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## LEŚNIEWSKI'S ONTOLOGY AND SOME MEDIEVAL LOGICIANS

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In the issue of this journal dated October 1966 (Vol. VII, No. 4, pp. 361-364) Professor John Trentman suggested limitations on my claim that Leśniewski's Ontology is of use in furnishing formal analyses of medieval logical theories, his grounds being that certain medieval theories deny what is called the "two-name theory of predication" allegedly common to Ockham and Ontology. Hence while the work of Ockhamists would be analysable with reference to Ontology, that of those "Thomists" who deny the two-name theory would not. Professor Trentman then goes on to suggest that for such "Thomist" analyses to take place, "something like Frege's functional analysis of predication", with a form like " $\phi(A)$ " is needed to show the "disparity of semantic category that holds between the subject and the predicate", thereby implying that no such form is available in Ontology, and that the allegations about the inadequacy of the two-name theory could have escaped my notice.

Neither of these implications is tenable. Ignoring the second of them, I can deal with the first by exemplifying the manner in which the Ontology in question deals with the relations between names and verbs (i.e. functors which when completed with nominal arguments form propositions). Thus definitions S6.21.12 and S6.22.11 from *The* De Grammatico of St. Anselm (D. P. Henry, Notre Dame 1964) run as follows:

1)  $[ab]: \varepsilon(b)(a) = .a \varepsilon b$ 

2)  $[a\phi]: a \varepsilon \operatorname{trm} \langle \phi \rangle := . a \varepsilon a \cdot \phi(a)$ 

From these one may infer:

3) 
$$[a]: a \in a : \supset : [\exists \phi] : \phi(a) : \equiv : [\exists b] : a \in b$$

The functor defined by 1) is '()', a functor-forming functor for one argument which is a name, the functor thus formed, when completed with one nominal argument, yielding a proposition; it is thus one of many instances of the ' $\phi$ ' of Professor Trentman's preferred form which Ontology makes available, and guarantees a verb corresponding to every name, and hence a ' $\phi(A)$ ' form corresponding to every 'two-name' form of the type of ' $a \varepsilon b$ '.

Conversely, 2) guarantees a name ('trm < >', reading 'term satisfying.....' or '..... er') for every verb (value of ' $\phi$ '). Hence, as 3) in effect illustrates, systems of the Frege-Russell type are in fact contained within Ontology. There is thus no reason at all why Ontology should not serve for the analysis of the theses of those medieval authors who reject the ''two-name theory of predication''. By such analyses their theses are made intelligible in the light of a single primitive term (e.g. '....ɛ ....', or such other as may be chosen), and I fail to see how analytic intelligibility can be carried any further. Examples of such analyses in non-Ockhamist contexts may be seen in my *Being*, *Essence*, and *Existence* ('Logique et Analyse' Vol. VII, No. 27, pp. 104-110, 1964) and *Ockham and the Formal Distinction* ('Franciscan Studies' 1965). (Incidentally, the equivocation which bedevils the use of ''predicate'' throughout Professor Trentman's exposition, and which threatens to make the issue vanish, needs to be clarified; but this is so obvious that it would be tedious to labour the point in detail).

However, it turns out that the possibility of such analyses would apparently still not satisfy Professor Trentman. I find it very difficult to understand his reasons, especially when he seems to be under the impressions that the following is a counter-Leśniewskian point: "A logic differs from an uninterpreted calculus in that, at least according to many logical theorists (including the medieval logicians under discussion) a logic is always developed with a view to an interpretation. It must be developed with a view to expressing what can be truly said about the world" (p. 363). For in fact the view of logic here propounded is exactly the one adopted by Leśniewski. (See, for example, C. Lejewski, On Leśniewski's Ontology, 'Ratio', Vol. I, No. 2, or E. C. Luschei, The Logical Systems of Leśniewski, Amsterdam 1962). Hence the definitions given above are not "simply a matter of translation, a matter of finding a notation by means of which one can write up certain forms of sentences in a spoken or written language", but are "truths about the world". In view of all this, I fail to see how "the representation of predication in a Thomist or Fregean system" (e.g. in terms of the functor on the left-hand side of the first definition given above) "properly reflects the relation of inherence of a form in the matter of which it is the form in that about which the proposition speaks in a way in which its representation in Ockham's" (i.e. the right-hand side of that definition) "or Leśniewski's system" (i.e. either side of that definition) "would not" (p. 363).

It seems to me highly probable that the clue to the only difficulty which can now obstruct the "Thomist" logician's accepting analyses in terms of Leśniewski's Ontology lies in the ways of speaking favoured in this last quotation ("inherence of a form..." and the like). These ways of speaking are connected with the statement of the truth-conditions of sentences such as "Socrates is a man"; ' $\phi(A)$ ', it will be alleged, reflects better the way in which the Thomist would prefer to express those truth-conditions than does ' $a \varepsilon b$ '. However, until it is shown, with reference to some theory of truthcondition statements, that the two manners of stating truth-conditions are not inferentially equivalent, then the argument tends to be somewhat indecisive. In the absence of such a theory, one can only speak in a speculative and fragmentary fashion, but I am, as it happens, inclined to believe that *in its original historical setting* the "two-name" statement of the truth-conditions was in fact designed to exclude certain quite valid standpoints which the Thomists, with their rival statements, were concerned to defend. To that extent, and in that setting, the latter were justified in eschewing the "two-name" theory, as I shall attempt to confirm briefly below. But to take the possible (not necessary) acceptance of the "twoname" statement of truth-conditions into a touchstone which has the magical property of signifying for all time and relative to all systems, the exclusion of those valid standpoints, is a move of which we should, at least since Wittgenstein, be exceedingly wary. Simple scrutiny of a single coin just cannot elucidate the notion of the monetary system from which it draws its significance.

In my opinion that technical terminology of "form" and its like which is alleged to be excluded by the "two-name" theory in fact represents a justified artificialisation of natural language for the purpose of expressing truths about how things are-truths involving semantical categories too recondite to be expressed in unalloyed natural language. That this is so may be gathered in part from the papers on Being and Ockham mentioned above. Hence, if the Ockhamist's preferred statement of truth-conditions was designed to exclude such expressions, and the paper on Ockham suggests that this would be a reasonable surmise, then that form of statement is, in its original context, certainly to be deprecated. But if, as is perfectly obvious to anyone acquainted with the system, Lesniewski's Ontology does not exclude truths involving such recondite semantical categories, then it is pointless to urge against it the quite accidental coincidence that it is possible (but not at all necessary) to outline the truth or sense conditions of its primitive term in the same form of words as was used by the medieval two-name theorists. As has been shown, this form of words could, if preferred, be dropped and replaced by one which revolves around the ' $\phi(A)$ ' form.

However, finally and most importantly, the whole controversy has nothing at all to do with Ontology as such. The statement of the truth-conditions of the primitive term is *not* a part of Ontology, and Leśniewski insisted that *any* method of putting over the sense of the primitive term could be adopted: gesticulational, choreographic, verbal, or whatever happened, in the circumstances, to promise to be most effective. For most people, specification in terms of traditional grammatical categories seems to be effective enough, but this is by no means exclusive or sacrosanct: anything may be pressed into service.

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