

ENGLISH AND ONTOLOGY^[1]

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Dr. C. Lejewski refers in his article on 'Logic and Existence'¹ to the difficulty which English speaking readers have in working intuitively with Leśniewski's singular-inclusion operator 'ε'. The source of this difficulty seems to be the fact that in English the two kinds of words which are covered by Dr. Lejewski's phrase 'noun-expression' are very different in their syntax. On the one hand there are proper nouns like 'Socrates', 'Pegasus', etc., and on the other hand there are common nouns like 'man', 'sun', 'dragon', etc. To form a statement of a proper name or names we use a simple verb (transitive or intransitive) or an expression equivalent to this. Thus we form the statement 'Socrates smokes' out of the name 'Socrates' by means of the verb '--- smokes'; we form the statement 'Plato admires Socrates' out of the names 'Plato' and 'Socrates' by means of the verb '-- admires ---'; and as a special case we have the verb '--- is ---', meaning '--- is identical with ---', as in 'Tully is Cicero'. But the operators which form statements out of common nouns are not simple verbs but expressions like 'Every --- is a ---', 'The --- is a ---', 'There is at most one ---'. And different again is our operator '--- is a ---', which takes a proper name for its first argument and a common noun for its second (as in 'Socrates is a man'). What consequently puzzles us about ontology is that its variables stand indifferently for proper and common nouns, and we have no operators in our {p.2} language (except perhaps '--- exists', which gives us so much trouble) which are thus indifferent as to whether they have proper or common nouns for arguments. The same difficulty seems to exist in French, though it is much less felt in Latin.

Most English and French expositions of ontology hitherto have attempted to solve this difficulty by translating Leśniewski's 'ε' as either '--- is ---' or as '--- is a ---', and then where necessary forcing the English operator to take 'unnatural' arguments. It seems to me, however, that the odd-sounding cases would be far fewer if we translated 'ε' by 'The --- is a ---'.² Dr. Lejewski has very ingeniously by-passed the problem by taking as his primitive operator not 'ε' but '⊂', but in principle his solution is the same as mine. For '⊂' translates as 'Every --- is a ---', which resembles 'The --- is a ---' in that the arguments which it 'naturally' takes (and which Leśniewski's name-variables are therefore taken as primarily standing for) are common nouns (whether these in fact apply to one, less than one, or more than one object); so that we obtain odd-sounding cases only when the blanks are filled by proper names.

This point is not without its relevance to Dr. Lejewski's main topic, existence and quantification. In what he calls the 'restricted' interpretation of the particular quantifier, the variables which it is usually thought of as binding are ones standing for proper names; and proper names are thought of as being {p. 3} somehow directly attached to actual individual objects, though there is some departure from ordinary usage in this, as the case of 'Pegasus' shows. But in what Dr. Lejewski calls the 'unrestricted' interpretation, the variables which he takes the quantifier to bind are thought of as standing primarily for common nouns; and common nouns may of course just as easily apply to no real thing as to one thing or more than one. So his solution of the 'Pegasus' problem has at least something in common with the orthodox solution of replacing the 'name which fails to name' by an expression containing the corresponding predicate (i.e. verb). He doesn't exactly do that; but he does treat a proper noun as if it were a common one, and this must wear a very similar air in the

eyes of anyone accustomed to treating common nouns as logical constructions out of predicates and quantifiers.

This is not, of course, to deny the superiority of the Leśniewskian procedure on the side of formal elegance. It has a further importance too, in that it brings out the fact that the theory of quantification need not be thought of as exclusively a predicate calculus. It is rather a quite general operator-and-argument calculus. We can interpret the operators as predicates and the arguments as proper names, but we do not need to do this. We could equally interpret the arguments as statements and the operators as statement-connectives, as in Leśniewski's other discipline of 'protothetic'; or we could interpret the arguments as common nouns and the operators as statement-forming operators or common nouns, and if with this interpretation we add to the operator-variables an operator-constant ('ε' or '⊂') with its own {p. 4} special axiom, we have 'ontology'. With other operator-constants, taking only non-empty common nouns as arguments, and other special axioms, we obtain the 'formalised syllogistic' of Łukasiewicz. From this point of view the most important and illuminating passage in Dr. Lejewski's paper is that³ in which he urges us to read '(∃x)(Fx)' not as 'There exists an x such that Fx' but rather as 'the non-committal "for some x, Fx."' What is important about this proposal is not merely that it removes the suggestion of existence, but that it removes the suggestion that 'F' must be a predicate and 'x' a proper name, and it is by removing the latter suggestion that it removes the former.

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¹ This Journal, 1954, 5, 115.

² I have accordingly adopted this policy in my Formal Logic (forthcoming) III, iii.4. As part of the same policy, I read 'ex(a)' as 'An a exists' and 'ob(a)' as 'The a exists'.

[Editors' note: This footnote does not appear in the printed version in Brit.J.Phil.Sci.]

³ Op. cit. p.113.

[1] This MS is kept in the Prior Collection at the Bodleian Library, Oxford. It has been edited by Sara L. Uckelman, Martin Prior, and Peter Øhrstrøm. It is an early version of the paper published in

Brit.J.Phil.Sci. vol. 6 no. 21 (May 1955), pp. 64-65. The author's original three footnotes above are kept apart from this editorial note.