Ontology: minimalism and truth-conditions

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Abstract In this paper, I develop a criticism to a method for metaontology, namely, the idea that a discourse's or theory's ontological commitments can be read off its sentences' truth-conditions. Firstly, I will put forward this idea's basis and, secondly, I will present the way Quine subscribed to it (not actually for hermeneutical or historic interest, but as a way of exposing the idea). However, I distinguish between two readings of Quine's famous ontological criterion, and I center the focus on (assuming without further discussion the other one to be mistaken) the one currently dubbed "ontological minimalism", a kind of modern Ockhamism applied to the mentioned metaontological view. I show that this view has a certain application via Quinean thesis of reference inscrutability but that it is not possible to press that application any further and, in particular, not for the ambitious metaontological task some authors try to employ. The conclusion may sound promising: having shown the impossibility of a semantic ontological criterion, intentionalist or subjectivist ones should be explored.

Keywords Ontology · Truth-conditions · Ontological minimalism ·
Ontological criterion · Quine · Reference inscrutability

1 Introduction

The idea that a discourse's ontic commitments can and indeed must be read off its sentences' truth-conditions is a tempting one. I call this approach to ontology TC-Ontologizing and its practitioners, consequently, TC-Ontologists. I begin by taking pains to develop what I consider to be its grounding arguments (Sect. 2). I take Quine to be the first TC-Ontologist and I try to show that his ontological

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criterion is, at least in a possible reading, the first supporter of "ontological minimalism", an idea basically claiming that the ontic commitments of a theory are its *indispensable* truthmakers (Sect. 3). (This idea must be considered in connection with TC-Ontologizing, since the truthmakers are to be read off sentences' truth-conditions).[1] I will defend here that ontological minimalism has a certain application, an application derived from another Quinean thesis, namely, inscrutability of reference (Sect. 4), but beyond that limited utility it is a doomed notion (Sect. 5). The rejection of OM implies the divorce of ontology and semantics, and forces us to search ontology in more exotic lands (Sect. 6).

2 Ontology and semantics

It is difficult to resist the idea that ontology must be an integral part of meaning. I. e., it seems logical to think that the meaning of a speaker's sentences has as an essential part of its content the entities the speaker takes to be speaking about by her sentences. According to this, we reach the following principle about the relationship between ontology and semantics (Ontologized Semantics Principle):

> (OSP) Ontology is built into semantics. I. e., the ontological commitments of a sentence are a constitutive part of its meaning.

Let us now adopt a Tarskian–Davidsonian theory of meaning, roughly, one identifying the meaning of sentences with their truth-conditions, and expressing these in a metalanguage with certain technical resources; now, we can formulate OSP in terms of truth-conditions:

> (OSP-TC) Ontology is built into semantics. I. e., the ontological commitments of a sentence are an essential part to its truth-conditions.[2]

I would like to draw attention now to the fundamental public character of language, a feature clearly visible once we set out to identify meaning and truth-conditions. As is well-known, this feature—call it the "language publicness requirement" (LPR)—has been constantly emphasized by the Quinean and Davidsonian tradition; I will offer some formulations of this principle by both authors:

> (LPR)
> The idea applied in particular to reference: "What an interpreter cannot on empirical grounds decide about the reference of a schemer's words cannot be an empirical feature of those words. What no one can, in the nature of the case, figure out from the totality of the relevant evidence cannot be part of meaning.

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[1] I take Quine—*my* Quine—, Cameron and Armstrong to be the main champions of this cause.

[2] Rayo makes similar considerations at the opening of his (2007):

> An immediate consequence of this way of thinking about ontological commitment is that the ontological commitments carried by a sentence are an *aspect* of its truth-conditions. This means, in particular, that one cannot change the ontological commitments carried by a sentence without thereby changing the sentence's truth-conditions. (Rayo 2007, p. 428).

(…) The semantic features of language are public features" (Davidson 1979, p. 235).

More general, as regards meaning: "Meaning is entirely determined by observable behavior, even readily observable behaviour" (Davidson 1990, p. 314).

And more general still: "Language is a social art. In acquiring it we have to depend entirely on intersubjectively available cues as to what to say and when." (Quine 1960, p. ix).

LPR has been traditionally linked—and I will so treat it here—to the idea of meaning as truth-conditions (understood, roughly, as applicability conditions). There is, in fact, no better candidate for a public determinant of meaning than the situations in which speakers utter their sentences. This is the only reason why I have introduced it here.

Thus, the possibility of interpreting some sentences as having different ontological commitments without affecting their truth-conditions would indicate that some of our former principles must be wrong. And, however, many sentences, as has since long been discussed, can receive a nominalist or a realist interpretation with regard to entities such as properties, classes, relations, numbers or propositions (these are the suspicious entities Carnap mentions in his (1956). And so, the realist as regards the existence of properties or numbers and the nominalist agree on the truth-conditions of sentences but not about their ontological commitments.

This runs counter to our previous argumentation: if ontology is an integral part of a sentence's truth-conditions (OSP/OSP-TC) and these exhaust what can be legitimately called the sentence's meaning (PLR), it cannot be the case that the same sentence (or two truth-conditionally equivalent ones) makes different ontic claims in the mouth of different speakers, since should the argumentation so far be right, then a discourse's ontological commitments will be as determined as its truth-conditions.

Anyhow, a proper analysis of this question requires a consideration of the issue as to how exactly the ontic commitments are to be read off a discourse's truth-conditions.

3 Revisiting Quine's Criterion

As orthodoxy currently dictates, let us begin our ontological reflections with a visit to Quine's criterion. In fact, it is not a mere tribute to orthodoxy: Quine must be considered the first TC-Ontologist, and his ideas about how to be one have set the agenda for the rest of us.

3.1 Quine's Ontological Criterion

Quine has offered a neat criterion for identifying the ontological commitments of a theory (QOC stands for "Quine's ontological criterion" henceforward); let us regiment the discourse whose ontological commitments are to be identified in the

usual first-order logical language; then, its ontological commitments are the values of the bound variables. "To be is to be the value of a variable", says the well-known slogan. To identify the ontology of a theory or language, then, is to find the values of the variables the quantifiers range over.[3] In this manner, a given existentially quantified variable presupposes the objects that make the open sentence true: "[T]o say that a given existential quantification presupposes objects of a given kind is to say simply that the open sentence which follows the quantifier is true of some objects of that kind and none not of that kind" (Quine 1953, pp. 130–131). Moreover, the ontological commitments of a theory are dependent on the way variables can appear: "What entities there are, from the point of view of a given language, depends on what positions are accessible to variables in that language" (Quine 1939, p. 201).

What positions are normally accessible to variables? Variables enter in first-order language in the place of the subjects of the sentences expressed in natural languages. Therefore, they represent the expressions which a predicate is attached to; the expressions whose referent something is to be predicated of. Quine often stressed the *triviality* of his criterion: to be a bound variable means to appear in a formula of the type "all X's" or "there are some X's…" and, therefore, the criterion would ultimately only claim that, for a given discourse, there are the entities it explicitly claims that there are.

QOC is usually dubbed a syntactical criterion, as it takes a syntactic property—to be a bound variable in first-order language or a subject-expression in a natural one—as the criterion to identify the linguistic elements which express the ontology of a discourse. But surely it is impossible to find the ontological claims of a language by looking at its words—the world must enter into the picture at some moment—. The next step now is to see what the world would be like in the case the discourse were true. That is: our quantifiers range, according to QOC, over the entities which would exist were our theory true.[4]

So, these seem to be the steps in QOC's method (from which, (a) and (b) are semantic tasks):

(a)   Find out the truth-conditions of the sentences.
(b)   See what entities are required for these conditions to be met.
(c)   Regiment the language in first-order logic language.
(d)   Pair the variables with the entities of (b).

The way of implementing steps (b) and (d) in our current semantic theories[5] is through satisfaction. I assume some familiarity with it, so I will be abrupt here. Very

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[3] The idea thus is that it only makes sense to try to figure out the ontology of a theory when this is apt to be formalized in quantificational language. In Quine's words: "The question of ontology simply makes no sense until we get to something recognizable as quantification, or perhaps as a relative clause, with pronouns as potential variables." (1975, p. 269).

[4] Azzouni gets it wrong: "On Quine's view, our quantifiers range over what exists, not over what we merely take to exist." (2004, p. 126).

[5] When speaking about standard semantic theories I am obviously thinking in Tarskian ones (s. Tarski 1933). Tarski's ideas were first applied to natural languages semantics by Davidson (s. 1967); currently, Kemeny's work seems to have settled the standard for this approach to semantics.

roughly: satisfaction is a relation (a relational property) between a sequence (an ordered set) of objects and a sentence (or open sentence). Since it is a relation between sentences and objects, it is a semantic notion; about whether this implies that it is a relation between linguistic items and objects in the world, we will turn to in due course.

3.2 QOC: Two Readings

Anyhow, this criterion does not settle the issue of a discourse's ontological commitment either without further specification. It is essential to distinguish two different readings of QOC:

(a) *The minimal reading*. Quine seems to be liberal sometimes about the possibility of deploying quantifications without ontic import, i. e., about the use of non-referring terms. So, QOC would not force us to ascribe a value to every bound variable, since the ontic commitments would be "all and only the objects over which the bound variables of the theory *have to be* construed as ranging in order that the statement affirmed in the theory be true" (Quine 1951, p. 11. Emphasis in original). Somewhere else, Quine stresses again the constraint of necessity in order to accept an entity as pertaining to the domain of a given discourse:

> [W]e are convicted of a particular ontological presupposition if, and only if, the alleged presupposition *has to be* reckoned among the entities over which our variables range in order to render one of our affirmations true. (1948, p. 13. My emphasis).

And with a slightly different formulation, even with a subtle suggestion of intentionalism:

> What there are, according to a given theory in standard form, are all and only the objects that the variables of quantification *are meant in that theory* to take as values. This is scarcely contestable, since "(x)" and "($\exists$x)" are explained by the words "each object x is such that" and "there is an object x such that". (Quine 1986a, p. 89. My emphasis).

These passages suggest that our quantifications are sometimes used to express ontic commitment and sometimes not. Besides, they follow an Ockhamian line in order to adopt a decision: quantification must be considered committing when it is indispensable to do so. More recently, Cameron has also subscribed to this minimalist idea (in fact, the label "ontological minimalism" is of his invention, as far as I know). He says (just after presenting a literal reading of QOC):

> I say that a sentence S commits you to some *particular* thing A when A *has* to make S true if it is true; that S commits you to there being some things or other amongst the Xs when it *has* to be the case that some things or other amongst the Xs make S true if it is true[.] (Cameron 2010, p. 253. Emphasis in original).

The minimal truthmakers for a sentence p are, according to Armstrong, the ones from which "you cannot subtract anything (…) and the remainder still be a

truthmaker for *p*" (2004, pp. 19–20). I interpret Cameron and Armstrong as presenting hereby a renovated version of the minimal reading: regardless of the employed terms, a discourse is committed to those entities indispensable for its sentences being true.[6]

(b)   *The literal reading.* Quine does not always appear to be so tolerant about non-referring terms or quantifications without ontic import. So, *every* quantification would betray ontic commitment. The accompanying slogan of this idea seems to be "no non-referring terms allowed":

> If someone says 'there is something x such that it is a prime number and exceeds ten million', no appeal to the syncategorematic status of any of his nouns will absolve him from implying that there are such things as numbers. insofar as this idiom and the term 'existence' (or 'being') mean anything at all. (1946, p. 15).

Quine's lapidary conclusion is, thus, "that the idiom 'there is something x such that' is by its very meaning a flat assertion of existence" (ibid.).

This reading becomes more substantial when seen—despite parachronism—in the context of the now almost legendary dispute between Carnap and Quine; Quine is answering to the (Carnapian) view of ontology as a question of adopting a certain linguistic framework without believing in the existence of the purported objects.[7] And Quine's answer is based on the rejection of "the philosophical double talk, which would repudiate an ontology while simultaneously enjoying its benefits" (Quine 1960, p. 242). According to this idea, to find out a discourse's ontic commitments should not be so controversial a question: "whether a given pattern of linguistic behavior *construes* a word *W* as having a designatum" is simply "decided by judging whether existential generalization with respect to *W* is accepted as a valid form of inference" (1939, p. 49).[8]

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[6]   It is significant that Cameron also offers the double view—minimalist and literalist—present in Quine. Cameron considers that when language tries to carve the world at its joints, the literal reading is mandatory, and he calls that language "Ontologese" (s. his 2010), but that is exactly what Quine calls simply natural science.

[7]   In Carnap's words: 'If someone decides to accept the thing language, there is no objection against saying that he has accepted the world of things. But this must not be interpreted as if it meant his acceptance of a *belief* in the reality of the thing world, there is no such belief or assertion or assumption (…)' (1956, pp. 207–208. Emphasis in original).

[8]   In fact, this statement is ambiguous. As it stands, it could represent either the literal or the liberal view; it depends on whether we consider that the existential generalization is logically and unavoidably entailed by the use of a name (i.e., that 'Fa' entails '($\exists$x)Fx'), or whether the possibility is conceded to block this entailment (as under a substitutional reading of the quantifiers). Thomasson (2007) makes a similar point, but she considers that it is not so clear that the substitutional interpretation of the quantifiers does not imply ontological commitments. Thus, once one accepts 'Jupiter has four moons', one is forced to accept 'the number of moons of Jupiter is four', which in turn implies that 'there is something that is the number of moons of Jupiter', and that, according to Thomasson, implies irrevocably a commitment with the existence of numbers. Nevertheless, we can (and rationally must) make the aforementioned inference, but to consider 'four' as a denoting term or not is not explicitly stated either in the inference or in the sentences. For sure, Quine is correct here: "Where substitutional quantification serves, ontology lacks point" (1969a, p. 107).

Now, both readings face a crucial difficulty. On the one hand, the minimal reading only says what types of entities are to be admitted as genuine commitments but it does not show how to discriminate among them. That is, if use of non-referring terms and the subsequent non-committing quantifications is recognized as legitimate, a procedure to discriminate between the referring/committing and non-referring/non-committing uses is still required. On the other hand, the literalist reading is draconian—borrowing a J. Azzouni's word—in its pretention of our theories to contain only committing quantifications.

Since it is by now widely accepted that our language, in ordinary use as much as in scientific practice, contains non committing quantifications, I will not pause on the draconian line.[9] Let me center on the minimal reading and pursue the question of how we could, following this QOC's interpretation, determine ontic commitments. On the argumentation so far developed, one possibility comes easily to mind: once reckoned that ontology is an essential ingredient of truth-conditions, we can consider that, applying the usual principle of ontological parsimony, the ontology of a discourse is the minimal ontology with which it is possible to construe a truth-conditional theory for it. I think this idea, OM, can be useful in an aspect, but it is failed in another, and this failure is the proof that we need a different kind of criterion for ontic commitment. I will try to show this in the remainder of the paper.

4 Minimal Ontology and Inscrutability of Reference

Inscrutability of reference (IR henceforth) is the Quinean thesis, roughly and famously, that it is possible to ascribe different entities as the terms' reference and, with the pertinent reinterpretations of other subsentential parts, sentences' truth-conditions will remain undisturbed.[10] Thus, different entities can do the job of satisfaction equally well. This is relevant here as it entails that *we* can choose, when making up our semantic theory for a given language, between, e.g., reckoning as referata (instantiated) abstract objects or physical objects (with properties). Ontological parsimony *can* settle the issue here.

However, someone could still insist, under what right could we deny the Platonist the right to speak about instantiations of abstract entities instead simply of things and their properties? The question is: when the Platonist says that rabbits are small,

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[9] That is, indispensability of a quantified expression does not entail *eo ipso* commitment to the quantified variables' values. Of course, this is a very substantial claim, but this paper takes it as established. S., for argumentation, Azzouni (2004, 2009) or forthcoming, Yablo (1998).

It is worthy of note that TC-Ontologists, even when minimalist, do not easily accept this view. Cameron, e.g., asks: "What possible reason could one have for thinking of some propositions that they need to be grounded in what there is that doesn't apply to all propositions?" (2008, p. 107). And another TC-Ontologist, Heil, claims: "When a claim about the world is true, something about the world makes it true" (2003, p. 9). Although this latter claim is too vague to be disputed, Heil seems to be thinking along the same line as the literalist Quine.

[10] Quine linked this idea to the thesis of ontological relativity, namely, that consequently the ontology of a discourse is relative to the ontology we choose for the metalanguage we will employ. This opens an unavoidable regress, as it is not at all clear how the metalanguage gets its ontology fixed. (This must suffice by now, but further reflections in the next chapter touch upon this point).

does she really mean that rabbits are small or that smallness is instantiated in rabbits (or that whenever there is rabbitness instantiated there is also smallness)? And the answer is that this is the kind of problem that IR presents as a pseudo-problem. (S. especially in this debate Quine 1969b).

What IR teaches us in this context, according to Quine, is that, given that the sentence's truth-conditions are exclusively what give it its meaning (PLR), and considering OSP-TC, the ontological commitments of a sentence are the entities contained in the truth-conditions *regardless of the metalanguage used in order to describe them*. And, consequently, *regardless of the entities posited by the metalanguage in order to describe them*.

With OSP-TC in hand, it makes no sense to say that two truth-conditionally equivalent sentences could make different ontological commitments; but, on the other hand, it is a fact that the different interpretations offered in the IR-examples posit different entities. Or is it not?

Well-known are Davidson's examples about how to speak about Wilt with a metalanguage that translates 'Wilt' by 'Wilt's shadow' (Davidson 1979), or how to speak about Rome in one that translates 'Rome' by 'an area 100 miles to the South of Rome' (1997). The situation is always one in which the trade-offs in the interpretations of other parts of the sentences result in the spoken-about entities (Wilt, Rome) being the same ones. Or, take again the alleged Platonist speaker. We can construe (by means of second-order logic) his predicates as denoting attributes and predication as a relation of instantiation; or we can take predication as the simpler relation of qualities holding of objects and these as the only ontic import of the discourse.[11]

We are in a position now to understand Davidson's point here; let us formulate it as the principle of the "ontological equivalence of the different metalinguistic characterizations" (OE, to abbreviate):

> OE: The different (correct) metalanguage characterizations of a sentence's truth-conditions make (despite contrary appearances) the same ontological commitments.

Now, OE's aspect that may seem provocative to many is the idea that two subjects cannot "conceptualize" or "conceive" the same facts making different ontological claims. The question about whether someone is talking about Platonic concepts (redness, rabbithood, and the ilk) instantiated in objects or about objects and their properties is indetermined because regardless of whether we use a metalanguage containing Platonic concepts or not, if the truth-conditions remain

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[11] I am thus offering a Davidsonian view of IR, which differs from Quines's. Quine considered that the different trade-offs in the interpretations maintain the sentence truth-conditions fixed *but not its ontology* probably because of a positivistic redoubt in his philosophy, which makes him take the entities to which observation sentences are keyed (redness, coldness) as the ones really existing and the rest as *Menschenwerk*. Quine asks, discussing under determination: "[T]aking a more positivistic line, should we say that truth reaches only to the observation conditionals at most, and, in Kronecker's words, that *alles übrige is Menschenwerk*?" (1975, p. 242). Davidson, for his part, considers that the different interpretations keep the ontology fixed because, at least as it concerns our ordinary environment, "there is a single ontology" (1995, p. 121), and thereof his consideration of inscrutability as an ontologically innocuous thesis.

unaltered, we are describing the same facts, and therefore we must be speaking about the same objects. Sure, there is much to say about this but this is not the place. What must be stressed here is how IR shows that a certain ontological minimalism is possible when building a semantic theory.

How? Advocating for the liberal application of QOC, as the reader will recall, implies advocating for the impossibility of TC-Ontologizing, since some terms are referring and some quantifications ontologically committing and some are not. Syntax is of no help here. What a semantic theory does is express in a metalanguage the target sentences' truth-conditions, but metalanguage ontological commitments—being metalanguage, after all, no more than a language—cannot be spotted from its syntactic or quantificational structure. If the target language's mere syntax cannot reveal its ontological commitments, there is no reason to suppose that a translation of it into a different language will. Thus, this is all IR can tell us regarding OM: we should select the most simple (embedding as least terms as possible) metalanguage. Once it is assumed that semantics and ontology are independent issues, this is all the Ockhamism we can aspire to.

In order to clarify this idea, I will add an example to the Davidsonian philosophical lore in this field. Suppose a dyed-in-the-wool pantheist insists on her speaking about entities-with-God-in-them. Whenever she says, e.g., 'there is a cat in the mat', she claims she means that there is a cat-with-God-in-it in the mat-with-God-in-it. But when construing a semantic theory for our pantheist, we are not trying to reveal her ontology; we are offering her sentences' truth-conditions in the metalanguage selected *by us*. OM merely tells us here that 'cat' is linguistically simpler than 'cat-with-God-in-it'. Ontology does not even enter into the picture here, since we do not know the ontic load of the metalinguistic expression 'with-God-in-it' (it cannot be ruled out a priori that it is a non-referring expression).

The failure to see the divorce between semantics and ontology led Quine to the conclusion that "reference and ontology recede thus to the status of mere auxiliaries [of the metalanguage]" (Quine 1990, p. 31). My point here is even more dramatic: reference and ontology are not even mere auxiliaries of the metalanguage, so the only utility of OM is to find metalinguistic simple expressions. However, let us assume we know the metalanguage's commitments. Quine's quoted view would be correct when made a bit subtler: *some* entities pertain to the ontology of the object language and *some* are auxiliary devices of the metalanguage. God can be considered an auxiliary entity of this metalanguage, as a more ontologically economic metalanguage is possible, namely one without reference to God (where we find the reference schemas "'cat' refers to cats" and "'mat' refers to mats"). What stands out as shocking in these types of examples is that ascribing a reference to people's shadows, areas 100 hundred miles to the South of cities or an inhabitant God is empirically correct but unnecessary and, therefore, unjustified.

Can people not conceive the same facts in different ways, as we have suggested? I have said that this is not the place to go into details about this issue, but a brief comment is now to the point. Our pantheist can conceive facts in a different way than the rest of us non-pantheist; she can, of course, *think* that God inhabits all things, but that is not reflected in her sentences' truth-conditions. Ontology is a question of private belief; meaning is public (as LPR states). The pantheist can do nothing to prevent us from

construing a semantic theory where her 'cat-with-God-in-it' is metalinguistically translated simply as 'cat'. Metalanguage's task, let us repeat, is to offer truth-conditions (in a metalanguage), not to reveal ontic commitments.

Nevertheless, once we take terms such as 'shadow' with its ordinary reference, Davidson is wrong in considering that 'Wilt is tall' and 'Wilt's shadow is the shadow of a tall thing' are ontologically equivalent. The latter sentence implies that there are shadows; the former does not. OE is thus wrong. And it is wrong for the same reason as QOC is: the failure to see that ontology and semantics are independent issues and in claiming, then, that truth-conditionally equivalent sentences must also be ontologically equivalent ones. Where Davidson is right is in that they are truth-conditionally equivalent sentences and, therefore, equivalent for our truth-conditional semantics, and so the fact that one interpretation is ontologically (assuming we have already found the metalanguage's commitments) simpler than the other, permits us to find a use for OM.

I will here sum up the conclusion about the use we have found for OM via IR. Once non-referring terms are admitted as indispensable in our metalanguage, the fact of including a term in a metalanguage cannot entail *per se* commitment to its alleged referent; thus, *OM can only consist of the requirement of including in our translation manuals as few terms as possible*. Translation which imply that "Wilt' refers to Wilt's shadow" or "'cat' refers to cats with God in them" would simply violate the requirement regardless of the ontological character of 'shadow' or 'god'.

5 Bad news for OM

Unfortunately, there are reasons that cast doubt on the possibility of pressing OM any further than what has been stated above. Concretely, there are two points which make not only OM, but any project aiming to read a language's ontic commitments from a truth-conditional semantic theory for it, an unfeasible project.

5.1 Metalanguage and sets

Our standard semantic truth-conditional theories deploy an ontology which cannot exactly be considered minimal as it must contain sets. All predicates are taken in these theories to be satisfied by sets. The project of ascribing a minimal ontology seems fated to fail, then, as *every* sentence is construed, in our current theories, as committed to sets even when there is no evidence that the target sentence is so committed.[12]

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[12] A. Rayo also makes this point:

Note, for example, that on standard semantic theories one assigns to each first-order predicate of the language a *set* as its semantic value. From this it follows that one's semantic theory for '∃x Elephant(x)' carries commitment to sets. But it would be a mistake to conclude on those grounds alone that '∃x Elephant(x)' itself carries commitment to sets. Just because a semantic theory uses sets in specifying truth conditions for '∃x Elephant(x)', it doesn't follow that the truth-conditions thereby specified demand of the world that it contain sets. Similarly, just because a semantic theory uses elephants in specifying truth conditions for '∃x Elephant(x)' it doesn't *immediately*

Besides, the domain of metalanguages must also contain interpretations—to make things worse.[13]

The problem OM faces here is this: a metalanguage always requires a richer ontology than its target language; so it is not possible to read the target language's ontic commitments from the metalanguage's ones, and much less if one is seeking a minimal ontology. As said, then, this is a problem not only for OM, but for any project working in the more general scheme of TC-Ontologizing.

5.2 Metalanguage Commitments

Let us concede that a good semantic theory can be developed without its predicates ranging over sets[14] or interpretations, and so our argument does not depend exclusively on Tarskian semantics technicalities. Why must we suppose that this metalanguage's commitments are easily identifiable? Or, at least easier than those of its target language? If we set out to read the ontic commitments of a language by designing a metalanguage-1, we will need a metalanguage-2 in order to read the ontological commitments of metalanguage-1, thereby opening an infinite regress.

Quine's method worked along the following lines: (a) take the indispensable assertions of the theory, (b) paraphrase them in first-order logic language, and (c) take the values of the quantified variables as the ontic import. That is, *stipulation* is Quine's way of avoiding the regress: quantifiers must be read, in the introduced paraphrases—in the first-order logic language, which is our selected metalanguage—as invariably committing. But it is this conjunction of indispensability (in (a)) and draconism (in (c)) what we assumed to have erred right at the beginning of our argumentation (Sect. 3.2). Indispensability, that was our assumption, must be understood as indispensability of certain not necessarily committing quantifications, so TC-Ontologizing only displaces draconism from the target language to the metalanguage.

The TC-Ontologist could appeal to satisfaction. Satisfaction—he says—is the task of selecting *objects* and pairing them to the sentences' terms or variables (remember step (d) in QOC), offering thus the ontology. But *nothing in the object language forces the metalanguage to select a sequence which includes exclusively existing objects*; numbers, spatial points, temporal points or fictional characters could be adopted even when we do not take them to exist. Take the paradigm of

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Footnote 12 continued

follow that the truth-conditions thereby specified demand of the world that it contain elephants. (Op. cit., p. 431).

[13] A little bit of technicality in order to motivate the assertion. An axiom of the theory will state the satisfaction conditions (and derivately the truth-conditions) for a monadic predicate 'P' as follows:

'Px_k' is satisfied by I iif Px_k.

That means that the predicate P is satisfied for some object k if and only if in the offered interpretation—a mapping of variables to objects—the object k is P. So, we need to include interpretations in the metalanguage's domain.

[14] There are good prospects. For example to adopt the canonical notation when we want to assert the existence of one object ('∃x') but to adopt the pluralist one when several objects are posited ('∃xx'). (S. e.g., Rayo 2007).

ontic commitment, the existential quantified sentence. Our Tarskian theory offers the following axiom for it:

$$\text{`}(\exists x_k)\phi\text{'} \text{ is true iff } (\exists x_k)\phi. \tag{1}$$

However, truth is explained here by satisfaction, so (1) is indeed an abbreviation of:

$$\text{`}(\exists x_k)\phi\text{'} \text{ is true iff satisfied by some sequence.} \tag{2}$$

And a sequence will satisfy this sentence iff it includes in the kth place an object which is ϕ. But, as said, *the sequence could include in this place a non existing object*. Thus, formulation (1) is ontologically neutral because the ontic commitments of the metalanguage's quantifications (the second '$(\exists x_k)\phi$') are as problematic as the target language's ones; and formulation (2) is also ontologically neutral because nothing assures that the kth element is assumed as a real object.[15] In fact, once it is assumed that our target language will indispensably contain non-referring terms, it is reasonable to suppose that so will the language deployed as a metalanguage for it. The defense of QOC (or Cameronian Ontologese, for this matter) by the prescription of translating the target language into the home language and then taking it at "face value", as Quine attempted, amounts simply to resorting to Tarskian-style semantics: "Within the home language, reference is best seen (I now hold) as unproblematic but trivial, on a par with Tarski's truth paradigm. Thus 'London' denotes London (whatever *that* is) and 'rabbit' denotes rabbits (whatever *they* are)" (1986b, p. 460). Yes, disquotation is trivial; and it does not offer any hint about the term's ontic load (as the "whatever *that* is" clause seems to suggest). Therefore, the infinite regress Quine indulges in when trying to read off a language's ontic commitments by translating it into the home language cannot be blocked by appealing to the latter's face value. To take it at face value cannot imply to accept draconism once we know it may contain non-committing quantifications. If no language shows its ontic commitments neither by itself—in its syntactic structure—nor in its sentences' truth-conditons, translation (even translation to the home language) can be of no use in finding ontic commitments.

6 Concluding Remarks

Once admitted the indispensability of non-referring terms, truth-conditions cannot "contain" or "show" our sentences' commitments. Indispensability belies draconism, and that entails the impossibility of TC-Ontologizing as Quine, Cameron and others conceive it.

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[15] Does the idea of senquences containing objects which are not assumed as existing sound Meinongian to you? (It does to me). It will depend on whether you consider Tarskian-semantics as entailing realism or not. Obviously, here is not the place to discuss it. However, if you take it to entail realism, think of my point as claiming that Tarskian semantics is neutral about whether the target language commits itself to real or Meinongian objects. I may even allow you to think of my point as affirming that we can find an ontologically neutral satisfactory truth theory (apt to employ as a truth-conditional semantics) (following, e.g., along the lines of Horwich's minimalism?).

We have found a very limited utility for TC-Ontologizing—the one of constructing a metalanguage as terminologically parsimonious as possible—, but we have seen that the main goal of this project, the one of reading the ontic commitments off truth-conditions, is doomed. And this means that at least one of the project's grounding principles given in Sect. 1 must be rejected. It is obvious that the present argumentation contradicts OSP/OSP-TC, since if it is not possible to read ontic commitments off truth-conditions, it implies that the former are not an integral part of the latter. Semantics and ontology must be seen as divorced elements. LPR, however, remains unaffected, since it stated the publicity of meaning, regardless of the relation it holds with ontology. But it is interesting to perceive that once ontology and semantics become divorced and LPR therefore needn't extend to the former, the door is open for intentionalist and subjectivist ontological criterions. There is, then, appealing philosophical territory to explore here.

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