Edward L. Keenan, Universal Grammar: 15 Essays. Croom Helm Linguistics Series. London: Croom Helm. 1987. 499 pp. £40.00

## Reviewed by John Roberts, Summer Institute of Linguistics

This volume is the 19th in the Croom Helm Linguistics Series and is an anthology of Ed. Keenan's writings. Keenan (K) has been a leading proponent in the field of comparative syntax since the early seventies. His two seminal 'foundational' articles 'Noun Phrase Accessibility and Universal Grammar' with B. Comrie (C) (Ch.1) and "Towards a Universal Definition of 'Subject of'" (Ch.4) are reproduced in this volume along with other articles that appeared previously in relatively inaccessible places. K also includes one new article 'The Psychological Validity of the Accessibility Hierarchy' (Ch.3) written especially for this volume. In the other article in Part 1, Cross Language Variation, 'Variation in Universal Grammar' (Ch.2) K proposes two generalisations on variation across languages with respect to relative clauses (RCs). The first is a syntactic constraint of RC formation. The second is a performance based generalisation of RC use in discourse.

The value of this book then is that it gathers all of K's work into one volume. K (as well as C) came out of the R(elational) G(rammar) offshoot of generative grammar and this shows in much of K's work, since most of the articles are concerned with the place of G(rammatical) R(elation)s in U(niversal) G(rammar). For example in 'Subject of' (Ch.4) K still maintains that a definition of 'subject of' is required in UG to account for a range of phenomena that occur in language, viz. relativisation according to the A(ccessibility) H(ierarchy) SU > DO > IO > OO > Gen > OComp<sup>1</sup>, functional succession principle of raising, and the advancement continuity principle relating operations like passive to the AH. K also maintains in 'On Collapsing GRs in UG' (Ch.5) that the 'generative' view is preferred to the 'comparative' view concerning the relation between the R(elational) H(ierarchy) (= AH) and the grammars of particular languages, i.e. that the categories in the RH (e.g. subject, direct object, etc.) are among the primitive categories in the generative grammar of each language. So K's argument is essentially that if GRs are sufficient to explain certain phenomena in some

languages then they are a necessary component of UG. In the section on GRs (Part 2) K also has a chapter 'Semantic Correlates of the Ergative/Absolutive Distinction' (Ch.5) in which he argues that languages that mark the ERG/ABS distinction by case marking and verb agreement are essentially coding certain semantic properties in surface structure. However there are a few languages, e.g. Dyirbal (Dixon 1972), where the ABS case functions as the pivotal category in the syntax of the language and is equivalent to 'Subject' (Nominative) in a language like English. Such cases seriously undermine the notion that GRs such as 'Subject of' and 'Direct Object of' are primitive categories of UG.

In Part 3, Relation-changing Rules in UG, K has two chapters on passive. In 'Some Universals of Passive in RG' (Ch.7) K argues that a relationally based analysis of passive is preferred to a structurally based analysis. In 'Passive is Phrasal (Not Sentential or Lexical)' (Ch.8) K follows the same line of argument as in 'Passive in the world's languages' (K (1985) Shopen, ed. 'Language typology and syntactic description'). In 'Parametric Variation in UG' (Ch.9) K presents a formal conception of UG in which it is made explicit just how we choose particular categories, rules and constraints from UG to form the grammars of particular languages. The proposals seek to unite the current research in language typology with generative grammar (Government and Binding theory). In 'Predicate Formation Rules in UG' (Ch.10) K argues for a system of P(redicate) F(ormation) R(ule)s whereby an n-place predicate (Pn) is a function mapping an expression of an appropriate argument category to a Pn-1. K claims that his system of PFRs provides a more elegant account of a range of syntactic phenomena relating to case and thematic role assignment than other approaches such as Relational Grammar, Generalized Phrase Structure Grammar, Lexical Functional Grammar and Government-Binding Theory.

Part 4, Explanation in UG, deals mainly with semantic structure (Logical Form). In 'The Logical Status of Deep Structures: Logical Constraints on Syntactic Processes' (Ch.11) K proposes that a relative clause (RC) consists of two parts: a head noun phrase (HNP) which carries a pronominal index and a subordinate sentence in which the pronominal index occurs and identifies the positions relativised into by the HNP. The set specified by a restrictive RC then will consist of just those objects specified by the HNP which the subordinate sentence is true

of. Logically the crucial point is that the subordinate sentence should not contain a repetition of the HNP but only of its pronominal index. Every language therefore should have some strategy for determining the function of this pronominal index. (cf. K (1985) 'Relative Clauses' in Shopen, ed.) In 'The Functional Principle: Generalising the Notion of 'Subject" (Ch.12) K demonstrates that subjects of simplex sentences, heads of RCs and possessor phrases of possessive constructions are logically similar in that the reference of the argument expression must be determinable independently of the meaning or reference of the function symbol, f(x), and that functions which apply to the argument may vary with the choice of argument (and so need not be independent of it). So these three syntactically dissimilar entities can be united as variations of the functional notion 'subject-of'. In 'On Surface Form and Logical Form' (Ch.13) K presents two quite general correlations between the surface forms (SFs) of natural languages and their logical forms (LFs). The two correlations are agreement relations, e.g. verbs agree with subjects, and the left-right order relation. K comments that there can be no simple direct argument concerning the correctness of a particular assignment of SF to a particular expression of a language. In other words the assignment of SF, e.g. constituent structure, is theoretically dependent. Also as we modify the rules to make them descriptively more adequate our assignments of SF will change (as the history of generative grammar amply demonstrates). The fact that there is nothing obvious or given or natural about the assignment of structure in linguistic theory is also true of all scientific theories. For example quantum mechanics is a very unobvious way of understanding the universe but this theory happens to explain the phenomena encountered in nuclear physics most adequately according to our present state of knowledge. If we represent the logical properties of an SF by a set of LFs we may say that what someone knows when he knows a language is a set of pairs <s,t> where s is a SF and t is an LF which represents one of the meanings of s. Therefore the language will be a very proper subset of SF X LF. So to account for the linguistic competence of the (ideal) native speaker we shall want to characterise the set of SFs, the set of LFs and the interpreting function which relates the two. In 'The Logical Diversity of Natural Languages' (Ch.14) K argues for a different understanding of the notion 'language universal'. In the Current View language universals (Us) are conceived of as constraints on the form of

possible human languages (Ls) and can be represented as overt properties of grammars, given that a L can itself be represented by a grammar. In the view that K proposes Ls are held to be distinct in syntactically and semanticaly significant ways. Us are not in general representable as overt properties of each grammar, so overt properties of grammars do not in general determine innate mental structures. Rather Us are determined by the pattern of cross-L variation with respect to a given property. On this basis then Us cannot be extrapolated from the grammar of a single language, e.g. English. The final chapter (Ch.15) 'Facing the Truth: Some Advantages of Direct Interpretation' examines the problem in any model theoretic framework for natural language semantics of how to specify the interpretation of syntactically simple expressions in a category where, on the one hand, the expressions are not logical constants, and on the other hand, are not interpretable freely. K argues that the direct interpretation approach which assigns the expressions whose interpretations are to be restricted to a subcategory of the category to which they belong is superior to the translation approach, e.g. Montague Grammar, which builds an entire language of interpretation (the intensional logic of PTQ) and translates all expressions of formal English into that language.

## NOTE

1. SU = Subject, DO = Direct Object, IO = Indirect Object, OO = Oblique Object, i.e. object of an adposition, Gen = Genitive, OComp = Object of Comparison.

## REFERENCES

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LLM 181

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