

THE LOGICAL CONCEPT OF EXISTENCE¹

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§1. The concept of existence has long been a topic of philosophical discussion, but until the modern development of logical techniques, this discussion lacked clarity and precision. The use of logical techniques has sharpened the discussion, but there is not yet a universally accepted account of existence. In this paper, I will examine the logical concept of existence, by exploring the ways in which it is possible to say that an individual exists (or does not exist). This examination will be limited to the use of singular terms in existential statements of formalized languages—i.e. to the formalized counterparts of sentences like

Pegasus does not exist.

Santa Claus exists.

Customary formalized languages (or formal systems), employing individual variables and quantifiers, impose restrictions on statements of existence. I will argue that these restrictions constitute an existential presupposition of customary formalized languages. And I will present the outlines of a formalized language that avoids this presupposition.

For the discussion that follows, it will be helpful to consider a specific formalized language. The system of predicate calculus of Hilbert and Ackermann (presented in *Mathematical Logic*) will be used for this purpose. The axioms of this system, apart from the axioms common to propositional calculus, are

$$\begin{aligned} (x)f(x) \supset f(y) \\ f(y) \supset (\exists x)\bar{f}(x). \end{aligned}$$

This system of predicate calculus is not really a language in the ordinary sense, for its only constants are logical ones. But the system presents the bare bones (the logical structure) of a genuine language, and we can discuss the concept of existence with respect to this system.

The goal of this paper is to consider ways of saying that an individual does or does not exist. If such statements are to be possible, the system must be extended to allow the employment of proper names (or other