Logical and Grammatical Predicates[1]

A.N. Prior

~~The following~~

Some thinkable has all the other perfections and is real

∴ Something that has all the other perfections is real

∃x (Tx & Ox & Rx)

∴∃x (Ox & Rx).

Something is a real dragon

∴Some dragon is real.

When D. put up the argument, one opponent Gaunilo said existence isn't a perfection or even a property, but is <u>presupposed</u> in having perfections or properties. Kant said existence isn't a predicate. And many later writers, such as Russell, have said that existence isn't a predicate. What does this mean?

Let's see at first what it <u>seems</u> to mean, because what it seems to mean is either trivially true or false. Most of us learnt to use the word "predicate" in grammar lessons, and in grammar it means part of a sentence. Now where a predicate is a part of a sentence

   (1) Existence isn't a predicate

without any quotes is obviously true – existence – your existence, my existence, any existence – isn't part of a sentence. And even with quotes

   (2) "Existence" isn't a predicate

is trivially true too – a predicate has to be a verb or a verb phrase, and "existence" isn't a noun. But let's look at another case.

{p. 2}

We might say that

   (3) "Smokes" is the predicate of the sentence "Socrates is smoking".

And we might express something very like this by saying

   (4) The sentence "Socrates smokes" predicates smoking of Socrates.

Similarly we might say

   (5) "Exists" is the predicate of "The Queen of England exists."

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[1] This MS is kept in the Prior collection at the Bodleian Library, Oxford. It has been edited by David Jakobsen, Martin Prior and Peter Øhrstrøm. It is handwritten and untitled. The above title is the suggestion of the editors. It has not dated, but it must have been written after October 1964, since Harold Wilson is mentioned as Prime Minister, cf. note 5.

And

(6) In "The Queen of England exists", existence is predicated of the Queen of England.

and more generally

(7) "Exists" (sometimes) can be the predicate of a sentence

and

(8) Some sentences predicate existence of objects.

And maybe (1) just denies (7) or (8). But in that case isn't it false? Surely "exists" <u>can</u> be the predicate of a sentence, and some sentences do predicate existence of objects.

Well, maybe that's true about English, but perhaps it's not true in a more tidied up language, and when people say that existence isn't a predicate what they mean is perhaps that "exists" won't be one of the predicates of a tidied up language.

Until late in the 19th century, the tidied up language that logicians used was one derived from Aristotle, in which people studied sentences {p. 3} constructed from common nouns, of these 4 principal forms

Every X is a Y

Some X is a Y

No X is a Y

Some X is not a Y

The X's and Y's were common nouns, and were called terms, and the 1st one was called the subject or subject term and the 2nd one the predicate or predicate term.

In modern logic we don't have symbols for common nouns but only for individual names and verbs. A predicate is anything that forms a sentence from an individual name or names – the F in Fx, or Fxy or Fxyz. And "Existence isn't a predicate", said by a modern person, means that in predicate logic we don't need a predicate "exists", but always express what we ordinarily means by using this predicate in other ways.

Lions exist = $\exists x Lx$

Unicorns don't exist = $-\exists x Ux$.

The <u>real</u> predicate of "Lions exist", we might say, is the predicate hidden in the apparent subject "Lions", i.e. the predicate "is a lion", and when we set it out in symbols that's the only predicate we need a predicate letter for: the "exists" part of it has gone into the quantifier.

{p.4}

Similarly if we say "<u>A</u> lion exists". That is again just $\exists x Lx$; "Something <u>is a lion</u>". "A lion" was called by Russell an <u>indefinite description</u>; and i.d. is just a common noun preceded by the indefinite article; and what modern logicians say is that even where this is used as the grammatical subject of an English sentence, it's

really just part of the predicate "is a lion" – you can rephrase the sentence so that this predicate is seen to occur.

Sometimes, however, we use "exists" with a <u>definite</u> description, i.e. a common noun preceded by the definite article

> The Queen of England exists.

> The King of France doesn't exist.

Here again the real predicate is the one buried in the apparent subject, and the "exists" part goes into the quantifier, only now it's a more complicated quantifier.

> The Queen of England exists = Exactly one thing is a Queen of England.

$$\underline{\exists}xQx \ ^{2}$$

i.e. $\exists x(Qx \ \& -\exists y(Qy \ \& \ y \neq x))$

The King of France doesn't exist

$$\underline{\exists}xKx$$

= $-\exists x(Kx \ \& -\exists y(Ky \ \& \ y \neq x))$.

{p.5}

So neither in

> Lions exist

nor in

> The Queen of England exists

is existence a predicate, i.e. something that forms a sentence from a name. Rather, it forms a sentence from a predicate. It amounts to

either $\exists x(\quad)x$

or $\underline{\exists}x(\quad)x,$

where the gap is filled by a predicate, not to anything like

$$\exists(\quad),$$

where the gap is filled by a name.

But don't we sometimes want to say things like "Mr. Wilson exists but Mr. Pickwick doesn't"? Russell says that we must distinguish between a <u>grammatical proper name</u> and a <u>logical proper name</u>. Read his chapter on "Knowledge by Acquaintance and Knowledge by Description"[3] in <u>Problems of Philosophy</u>.

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[2] Editors': Prior is using a special symbol $\underline{\exists}$ to indicate unique existence.

A logical proper name has no function except to pick out an object – the object we want to talk about. A g.p.n.[4] seldom does just that; if the object isn't right there in front of us, it really works by an element of description, probably a rather long description and possibly a different description with different people. "Mr. Wilson exists" means there is such a person as the person who is either Mr. Wilson and is now Prime Minister of England[5] and so on "Mr. Pickwick doesn't exist" means &c.

Quine suggests that we invent verbs corresponding to each proper name and summing up these descriptions, whatever they are, so that "Mr. Wilson exists" means "Somebody Wilsonises", $\exists x Wx$, and "Mr Pickwick doesn't exist" {p. 6} means "Nobody Pickwickises". For a l.p.n.[6] you have to go to something more like a demonstrative. "This is real" would really be of the form Fx; "Mr. Wilson is real" isn't really of that form but is more like

$$\underline{\exists}xWx \ \& \ \forall x(Wx \rightarrow Fx).$$

So for "exists" really to be used as a predicate we'll have to have some example like "This exists". Russell says this is just meaningless. I'm not sure why he says this. Moore says that if it's meaningful it's true, and similarly if "This doesn't exist" is meaningful it's false. And you could get a predicate that means "exists" even in Russell's system if you let it be "— is identical with something":

$$Ea = \exists y(a=y).$$

But now notice this is a theorem

$$\vdash \exists y(a = y).$$

Simple to prove it

(1)	$a = a$	$= I$
(2)	$\exists y(a = y)$	1. EI[7].

Another 2 assertions about 'exist'.

1	Socrates is ill $\rightarrow$ Socrates exists	$Fs \rightarrow Es$
	Socrates doesn't exist $\rightarrow$ Socrates is not ill	$-Es \rightarrow -Fs$
2	x is imaginable -|-> x exists	

[3] Editors' note: Prior writes "Aq and Descr.". Russell, B.: The Problems of Philosophy, London 1912, cf. http://www.ditext.com/russell/russell.html

[4] Editors' note: 'g.p.n.' is an abbreviation of 'grammatical proper name'.

[5] J. Harold Wilson was Prime Minister of the United Kingdom from October 1964 until June 1970 (i.e. 8 months after the death of A.N. Prior).

[6] Editors' note: 'l.p.n.' is an abbreviation of 'logical proper name'.

[7] Editors' note: 'EI' is an abbreviation of 'existential introduction'.