

# Getting a grip: ontological commitment, truthmaking and aboutness

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## Abstract

I argue that the traditional notion of ontological commitment has two aspects, which are both better accounted for by other theories: a theory of aboutness and a theory of truthmaking. I give a short sketch of both, and try to bring the separate strands together in the project of a general theory of (metaphysical) making.

## 1 The two strands in Quine’s criterion of ontological commitment

The champion of ontological commitment is undoubtedly Quine: if “to be *assumed as* an entity is [...] to be reckoned as the value of a variable” (Quine 1948: 13), a theory or body of (putative) truths  $T$  commits us to those entities that are assumed to be in the range of variables to make  $T$  true. According to Quine, it is the presumed truth of the sentences we use that puts us under ontological obligations and it is our use of first-order quantification in a semi-formalised canonical idiom which makes these obligations explicit. I want to argue, first, that it is not the truth of what we assert but the inferences we are prepared to accept that commit us to entities; second, that this notion of ontological commitment should not be formulated in modal terms and, third, that the intuitive notion of ontological commitment has two aspects which should be separated and are better captured by theories of aboutness and of truthmaking respectively.

According to Quine’s criterion, what a sentence commits us to is determined by what its variables range over and hence by how it is formalised. The connection between formalisation and commitment, however, may be in one of two directions:

- (i) Formalisation uncovers ontological commitment: the commitment of a sentence is determined by its logical form.
- (ii) Formalisation is constrained by ontological commitment: sentences have an ‘ontological form’ that a correct formalisation has to confirm.

Quine privileges the first direction, while I think that the second is perhaps more important: we cannot simply read of our commitments from the logical forms of the sentences we accept – rather, we are guided in our formalisation efforts themselves by a sense of which commitments are acceptable. But how, one may ask, is it even *possible* that formalisation is constrained by, rather than constrains, ontological commitment? After all we do not, one may think, have an independent grasp of ‘ontological’, as opposed to logical form. But perhaps we do.

There are many inferences we accept as valid but are uncertain about how to formalise. Here are some examples:

- (i)  $\frac{\text{Maria is a vixen.}}{\text{Maria is female.}}$

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(2) 
$$\frac{\text{Sam is slowly buttering his toast.}}{\text{Sam is buttering his toast.}}$$

(3) 
$$\frac{\text{He ought to } F.}{\text{He is able to } F.}$$

(4) 
$$\frac{\text{Spaghetti can be cooked à la Bolognese.} \\ \text{Spaghetti can be cooked à la Carbonara.} \\ \text{Spaghetti can be cooked à la Cinque P.}}{\exists x, y, z(x, y \text{ and } z \text{ are ways of cooking spaghetti and } x \neq y \wedge x \neq z \wedge y \neq z)}$$

We recognise these inferences as valid even though (and hence independently of the fact) that we do not want to commit ourselves to some particular formalisation of the sentences they contain. We do recognise, however, that their validity depends on what the premisses and the conclusion are about: if I was talking about two different people called “Sam”, for example, the second inference would be fallacious. We presuppose, in other words, that our uses of names, variables and anaphora are *coordinated*: that identical words and sequences of syntactically dependent words refer – *de jure*, not just *de facto* to the same thing. Coordination, in its simplest form, is presupposed whenever we fuse two predications into one:

(id<sub>a</sub>) 
$$\frac{Fa \\ Ga}{(F \wedge G) a}$$

The conclusion of (id<sub>a</sub>) is meant to rule out cases of conjunction introduction where the proper name type is used ambiguously, as in

(id<sub>DL</sub>) 
$$\frac{\text{David Lewis is an American-born philosopher famous for his modal realism.} \\ \text{David Lewis is a Russian-born Canadian lawyer and politician.}}{\text{David Lewis is both a philosopher and a politician}}$$

The validity of (id<sub>a</sub>) rules out this kind of equivocation. Identity is crucially involved in the validity of (id<sub>a</sub>), as can be seen from the fact that

(id<sub>something</sub>) 
$$\frac{\text{Something is red.} \\ \text{Something is round.}}{\text{Something is red and round.}}$$

is not a valid inference. To get validity (under an assignment), we need an additional premise as in

(id<sub>x,y</sub>) 
$$\frac{x \text{ is red.} \\ y \text{ is round.} \\ x = y}{x \text{ is round and green.}}$$

How coordination is achieved is a vast, and partly empirical question. Some typical examples may however be useful. A first class of cases involves intentions of co-reference: two utterances are coordinated in this way if one of them essentially involves an intention to use some syntactical-lexical form, some sound pattern or some other physical item *in the same way*, whatever it is, as the salient physical item is used in the other. In typical cases when I am about to use a word, it already exists as a sequence of tokens, ending in one particular token – an intention of co-reference will then determine whether another phonetical or graphical item is a token of the same word or not. In other cases, as in the case of pronouns and anaphora, coreferentiality is encoded in the syntax of the word in question and the structure of some stretch of discourse.

That names are individuated by coordination among utterances is not really a new idea. In retrospect, it can be seen lurking behind much of what has been said in the last thirty-five years about the

rigidity of proper names, i.e. the fact that they keep their reference constant across both actual and counterfactual circumstances. The question naturally arises how proper names can be bestowed with such an amazing capacity - and it seems a plausible idea that it is our use of them, and the intentions guiding that use, that make them keep their reference:

“What kind of linkage can insure that a name keeps the same reference in all possible worlds? [...] On the one hand names and other genuine singular terms must keep their reference in order for quantification to make sense. On the other hand, history is full of examples of names that due to confusion have come to change their reference. It took me many years to notice something that should have struck me immediately: What I show in this dissertation [(Føllesdal 1961)] is not that names and other referring expressions keep their reference in all possible worlds, I show only the conditional statement that *if* quantification into modal (and other intensional) contexts shall make sense, *then* names and other referring expressions have to keep their reference.

We have hence no guarantee that names keep their reference, we only know that *if* we get confused about reference, *then* we get confused about quantification. When we use a name, a pronoun or a quantificational variable, we signal that we intend to keep on referring to the same object, and we commit ourselves to do our best to keep track of it. [...]

Constancy of reference is therefore not something which is guaranteed, but something we must strive for when we use singular terms. It is a norm that we are expected to live up to as language users.” (Føllesdal 2004: xxviii-xxix)

Names keep their reference when used to describe counterfactual situations because we coordinate these tokens with their uses in describing the actual world. This explains their rigidity!<sup>1</sup>

Kit (Fine 2003) has plausibly argued that it is only by recourse to coordination that we are able to explain the difference between the semantic behaviour of the free variables  $x$  and  $y$ .<sup>2</sup> This also sheds some light on what Crispin Wright (1998: 73) has called the ‘Reference Principle’, namely that “co-referential expressions should be intersubstitutable *salva veritate*, at least in extensional contexts, and intersubstitutable *salva congruitate* in all”. Suppose that we assign  $x$  and  $y$  to the same individual; consequently, they are coreferential if anything is. But they are not substitutable for each other in

“ $\exists x, y(\dots x.y \dots)$ ”.<sup>3</sup> This suggests that in some contexts coreference has to be strict or *de jure*, arising from coordination, to guarantee intersubstitutivity.

Intersubstitutivity, however, is just one special case of an entitlement to inferences: coordination is thus seen to be what justifies our acceptance of identity inferences. To find out what someone is ontologically committed to, then, we should let us be guided not by the truth of what he assents to, but by the inferences he accepts: not by logical form, but by what logical form has to explain.

I have three reasons for preferring coordination and not quantification as guide to a person’s ontology:

<sup>1</sup>“Someone uses a substance term rigidly if, in talk of any counterfactual or hypothetical situation, she uses it to refer to whatever in that situation the same substance as the substance referred to by the term in the actual situation.” (Putnam 1990: 57) Cf. also the characterisation of rigidity by Burgess (1996: 20): “...a name is initially bestowed on a thing specified by description, and on each subsequent occasion is used with the intention of continuing to refer to what it has been being used to refer to.”

<sup>2</sup>The key idea of Fine’s relational semantics is adumbrated in Kaplan’s 1990 paper: “I have come to think that two sentences whose syntax – perhaps here I should say, whose *logical syntax* – differs as much as “ $a = a$ ” differs from “ $a = b$ ” should never be regarded as having the same semantic value (expressing the same proposition), regardless of the semantic values of the individual lexical items “ $a$ ” and “ $b$ .” (Kaplan 1990: 95, fn. 6)

<sup>3</sup>The reference principle also is in peril in all cases of ‘appositive expansions’, as from “ $p$ ” to “the proposition that  $p$ ” (Prior 1971; Bach 1997), from “Tom” to “the singular term “Tom”” and from “Alexander” to “Alexander the Great”. It is true that  $p$ , but “it is true that the proposition that  $p$ ” is ungrammatical; he was called “Tom”, but it makes no sense to say that he was called the singular term “Tom”, Bucephalus is Alexander’s horse but it is the horse *of* Alexander the Great.

1. *Ontological Reinterpretation*: Quine (1953b: 114) himself claims that although “ $\exists x(x \text{ is a dog} \wedge x \text{ is white})$ ” and “ $\exists x(x \in \text{dogkind} \wedge x \in \text{class of white things})$ ” are truth-functionally equivalent, they differ in ontological commitment. This happens often in philosophy: to avoid ontological commitment, we give alternative formalisations of sentences we think problematic. Such reinterpretations have to satisfy two requirements: they must preserve truth-conditions and minimise ontological commitment. Hence it seems that logically equivalent sentences must be allowed to differ in ontological commitment.
2. *Trade-off between Ontology and Ideology*: Quine famously held that there is a trade-off between ontology and ideology: we can avoid ontological commitment by making our language more expressive. We may, for example, avoid commitment to Pegasus by introducing a primitive predicate “ $x$  pegasizes” into our language. But do we thereby really reduce our commitments? This has seem dubious to many:

“...the employment of terms like ‘pegasizes’, with a “guarantee” (whatever that might mean) that they are truly predicable of one and only one thing (or of nothing), does nothing more than introduce “proper names” at the predicate level.” (Hochberg 1957: 553)

As Quine has shown us himself, we may carry this to a point where all variables are eliminated (Quine 1960). If such a reinterpretation of our discourse by a variable-free language is to be adequate, however, it has to preserve the validity of inferences – and some of these presuppose a non-empty universe.

3. *Proxy-Functions*: The radical interpreter’s decision “what expressions to treat as referring to objects, and, within limits, what sorts of objects to treat them as referring to” (Quine 1957: 3) is *unconstrained* by all possible empirical evidence:

“English general and singular terms, identity, quantification, and the whole bag of ontological tricks may be correlated with elements of the native language in any of various mutually incompatible ways, each compatible with all possible linguistic data, and none preferable to another save as favored by a rationalization of the *native* language that is simple and natural to *us*.” (Quine 1957: 4-5)

We may

I think there are two – connected – morals to be drawn from this observations: we first have to give a *amodal* criterion of ontological commitment and we have, second, to separate the two different strands of thought it tries to capture: we should give separate criteria for aboutness and for truthmaking, two intuitive ideas unhappily married together in the notion of ontological commitment.

Whenever several readings of a natural language sentence are available, Quine counsels us, we should adopt the ontologically least committal. This is expressed by the modal auxiliary in many statements of the criterion:

“a theory is committed to those and only those entities to which the bound variables of the theory *must* be capable of referring in order that the affirmation made in the theory be true” (Quine 1948: 13-14, my emphasis);

“...entities of a given sort are assumed by a theory if and only if some of them *must* be counted among the values of the variables in order that the statements affirmed in the theory be true” (Quine 1953b: 103, my emphasis, cf. also 108);

“To show that some given object is required in a theory, what we have to show is no more nor less than that that object is *required*, for the truth of the theory, to be among the values over which the bound variables range.” (Quine 1969a: 94, my emphasis)

The “must” in these formulation, in my view, should not be interpreted as an alethic modality (that are, after all, repudiated by Quine),<sup>4</sup> but as a meta-theoretic statment: Whenever a claim may be

<sup>4</sup>Based on the presence of the modal auxiliaries, Cartwright (1954: 319) and Chihara (1968: 32) have – falsely, in my view – interpreted Quine’s criterion as intensional.

evaluated as true over different domains, we should interpret it as committed to only those entities common to all these domains.

“Constraint  $C$  is to be imposed by accepting  $C$ -theory, according to Putnam. But  $C$ -theory is just more theory, more grist for the mill; and more theory will go the way of all theory. To which I reply:  $C$  is *not* to be imposed just by accepting  $C$ -theory. That is a misunderstanding of what  $C$  is. The constraint is *not* that an intended interpretation must somehow make our account of  $C$  come out true. The constraint is that an intended interpretation must conform to  $C$  itself.” (Lewis 1984: 62)

## 2 Aboutness and topic-neutrality

“Russell’s analysis of statements containing definite descriptions and, by extension, ordinary proper names, shows, he believed, that such statements are not really *about*, do not really *mention*, the denotation of the description or the referent of the name.” (Donnellan 1974: 223)

Very general constraints, such as the principle of substitutivity, are motivated by appeal to intuitive aboutness judgments:

“...the basis of the principle of substitutivity appears quite solid; whatever can be said about the person Cicero [...] should be equally true when said about the person Tully [...] this being the same person.” (Quine 1953c: 17)

Very much in a Fregean vein, Quine also draws the converse implication: if coreferential terms are not substitutable *salva veritate*, then their occurrence within the sentence is not – or “not squarely” – about their usual referent:

“If we assert [“Tom believes that Tully wrote the *Ars Magna*”] on the strength of Tom’s confusion of Tully with Lully, and in full appreciation of Tom’s appreciation that Cicero did not write the *Ars Magna*, then we are not giving the term “Tully” purely referential occurrence in our sentence “Tom believes that Tully wrote the *Ars Magna*”; our sentence is not squarely about Tully. If it were, it would have to be true of Cicero, who *is* Tully.” (Quine 1957: 18)

“That  $M$  is a *thing* can’t be *said*; it is nonsense: but *something* is *shown* by the symbol “ $M$ ”. In [the] same way, that a *proposition* is a subject-predicate proposition can’t be *said*: but it is *shown* by the symbol.” (Wittgenstein (1979: 109), cf. also 1921: § 4.126)  
“Even if there *were* propositions of [the] form “ $M$  is a thing” they would be superfluous (tautologous) because what this tries to say is something which is already *seen* when you see “ $M$ ”.” (Wittgenstein 1979: 114)

“Call  $A$  *peculiarly about*  $x$  in  $D$  [...] exactly if there is some world  $w$  and a permutation  $g$  which permutes  $x$  with  $y \neq x$  [...] such that  $A$  is true in  $w$  but not in  $g(w)$  – while no permutation has that effect if it leaves  $x$  [...] fixed.” (van Fraassen 1991: 469)

## 3 Truthmaking and foundation

The truthmaker intuition consists in roughly the following two tenets:

1. Truth is relational: being true is being made true by something. It is then a further question whether the things in virtue of which truthbearers are true are states of affairs, some objects or ways they are.

2. Truth is grounded: true truthbearers are true because the world is how it is; truth is not brute. It is a further question whether some truthbearers may ground themselves and what the grounding in question comes to.

## 4 Bringing them together: a theory of making

What makes it the case that “Sam is a dog” is about Sam? Something about Sam and our words about him.

What makes it the case that Sam makes it true that Sam is a dog? Something about Sam. If Sam is essentially a dog, perhaps he himself suffices for this truth. But for “Sam is black”, I would agree with Armstrong, something more is required: his blackness has to come into play.

Importantly, however, both our answers are not to questions of logical form: no suggestions is being made that “Sam is black” ‘really’ is short for “ $\exists \phi \exists x (x = \text{Sam} \wedge \phi = \text{blackness} \wedge Ex(x, y))$ ”.

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