

Linguistic Society of America

Review: [untitled]

Author(s): D. Terence Langendoen

Reviewed work(s):

Plurals and Events by Barry Schein

Source: *Language*, Vol. 73, No. 2 (Jun., 1997), pp. 375-376

Published by: Linguistic Society of America

Stable URL: <http://www.jstor.org/stable/416025>

Accessed: 12/05/2009 12:14

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=lsa>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.



Linguistic Society of America is collaborating with JSTOR to digitize, preserve and extend access to *Language*.

<http://www.jstor.org>

REVIEWS

Plurals and events. By BARRY SCHEIN. (Current studies in linguistics, 23.) Cambridge, MA: MIT Press, 1993. Pp. xv, 384.

Reviewed by D. TERENCE LANGENDOEN, *University of Arizona*

This ambitious book claims that the theory of plurality and event structure it develops 'is the only game in town in the semantics of plurals' (5). It comprises twelve chapters, two appendices, extensive notes, references, and indices. The first chapter elegantly summarizes the entire book and points to the specific sections in which the arguments are fully developed. The core theory is laid out in the next three chapters with the remaining chapters providing detailed analyses of the semantics of plurality and quantification, including first- and second-order quantification, semidistributivity, and cumulative quantification. The first appendix is a short postscript on the ambiguity of logical form, while the second provides a comprehensive listing of variable symbols and notational conventions and restates all the crucial definitions and examples in the text. Given the intricacy of the argumentation, the layout of the book could hardly be better.

Schein argues for Boolos' 1984 analysis of definite plural noun phrases as predicates, each of which denotes each object it is true of. Thus '*the elms* ... does not denote [a plural] object that comprehends all elms. Rather it denotes each elm' (37). Like Boolos, S avoids the postulation of plural objects in order to prevent Russell's paradox from arising within a semantics for natural languages which is rich enough to account for certain entailments. However, Boolos' analysis introduces a discrepancy between the syntactic form of definite noun phrases and their logical forms. A singular like *the elm* denotes an object directly, whereas a plural like *the elms* denotes a predicate, which in turn denotes objects.¹

I am not convinced of the need to analyze definite plural noun phrases differently from singular ones. The now standard view of plural definites as denoting plural objects leads to paradox only under certain assumptions which strike me as dubious. Chief among them is an assumption of which I is a special case (29).

(1) There exists an elm \vdash The elms exist

First, the conclusion has a peculiar grammatical form in which the subject of *exist* is definite. Second, the inference in 1, even if the conclusion is grammatical, is invalid. It ignores the plurality of *the elms*. This can be seen sharply if an indefinite phrase replaces the definite one in the conclusion, as in 2.

(2) There exists an elm \vdash There exist elms

Reversing the premise and conclusion in 2, of course, does result in a valid inference.

(3) There exist elms \vdash There exists an elm

The inference in 3 is a consequence of the axiom 4 in which N is a singular common noun predicate, Ns is its plural counterpart, and \leq and \circ are the part-whole and overlap relations of the calculus of individuals (Goodman 1951).

¹ S. does not consider the possibility of removing the discrepancy by treating singular definites as predicates, too. As far as I can tell, no harm would be done to his analysis, except for the additional layer of indirection in the resulting semantic representations. However, such a move would introduce a new discrepancy between the treatment of singular definites and that of singular proper names, and to remove that discrepancy would require the somewhat more radical move of treating singular proper names as predicates.

$$(4) \exists x(Ns(x)) \leftrightarrow \exists y(N(y)) \wedge \exists z(N(z)) \wedge y \leq x \wedge z \leq x \wedge \neg(y \circ z)$$

The plural definite description *the elms* is related to the plural predicate *elms* exactly as the singular definite description *the elm* is related to the singular predicate *elm*, and picks out the appropriate plural object as its denotation. Axiom 4, unlike the 'comprehension axiom' that S provides for the relation between singulars and plurals (31, formula 62), does not lead to Russell's paradox.²

S's central thesis is a 'radical Davidsonian decomposition' of any natural-language predication into a conjunction of predications in which each theta-role is a two-place predicate relating an event argument and a participant, and the main predicate holds just of an event argument (10). The various predications are connected by anaphoric relations that are reminiscent of those that hold between pronouns and antecedents. For example, he proposes that 5 has the logical form 6, paraphrasable as 7 (8–13).³

- (5) Three video games taught every quarterback two new plays.
 (6) $\exists e(\text{teach}(e) \wedge$
 $[\exists X: 3(X) \wedge \forall x(Xx \rightarrow Gx)] \forall z(\text{INFL}(\text{there}, z) \leftrightarrow Xz) \wedge$
 $[i[\text{every } y: Qy][\exists e': e' \leq e] \forall z(\text{TO}(e', z) \leftrightarrow z = y) \wedge$
 $[\exists W: 2(W) \wedge \forall w(Ww \rightarrow Pw)] \forall z(\text{OF}(e', z) \leftrightarrow Wz)])$
 (7) Within some event, every quarterback is taught two new plays, and that was by three video games.

Most of the book is taken up with detailed analysis of examples such as 5, designed to show both the motivation for the apparatus S develops and its adequacy. It is an impressive achievement, which should be read by everyone seriously interested in the semantic analysis of plural terms.

REFERENCES

- BOOLOS, GEORGE. 1984. To be is to be a value of a variable (or to be some values of some variables). *Journal of Philosophy* 81.430–49.
 GOODMAN, NELSON. 1951. *The structure of appearance*. Cambridge, MA: Harvard University Press.

Department of Linguistics
 P.O. Box 210028
 University of Arizona
 Tucson, AZ 85721-0028

² S does not consider what strikes me as a very elementary objection to the postulation of a fundamental semantic difference between singular and plural definites, namely the existence of languages in which definite noun phrases are unspecified for number. Rather than treating such phrases as having a vague denotation as compared to their English counterparts, S would appear to be forced to consider them systematically ambiguous.

³ S's theta-roles in 5 are in effect the names of the grammatical relations of subject (INFL), direct object (OF), and indirect object (TO). The predicates *X* and *W* are the denotations of the plural noun phrases *video games* and *new plays*.