EXISTENTIAL SENTENCES

Their Structure and Meaning

Michael Lumsden

ROUTLEDGE LIBRARY EDITIONS:
LINGUISTICS

ROUTLEDGE LIBRARY EDITIONS:
LINGUISTICS

Volume 16

EXISTENTIAL SENTENCES

This page intentionally left blank

EXISTENTIAL SENTENCES

Their Structure and Meaning

MICHAEL LUMSDEN

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published in 1988

This edition first published in 2014
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-0-415-64438-9 (Set)
eISBN: 978-0-203-07902-7 (Set)
ISBN: 978-0-415-72369-5 (Volume 16)
eISBN: 978-1-315-85743-5 (Volume 16)

Publisher's Note
The publisher has gone to great lengths to ensure the quality of this reprint but points out that some imperfections in the original copies may be apparent.

Disclaimer
The publisher has made every effort to trace copyright holders and would welcome correspondence from those they have been unable to trace.

Existential Sentences
Their Structure and Meaning

Michael Lumsden

ROUTLEDGE
London • New York

First published in hardback in 1988
by Croom Helm Ltd
First published in paperback in 1990
by Routledge
11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada
by Routledge
a division of Routledge, Chapman and Hall, Inc.
29 West 35th Street, New York, NY 10001

Printed and bound in Great Britain by
Biddles Ltd, Guildford and King's Lynn

British Library Cataloguing in Publication Data

Lumsden, Michael
Existential sentences: their structure and meaning.—(Croom Helm linguistics series).
1. Grammar, Comparative and general—sentences 2. Grammar, Comparative and general—Existential constructions
I. Title
415 P295

ISBN 0-415-05300-5

ACKNOWLEDGEMENTS

This book grew from my University of York thesis and I would like to thank some inspiring teachers in the Department of Language at York who introduced me to the study of linguistics: Patrick Griffiths, Joan Russell, Anthony Warner and Steve Harlow, my supervisor. My thanks are also due to friends and colleagues for their patience and support. I owe a great debt of gratitude to my parents William Lumsden and Gladys Muriel Lumsden, who helped and encouraged me in my studies over many years. My thanks also go to my brother David, always ready to discuss my queries about topics in the philosophy of language.

Michael Lumsden
Hull, 1988

This page intentionally left blank

Contents

Introduction

0.1 GENERAL INTRODUCTION

This study attempts to account for the relationship between the structure of existential sentences (ES) and their meaning. The study of ES has received a great deal of attention because the construction has complex syntactic properties, is associated with restrictions of a semantic nature, and provides an interesting area for investigation at a pragmatic level.

The syntactic treatment of ES is widely treated in introductory textbooks such as Akmajian and Heny (1975), who derive ES using a Standard Theory framework in which a construction-specific rule of *there*-insertion is claimed to account for a number of exceptional properties of ES containing *be*. Milsark (1974) has discussed a wide range of topics associated with ES and his work provides the basis for a lot of the ideas that I will develop. The study by Jenkins (1975) and, in some respects, Milsark (1974) represent part of a general debate concerning the base or transformational generation of particular syntactic forms. The topic of ES has also figured in discussions of trace theory, as in the work of Dresher and Hornstein (1979), and is also treated in some detail by Chomsky (1981). More recent treatments within this framework include those by Safir (1985) and Burzio (1981). I consider syntactic properties of ES in Chapter 1, where the main aims are to establish an appropriate constituent structure for ES and to show how the derivation of these sentences is compatible with general principles that have been proposed within recent versions of Transformational Grammar.

I have not discussed in detail the syntactic properties of logical form but have simply assumed that sentence grammar provides a

mapping between a sentence and an appropriate number of Logical Form Representations that specify the readings that the sentence has from the point of view of truth conditions. With this in mind, in Chapter 2 I consider the readings that should be represented to account for the behaviour of *there* in complex sentences containing verbs of propositional attitude.

A central focus of interest in this study is the range of semantic restrictions pointed out by Milsark (1974, 1977): firstly, the restriction on the quantified expressions that appear freely after *be* in ES; and secondly, the restriction on the predicate expressions that occur in ES. I concentrate on these questions in the central chapters of this study. After reviewing a number of approaches to the classification of quantifiers I develop an account based on the presuppositional properties of different quantified expressions. I show how utterances containing such expressions are interpreted by developing a framework proposed by Prince (1978). The framework is extended to include distinctions proposed by Carlson (1977) in the course of his analysis of bare plural constructions, and this provides a basis for the examination and explanation of a number of properties associated with ES.

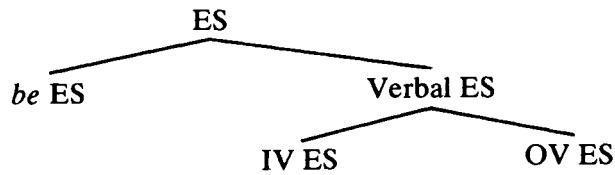
In Chapter 6 I extend the framework in a way that allows a clear statement to be made about the relationship between the syntactic structure of ES and the interpretation that they receive. This makes possible a satisfactory account of the restriction affecting quantified expressions referred to above. I also use proposals by Lyons (1975) in order to investigate the deictic properties of *there* in ES. The final chapter is of the form of a conclusion and attempts to show how syntactic representations together with logical forms are interpreted by hearers using assumptions concerning the speaker, knowledge of the immediate situation and the previous discourse, together with other background assumptions and contextual inferences.

In the course of this analysis many aspects of the usage of ES are discussed in detail, and the general aim is to accommodate a wide range of facts concerning quantified noun phrases and ES within a coherent perspective.

0.2 TERMINOLOGY AND BACKGROUND TO SYNTACTIC APPROACH

The term existential sentence (ES) is being applied to a particular syntactic form, namely, a sentence containing unstressed *there* as a pleonastic subject NP (see Milsark (1974: 4) and Akmajian and Heny (1975: 166) for justification of this). (1) indicates a number of types of ES labelled according to terminology introduced by Milsark (1974).

(1)



Examples: *be* ES: There are rabbits.
There was a man arrested.
There is rain in the South.
IV ES: There appeared an angry crowd.
OV ES: There dwelt in that house an old man.

The motivation behind the labels is largely self-evident, but IV ES can be thought of as conveying 'inside the verbal unit', in that the NP occurs immediately to the right of the verb, while OV ES conveys 'outside the verbal unit', reflecting the fact that the NP is separated from the verb by a prepositional phrase.

We can use the term 'coda', following Milsark, as a general term for the material that follows *be*, or another verb in IV ES. Milsark does not apply the term to OV ES, presumably reflecting the intuition that a rather different constituent structure is involved in these cases. Later on in my discussion of the derivation of *be* ES it will be suggested that *be* takes an NP or a clausal complement, and there will be less need of the more neutral descriptive term 'coda'.

Milsark (1974: 90) also provides the following classification of *be* ES according to the form of their coda:

(2)a. Ontological ES: [$_S$there−AUX−be−NP]
Example: There are cats.
b. Locational ES: [$_S$there−AUX−NP−LOC]
Example: There is a cat in the tree. (LOC=Locative PP)

c. Periphrastic ES:
$$[_S \text{there} - \text{AUX} - \text{be} - \text{NP} - [_{VP} \left\{ \begin{matrix} \text{V-ing} \\ \text{V-en} \\ [_{PRED}\text{AP}] \end{matrix} \right\}] - \text{Y}]$$

Examples: There is a man swimming.
There was a man caught.
There is a man drunk.

Within a Standard Theory framework a transformational rule of *there*-insertion allows the direct expression of distributional properties of *there* such as the following:

(a) The fact that it behaves syntactically as an NP.
(b) The fact that it is confined to subject position.
(c) Its occurrence with a certain range of verbs, notably *be*.
(d) The fact that the following NP is not normally definite.
(e) The location of the NP after the first occurrence of *be*.

The restriction in (e), known as the 'left-most *be* condition', is illustrated below:

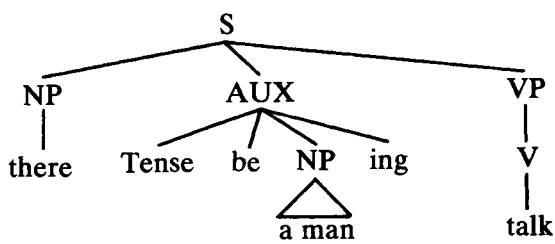
(3)a. There was a man being interrogated.
b. *There was being a man interrogated.

A standard formulation of the rule of *there*-insertion is given below:

(4) SD NP−Tense−(Modal)−(have en)−be
[-Def]
1 2 3 4 5
SC there 2 3 4 5+1

As pointed out by Akmajian and Heny (1975), one problem with such a formulation is the constituent structure that may be assigned. For example, if *there*-insertion applies to a structure containing auxiliary *be* the post-verbal NP will be located under the AUX node in derived structures:

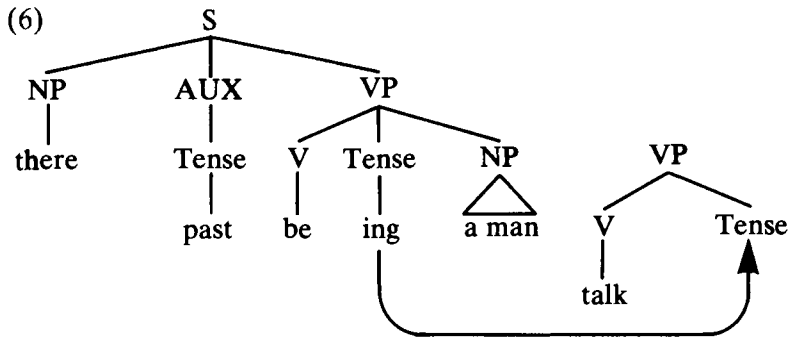
(5)



This is a result of the ordering of *there*-insertion with respect to Affix Hopping and the assumption that the latter rule does not apply over intervening material.

Akmajian and Wasow (1975) have suggested splitting Affix Hopping into two rules in order that *en* and *ing* can be located in their derived structure positions before the application of *there*-insertion, which can then be formulated so as to locate the post-verbal NP as the left-most constituent of the VP. Another more intuitively satisfying result is found in the account of Emonds (1976: VI.2.3). According to this account *have* and *be* take VP complements and Affix Hopping is modified so that it applies over intervening material. These proposals would allow a configuration such as the following:

(6)



These brief references to the literature serve to illustrate that the standard formulation of *there*-insertion leaves considerable scope for refinement while retaining the basic insight of a transformational relationship between ES and corresponding non-ES. In Chapter 1 the syntactic discussion of ES will take into account modifications that have more recently been made in the theory of Transformational Grammar.

1

Syntax of ES

1.0 ASSUMPTIONS ABOUT THE FORM OF A GRAMMAR

In this chapter various syntactic properties of ES are examined in the light of recent developments within the framework of Chomsky's Extended Standard Theory (EST) as expressed in Chomsky (1981). The assumptions that I will make about the form of a grammar include the following points:

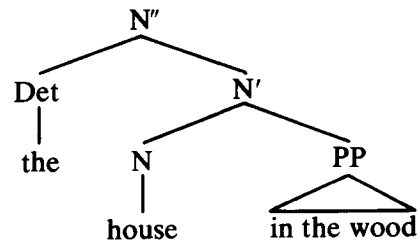
1. D-structures can be considered to be generated by rules of the base component. Chomsky (1982: 8) indicates that much of the content of base rules such as:

(1)a. S→NP INFL VP
   b. VP→V NP S′

can be derived from information that is represented elsewhere in the grammar. For instance, firstly, the complements of the verb in (1b) reflect the subcategorization frames associated with particular lexical items and secondly, the expansion of the VP as a verb followed by complements reflects a general theory of the base, namely, X-bar theory.

2. X-bar theory (bar levels will be indicated by primes) is based on the assumption that the phrasal nodes dominating a lexical category share the categorial features of that lexical category. For instance, in (2) the lexical category N is dominated by N′, which is dominated by N″.

(2)



This assumes that a noun phrase is represented by N″, two levels above a lexical category. There have been various proposals concerning the number of bar levels that are required, and on this question see Jackendoff (1977). The only explicit reference to X-bar theory that will be made in what follows is the notion of *maximal projection*.

3. The maximal projection of a lexical node is the phrasal node with the maximum number of bar levels and containing the same categorial features and which most immediately dominates the lexical node. In other words, the maximal projection of N in (2) is N″.

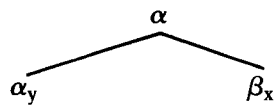
4. Lexical items are inserted at D-structure level in accordance with the subcategorization frame of individual lexical items.

5. A transformational component relates D-structures and S-structures. This consists of a rule Move α, where α is a syntactic category. Move α is subject to the Subjacency Condition, which specifies that an element can cross no more than one bounding node as a result of one application of the rule Move α. I will assume that S and NP are the relevant nodes for this condition as illustrated in (3):

(3) $[_{S'}[_{S_1}[_{S'}\ [_{S_2}\ldots X\ldots]]]]$

6. A moved element either fills an empty position of the same syntactic category, or is adjoined to an existing node. In the case of adjunction the derived structure is defined in terms of Chomsky Adjunction; that is, adjoining a node x of category β to a node y of category α will involve building a higher node of category α immediately dominating node y and to which the adjoined element is attached:

(4) $\ldots \alpha_y \ldots$



7. Movement of an element creates a relation between the two positions involved; that is, the moved element leaves a trace, defined as an empty node coindexed with the element that has undergone movement.

8. Case theory provides conditions of well-formedness affecting certain syntactic configurations in that there are rules for the assignment of Case and at the same time a requirement for certain nodes to receive Case. Specifically, Case is assigned at S-structure according to the following principles:

(i) An NP is assigned Objective Case when governed by V, provided that V is a Case assigner.
(ii) An NP is assigned Nominative Case when governed by INFL, the inflectional element of the verb.
(iii) Case Filter: a structure is ungrammatical if an NP has phonetic content and no Case.

9. Case assignment employs the concept of *government*. One definition of government can be expressed informally as follows: if α is a lexical category, α governs another node γ if and only if every maximal projection that dominates α also dominates γ and vice versa. More explicitly, α governs γ in (5):

(5) $[_\beta \ldots \gamma \ldots \alpha \ldots \gamma]$, where
(i) $\alpha = X^\circ$
(ii)where ϕ is a maximal projection, ϕ dominates α iff ϕ dominates γ (Chomsky 1981: 164 attributed to Sportiche and Aoun)

10. *Empty category principle* (ECP): all empty categories, but not PRO, which has a feature analysis, must be governed in some sense. This requires a modification of the class of possible governors, to the effect that for the satisfaction of the ECP, α must either be X° or coindexed with γ.

11. Rules of the LF component map S-structures into logical form representations. At the level of LF the properties of a sentence that are essential for semantic interpretation are represented, including information such as the coindexing between anaphors and antecedents, and the scope of quantifiers. An

anaphor is an NP that can have no independent reference: its reference is determined by some other element in the sentence. Anaphors may be lexical, such as *each other*, pronominal, as is the empty category PRO, and finally they may be non-pronominal, such as the trace of NP movement.

12. Coindexing is part of a relationship of *binding*, which is defined as follows:

(6) Binding: α binds γ iff α is coindexed with γ and α c-commands γ

Different kinds of elements are distinguished in terms of whether or not they are bound, and in addition, if they are bound, whether or not the binder is within the governing category of the bound element. For instance, Chomsky (1981: 188) provides the following Principles of Binding:

(A) An anaphor is bound in its governing category.
(B) A pronominal is free in its governing category.
(C) An R-expression is free.

The governing category of an element is the NP or S within which that element is governed. An R-expression is an element that has potential for reference, such as lexical NPs and variables. Consider the example shown in (7):

(7) $[_{S_0}\text{Bill}_i$ thinks [that $[_{S_1}$Tim criticized $\text{him}_i]]]$

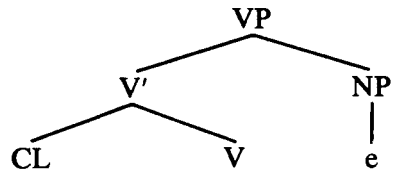
Him is pronominal and not bound within its governing category, which is S_1, since *him* is governed by the verb *criticized*.

13. The definition of binding involves the relationship of c-command. A range of definitions of c-command are available and Chomsky (1981: 166) has suggested that more than one definition may be required. For present purposes I will assume a definition along the following lines:

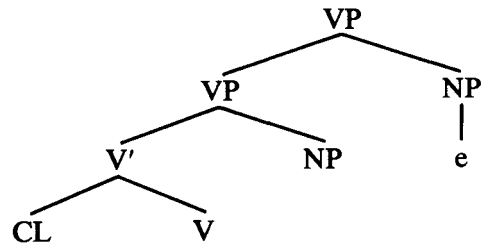
(8) c-command: either β immediately dominating α dominates γ, or a projection of β dominates γ, and there is no maximal projection of β that does not dominate γ

The aim of this definition is to distinguish between the following structures:

(9)a.



b.



Only in (9a) do the verb and clitic c-command the empty NP node.

14. θ-theory is concerned with the assignment of thematic roles such as agent-of-action, goal-of-action, patient, to arguments. Arguments are expressions with some referential function, such as names, pronouns, variables, overt anaphors, and are assigned θ-roles. Expressions such as *there* or introductory *it*, which do not have a referential function, are not arguments and are not assigned θ-roles.

15. θ-criterion: each argument bears one and only one θ-role and each θ-role is assigned to only one argument.

16. Rules of the PF-component map S-structures into phonetic form representations. The rules in this component include deletions, stylistic rules and phonological rules.

1.1 CONSTITUENT STRUCTURE OF ES

In this section I will investigate the consequences of the assumption that *be* ES and Verbal ES are generated via the application of the syntactic rule Move α. As indicated in section 1.0 above, this will involve the movement of a subject NP either to another NP position or the adjunction of the moved NP to another node. The purpose is to provide an analysis of ES that takes account of the main distributional complexities and provides the basis for the further elaboration of issues affecting syntactic and semantic properties in later chapters.

1.1.1 Movement within ES

The principles of Case assignment specified in (8) of section 1.0 allow for the application of NP-movement from a non-Case marked position to one that is Case marked. For example, the structures in (10a) and (10b) illustrate leftward NP-movement from the subject of an infinitive and the complement of a past participle, neither of which are Case marked positions, to the subject of a tensed verb, where the NP is governed by AGR, the agreement element within INFL, and assigned Nominative Case:

(10)a. John_i is certain [$_S$ e_i to win]
b. John_i was beaten e_i

Applying this to ES with the minimum of alteration, movement of an NP from subject to post-verbal position clearly involves movement from a Case marked position:

(11)a. e_i is a man_i in the yard
b. John believes [$_S$ e_i to be a man_i in the yard]

In (11a) there is movement from the subject position of a tensed verb. (11b) is handled by a rule of S′ deletion triggered by the presence of the verb *believe*. Since the embedded sentence is infinitival, there is no AGR within INFL which can govern the subject position. S′ is a barrier to government, but S is not, so that following S′ deletion the complement subject position is governed and assigned Case by the verb *believe*. This can be seen clearly by the overt Case marking of the pronoun in (12):

(12) John believes [$_S$ him to be in the yard]

It therefore appears that movement in (11b) also involves movement from a Case marked position, this time a position assigned Objective Case by Exceptional Case Marking contingent on S′ deletion.

If the positions from which movement occurs in (12) are Case marked there is a further consideration concerning the status of the trace: Case marked traces must be variables and bound by some operator such as a *wh*-phrase, according to Chomsky (1981: 293). The insertion of *there* in these positions can be seen as avoiding a potential violation of this restriction.

Consider now the position to which the NP is moved. It might be suggested that the NP was moved to a vacant NP position immediately following the verb *be*, dominated by VP. In order to determine an appropriate constituent structure it is relevant to ask whether the PP in examples such as (13a) is sentential or verb-phrasal:

(13)a. There was a man in the yard.
b. There was in the yard a man.

(13b) is a noticeably marked order compared with the canonical ordering in (13a). The order in (13a) would follow naturally if the post-verbal NP was in object position and the PP was verb-phrasal:

(14) there [$_{VP}$was [$_{NP}$a man] [$_{PP}$in the yard]]

If it turned out that the PP could be better analysed as a sentential PP the order of elements would still be compatible with the NP being in object position. However there is some evidence that the verb-phrasal analysis of the PP is more appropriate.

Reinhart (1976: 61–4) proposes tests for distinguishing between sentential and verb-phrasal PPs. In one test, involving PP preposing, it is proposed that the following sequence should be ill-formed if the PP is sentential:

(15) [VP+PP] he did

For instance, there is a contrast between the acceptability of the following sentences:

(16)a. They wanted Rosa to find a scratch in Ben's picture, and find a scratch in Ben's picture she did.
b. *I wanted Rosa to ride a horse in Ben's picture, and ride a horse in Ben's picture she did.

(Reinhart 1976: 63)

The PP in (16a) is found to be verb-phrasal and the PP in (16b) is found to be sentential. If a similar preposing operation is performed on (17) the resulting acceptable string suggests that the PP is not sentential:

(17) Mary claimed that there was a man in a yard and a man in the yard there was.

Notice that (17) is not entirely equivalent to the model provided in (15) and (16) because of the form of the preposed expression and the presence of *be* rather than the auxiliary *do*. However, there is some reason to suppose that the difference is not crucial to the syntactic test proposed. Emonds (1976: 31 note 8) mentions examples such as the following in his discussion of VP Preposing:

(18)a. Mary said that he was a bad risk, and a bad risk he was.
b. We thought she would be in the running, and in the running she was.

He suggests that the operation referred to as 'VP Preposing' may be a misnomer, in that it applies to any phrasal node following the first auxiliary. This test therefore suggests that not only is the material following the verb all dominated by the VP, but that it may also form a constituent. This second point is developed later in the chapter as part of the discussion of the small clause analysis of ES.

Secondly, Reinhart refers to a distinction drawn by Jackendoff (1972) between environments to which verb-phrasal and sentential adverbs can be moved. Verb-phrasal adverbs cannot occur between the subject and the VP, while sentential adverbs can:

(19) John $\left\{\begin{array}{l}\text{probably}\\ \text{*slowly}\end{array}\right\}$ was eating a carrot.

This restriction also applies to PPs, and on this test the PP in (13a) also appears to be verb-phrasal:

(20)a. There probably was a man.
b. *There in the yard was a man.

(Ignore the well-formed reading of (20b) in which *there* is taken as a deictic adverbial.)

We therefore have some evidence that would support an analysis in which the post-verbal NP occurred in object position. If adjunction to VP rather than substitution were involved different predictions would be made concerning word order, in that

this would derive a structure as shown in (21) with the post-verbal NP to the right of a verb-phrasal PP:

(21) there $[_{VP}[_{VP}[_{V}$was$][_{PP}$in the yard$]][_{NP}$a man$]]$

This suggests that an analysis in terms of adjunction would encounter problems.

Now consider the analysis of Verbal ES. In OV ES a PP must separate the verb from the post-verbal NP:

(22)a. There flew through the window a piece of ice-cream.
b. There ran into the room a small boy.
(23)a. *There flew a piece of ice-cream through the window.
b. *There ran a small boy into the room.

The PPs in (22) would appear to be verb-phrasal in view of the acceptability of the following:

(24)a. Flew through the window, a piece of ice-cream did.
b. Ran into the room, a small boy did.

The extension of the data on (24) to Verbal ES is based on the assumption that if the V PP sequence is analysed as containing a verb-phrasal PP when there is a lexical subject, then this is good evidence for other sentences containing the same V PP sequence. At the same time, the PPs cannot be preposed to a position equivalent to a sentential adverb such as *probably*:

(25)a. *A piece of ice-cream through the window flew.
b. *A small boy into the room ran.

OV ES are different therefore from the *be* ES examples, in that if the movement of the subject NP involved substitution in an NP position following the verb, the order of elements that would arise would not correspond to that in (22). On the other hand, adjunction would yield precisely the result that is required:

(26) there $[_{VP}[_{VP}[_{V}$flew$][_{PP}$through the window$]][_{NP}$a piece of ice-cream$]]$

IV ES examples are different in that the post-verbal NP immediately follows the verb: