Soochow Journal of Philosophical Studies, No. 16 (August 2007), pp.197-213 ©2007 Soochow University

# How the Particular Quantifier Became Existentially Loaded Behind our Backs<sup>\*</sup>

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### I. Introduction: the Particular Quantifier

Meinongians of various kinds, including noneists such as myself, hold that one can quantify over something without taking it to exist. More specifically, what is most naturally called the *particular* quantifier (being the dual of the *universal* quantifier) should not be read as 'there exists'—or even 'there is', there being no real difference between being and existence; it should simply be read as *some*, leaving it open whether the some in question exist or not.

This view flies in the face of current orthodoxy, as is witnessed by the fact that nearly every logic text book will simply call the particular quantifier the *existential* quantifier without further comment; and write it as  $\exists$ , which invites this reading.<sup>1</sup> The view that the particular quantifier is "existentially loaded" is so engraved on the modern philosophical logicians' mind, that the

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<sup>&</sup>lt;sup>1</sup> For this reason, in Priest (2005) I write the particular quantifier as S (Fractur 'S', for 'some')—and the universal quantifier A (Fractur 'A', for 'all') to keep it company.

mere suggestion that things might be otherwise is apt to produce what David Lewis, in a different context, called the incredulous stare. Here, for example, is Bill Lycan:<sup>2</sup>

I have to take my place amongst those who find *Relentlessly* (i.e., *genuinely* or *primitively*) Meinongian quantification simply unintelligible. However, in saying this, I am not using the term 'unintelligible' in its sneering post-Wittgensteinian sense. So far as I am able to introspect, I am not expressing any tendentious philosophical *qualm*. (For this reason, my use of the term may be irrevocably misleading.) I mean that I really cannot understand Relentlessly Meinongian quantification at all; to me it is *literally* gibberish or mere noise.

And here, more recently, is Terry Horgan:<sup>3</sup>

Noneism remains in a standoff with those, including myself, who find noneist quantification unintelligible.

Lycan and Horgan articulate the common view, though they may articulate it more forthrightly than is common.

The view in question is a distinctly puzzling one: examples of unloaded quantification are legion; and most native English speakers appear to have

<sup>&</sup>lt;sup>2</sup> Lycan, 1979: 290. Italics original.

<sup>&</sup>lt;sup>3</sup> Horgan, 2007: 620.

little difficulty in understanding them. Merely consider:<sup>4</sup>

I thought of something I would like to buy you for Christmas, but I couldn't get it because it doesn't exist (e.g., a perpetual motion machine).

One would think that, at the very least, such examples put the onus on those who think that such sentences are unintelligible to do more than just stare back. I am not here concerned to expound a noneist theory of quantification, however; nor to defend its virtues.<sup>5</sup> What interests me presently is how the view that the particular quantifier expresses existence has come to be so ingrained in the psyche of contemporary philosophical logicians. The tale, I think, is an illuminating one.

## II. The Particular Quantifier in Ancient and Medieval Logic

It might be thought that the view is coeval with the origin of Western logic. The view that the particular quantifier is existentially loaded is not, however, to be found in Aristotle (at least as far as I am aware). Of course, Aristotle does not talk of quantifiers at all. That terminology, and the modern understanding that goes with it, is of a later date. But quantificational locutions are central to syllogistic. And in the *Analytics*, where Aristotle reads things that we would now write as  $\exists x(Sx \wedge Px)$ , he says simply 'P belongs to some

<sup>&</sup>lt;sup>4</sup> Priest, 2005: 152.

<sup>&</sup>lt;sup>5</sup> This is done in Priest (2005).

Ss'—nothing about some Ss that exist. For example (pretty much at random):<sup>6</sup>

...[if] R belongs to every S, P to some S, P musts belong to some R.

It could, of course, be maintained that by 'some' he meant *some existent*, since non-existent things were out of bounds. But that is not right either. He also says:<sup>7</sup>

... one can signify even things that are not.

And in *On Ideas*, 82.6, we have:<sup>8</sup>

Indeed, we also think of things that in no way are...such as hippocentaur and Chimaera.

The great medieval logicians were even more explicit on the matter.<sup>9</sup> According to standard theories of *supposition*, 'some Ss are Ps' is to be understood as:

*a* is a *P*, or *b* is a *P*, or ...

where  $\langle a, b, ... \rangle$  is an enumeration all those things which are actually *S*. However, the also standard doctrine of *ampliation* tells us that 'some *S*s will be [were] *P*s' is to be understood as:

<sup>&</sup>lt;sup>6</sup> An. Pr. 28<sup>b</sup>6-7. Translation from Barnes (1984).

<sup>&</sup>lt;sup>7</sup> An. Post. 92<sup>b</sup>29-30. Translation from Barnes (1984).

<sup>&</sup>lt;sup>8</sup> The authenticity of this text is sometimes disputed. For a defence, see Fine (1993), from which the quote comes (p. 15).

<sup>&</sup>lt;sup>9</sup> For more on the following, see Priest (2005), 3.7.

a will be [was] a P, or b will be [was] a P, or ...

where  $\langle a, b, ... \rangle$  is an enumeration all those things which either are or will be [were] S. So the domain of supposition is ampliated to a wider collection of objects. And the medievals had a very robust sense of reality. Future and past objects do not exist (though they will or did exist).

It might be thought that we may simply identify existence *simpliciter* with existence at some time, as the medievals did not. But they go further. They held, applying the notion of ampliation again, that 'some *S*s can be *P*s' is to be understood as:

a can be a P, or b can be a P, or ...

where  $\langle a, b, ... \rangle$  is an enumeration of all those things which either are or could be *S*. The enumeration includes *possibilia*, things that do not exist (though they could do). Here, for example, is Buridan on the matter:<sup>10</sup>

A term put before the word 'can'...is ampliated to stand for possible things even if they do not and did not exist. Therefore the proposition 'A golden mountain can be as large as Mont Ventoux' is true.

William of Sherwood and other thirteenth century figures speak quite unguardedly of terms ampliated to things that do not exist.<sup>11</sup> And Paul of

<sup>&</sup>lt;sup>10</sup> Buridan, 2001: 299.

<sup>&</sup>lt;sup>11</sup> De Rijk, 1982: 172.

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Venice states categorically:<sup>12</sup>

The absence of the signification of a term from reality does not prevent the term's suppositing for it.

The medievals standardly allowed that some verbs, notably intentional ones, ampliated the supposition of a term to an even broader class of objects. Thus, Marsilius of Inghen writes:<sup>13</sup>

Ampliation is the supposition of a term...for its significates which are or were, for those which are or will be, for those which are or can be, or for those which are or can be imagined.

And at least for some logicians, what can be imagined includes *impossibilia* too. A standard medieval example of an object of the imagination is a chimera. On at least one understanding, this is an impossible object—having incompatible essences. Here is Paul of Venice again:<sup>14</sup>

Although the significatum of the term 'chimera' does not and could not exist in reality, still the term 'chimera' supposits for something in the proposition 'A chimera is thought of', since it supposits for a chimera.

We see, then, that no connection was forged between the particular quantifier and existence in either Ancient or Medieval logic.

<sup>&</sup>lt;sup>12</sup> Paul of Venice, 1978: 13.

<sup>&</sup>lt;sup>13</sup> Maierù, 1972: 182.

<sup>&</sup>lt;sup>14</sup> Paul of Venice, 1978: 13.

## III. The Particular Quantifier and the Rise of Modern Logic

#### A. Frege

So when did the nexus come to be forged? Very recently. As one might expect, given the preceding, it was with the formulation of the modern theory of the quantifier. Let us now turn to this. What we will see is how a relatively unselfconscious usage can turn into a bit of philosophical dogma behind people's backs.

The modern theory of the quantifier was invented most famously by Frege. When it comes to the particular quantifier, as expressed his *Begriffschrift* notation, he often reads it simply as 'there is' ('Es gibt'<sup>15</sup>). But he also calls such sentences 'existential' ('Existentialsätz'<sup>16</sup>) and describes such sentences as ascribing the property of existence ('Existenz Eigenschaft'<sup>17</sup>) to a concept. Here is Frege explaining his view that existence is a second-order concept:<sup>18</sup>

I have called existence a property of a concept. How I mean this to be taken is best made clear by an example. In the sentence 'there is at least one square root of 4', we have an

<sup>&</sup>lt;sup>15</sup> Frege, 1980: 35, 73.

<sup>&</sup>lt;sup>16</sup> *Ibid.*, p. 35.

<sup>&</sup>lt;sup>17</sup> *Ibid.*, p. 73.

<sup>&</sup>lt;sup>18</sup> Geach and Black, 1970: 48-49.

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assertion not about (say) the definite number 2, nor about -2, but about a concept *square root of* 4; viz. that it is not empty.

I think it wrong to read any heavy-duty metaphysics into all this, however: the vernacular glosses appear to be philosophically rather innocent. They are just the standard way that mathematicians talk when showing that *something* satisfies a certain condition; that its concept is, as Frege puts it, not empty.

Lest this be thought unduly deflationary, just note how often mathematicians use modal vocabulary—as thumbing through any mathematical textbook will reveal. For example, they say that one mathematical structure *can* be embedded in another. Or that, given a certain lemma, one *may* prove such and such a theorem. These locutions have nothing to do with possibility and necessity, much less permission and obligation. They are simply ways of expressing the fact that something satisfies a certain condition—a function (in the case of the embedding) or a deduction (in the case of the proof). So it is with talk of existence.

#### **B.** Russell

The next episode concerns Russell. And Russell, whatever he is, is no metaphysical innocent. His views on the matter at hand developed over a period of years. The initial phase concerns 'On Denoting' (1905). Here he wants to reject his former view (of the *Principles of Mathematics*) that there are objects that do not exist. But he still does not pack existence into the particular quantifier. He clearly takes it to be a substantial philosophical thesis that all objects exist, not a logical truism. When he comes to explaining the meaning of a sentence with the particular quantifier, C(something), he gives:

C(x) is sometimes true.<sup>19</sup>

There is one occasion in 'On Denoting' when he explains the theory of descriptions using an explicit quantifier. (Usually, he uses the phrase 'one and only one'.) Towards the end of the paper, in discussing the Ontological Argument, he glosses 'The most perfect Being has all perfections; existence is a perfection; therefore that one exists' as:<sup>20</sup>

There is one and only one entity x that is most perfect; that one has all perfections; existence is a perfection; therefore that one exists.

Note that although he uses the phrase 'there is' for the particular quantifier, the notion of existence itself is left unanalysed.

The most important phase of Russell's thought for the present matter concerns his lectures on Logical Atomism (1918). There, Russell gives an explicit defence of the view that existence is expressed by, and only by, the particular quantifier. First, Russell states the view baldly, if somewhat confusedly:<sup>21</sup>

When you take any propositional function and assert of it that it is possible, that it is sometimes true, that gives you the fundamental meaning of 'existence'. You may express it by

<sup>&</sup>lt;sup>19</sup> To be more precise, what he actually gives (Russell, 1905: 104 of reprint) is: It is false that C(x) is false' is always true.

<sup>&</sup>lt;sup>20</sup> Russell, 1905: 117 of reprint.

<sup>&</sup>lt;sup>21</sup> Pears, 1972: 89.

saying that there is at least one value of x for which that propositional function is true. Take 'x is a man', there is at least one value of x for which this is true. That is what one means by saying that 'There are men', or that 'Men exist'. Existence is essentially a property of a propositional function. It means that the propositional function is true in at least one instance. If you say 'There are unicorns', that will mean that 'There exists an x, such that x is a unicorn'. That is written in phrasing which is unduly approximated to ordinary language, but the proper way to put it would be '(x is a unicorn) is possible'... It will be out of the notion of *sometimes*, which is the same as the notion of *possible*, that we get the notion of existence [sic!]. To say that unicorns exist is simply to say that '(x is a unicorn) is possible'.

He then goes on to give his main argument for the view. He starts:<sup>22</sup>

It is perfectly clear that when you say 'Unicorns exist', you are not saying anything that would apply to any unicorns there might happen to be, because as a matter of fact, there are not any, and therefore if what you say had any application to the actual individuals, it could not possibly be significant unless it were true. You can consider the proposition 'Unicorns exist', and see that it is false. It is not nonsense. Of course, if the

<sup>&</sup>lt;sup>22</sup> *Ibid.*, p. 90.

proposition went through the general conception of the unicorn to the individual, it could not even by significant unless there were unicorns. Therefore when you say 'Unicorns exist', you are not saying anything about any individual things, and the same applies when you say 'Men exist'.

Russell claims that if one applies a predicate — and *a fortiori* the existence predicate — to something that does not exist, the result is meaningless. One might, of course, contest this; one might say that the result is false. But Russell's claim is, in fact, irrelevant to the matter at hand. How are we to understand the statement 'unicorns exist'? This is not a generic claim, like 'Dogs have four legs'. Neither is it supposed to be the claim that *all* unicorns exist. As Russell says, we should understand it as the claim that there exist some unicorns, i.e.:

(\*) Some things that are unicorns exist.

This may be spelled out naturally as:  $\mathfrak{S}x(x \text{ is a unicorn } \land x \text{ exists})$ . When thus spelled out, it is clear that the claim does not presuppose the existence of any unicorns; and (\*) is simply false, as Russell claims, since there are no unicorns. But this clearly is quite compatible *both* with existence being a predicate of individuals *and* with the particular quantifier being existentially unloaded.

Russell continues:<sup>23</sup>

If you say 'Men exist, and Socrates is a man, therefore

<sup>&</sup>lt;sup>23</sup> *Ibid.*, p. 90.

Socrates exists', this is the same sort of fallacy as it would be if you said 'Men are numerous, Socrates is a man, therefore Socrates is numerous', because existence is a predicate of a propositional function, or derivatively of a class. When you say of a propositional function that it is numerous, you will mean that there are several values of x that will satisfy it, that there are more than one; or, if you like to take 'numerous' in a larger sense, more than ten, more than twenty, or whatever number you think fitting. If x, y, and z all satisfy a propositional function, you may say that that proposition is numerous, but x, y, and z severally are not. Exactly the same applies to existence, that is to say that the actual things there are in the world do not exist, or, at least, that is putting it too strongly, because that is utter nonsense. To say that they do not exist is strictly nonsense, but to say that they exist is also strictly nonsense.

Russell asks us to compare two inferences:

Men exist	Men are numerous
Socrates is a man	Socrates is a man
Socrates exists	Socrates is numerous

and claims that the same sort of fallacy is involved in both. We are supposed to conclude that the conclusion of the first is ungrammatical, as is that of the second. But the analogy is lame, as should have been clear to Russell had he not already been in the grip of his view. To say that men are numerous is

indeed to say that many things are men. In the right context, this is true, as is the other premise. The conclusion, however, is *clearly* nonsense. The inference is therefore fallacious. The first argument, too, is fallacious. But that is simply because it is of the form:

$$\frac{\Im x(Mx \wedge Ex)}{Ms}$$

Note that the corresponding inference with a universal major premise:

All men exist Socrates is a man Socrates exists

seems perfectly valid. (All the people in this novel actually exist; Howard is in this novel, so Howard is an actually existing person.) And the conclusion of both arguments, that Socrates exists, is *prima facie* perfectly grammatical. Compare: 'Socrates exists, but Father Christmas does not'. Russell's argument does nothing to show matters to be otherwise.

One is forced to ask whether Russell had really formed his view about the quantifier on the basis of such bad arguments. Presumably not: they have all the feeling of an *ex post facto* rationalisation of something Russell had already come to accept.

#### C. Quine

Let us now come to the definitive moment of the story: Quine's 'On What there is'. In this, the view that the particular quantifier expresses existence —

or, as Quine is wont to put it: to be is to be the value of a bound variable — is endorsed with panache. The full passage is again worth quoting. Having argued that the use of predicates does not commit us to the existence of universals, Quine continues:

At this point McX begins to wonder whether there is any limit at all to our ontological immunity. Does *nothing* we say commit us to the assumption of universals or other entities which we may find unwelcome?

I have already suggested a negative answer to this question, in speaking of bound variables, or variables of quantification, in connection with Russell's theory of descriptions. We can very easily involve ourselves in ontological commitments by saying, for example, that there is something (bound variable) which red houses and sunsets have in common; or that there is something which is a prime number and larger than a million. But this is, essentially, the only way that we can involve ourselves in ontological commitment: by our use of bound variables. The use of alleged names is no criterion, for we can repudiate their namehood at the drop of a hat unless the assumption of a corresponding entity can be spotted in the things we affirm in terms of bound variables. Names are, in fact, altogether immaterial to the ontological issue, for I have shown, in connection with 'Pegasus' and 'pagasize', that names can be converted into descriptions, and Russell has

shown that descriptions can be eliminated. Whatever we say with the help of names can be said in a language which shuns names altogether. To be assumed as an entity is, purely and simply, to be reckoned as the value of a variable.<sup>24</sup>

The logic of the text is interesting. Quine argues that the use of names and predicates *is not* existentially committing; but there is absolutely no argument given as to why quantification *is* existentially committing. Quine simply *assumes* that the domain of quantification comprises existent objects—or what comes to the same thing, that the particular quantifier is to be read as 'there is'. No argument is given for this: it is stated simply a matter of dogma.<sup>25</sup>

### **IV. Conclusion**

I am not suggesting that there are not later developments that are relevant to the issue. There are. But after 'On What there is', the matter is effectively settled. In this way, in the first half of the Twentieth Century, did the view that the particular quantifier encodes existence become firmly entrenched. Whether for good or for bad reasons, I leave it to the reader to judge.

<sup>&</sup>lt;sup>24</sup> Recall that 'entity' comes form the Latin 'ens', meaning (a) being.

<sup>&</sup>lt;sup>25</sup> So if neither names, nor predicates, nor quantifiers are ontologically committing, what is? To say that something exists, of course!

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