1940. "Linguistics as an Exact Science." In *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*, edited by John B Carroll, 220–32. Mansfield Centre, CT: Martino Publishing.
- Witherspoon, Gary. 1977. *Language and Art in the Navajo Universe*. Ann Arbor: University of Michigan Press. <https://doi.org/10.3998/mpub.9705>.

