

# Essays on Grammatical Theory and Universal Grammar

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# In memory of Dave Kilby (1947–1985)

### Preface

This volume and the essays in it are a tribute to Dave Kilby, who died of leukaemia in 1985, at the age of 38. The editors were all friends and colleagues of Dave at Essex University. Many of the contributors also knew Dave as a friend, student, teacher, or colleague, as well as through his published work. The articles all address, in different ways, the three themes Dave was most concerned with. First, the issue of how, and how far, syntactic categories and relations can be grounded in broadly semantic concepts (Kilby 1973, 1976a, 1977a, 1977b, 1981). Second, the search for linguistic universals, and the study of language typology (Kilby 1977b, 1982c, 1982a). Third, descriptive linguistics, and the description of particular languages, especially Russian, English, and the languages of the Caucasus (Kilby 1974, 1982b, 1984).

Before coming to Essex as a lecturer in 1973, Dave had been a student of Russian at the University of Birmingham, and a postgraduate student at the University of Edinburgh. His doctoral thesis, subsequently published as *Deep and Superficial Cases in Russian* (Kilby 1977a), was devoted to the study of case in Russian.

In later years, his primary interests were in descriptive linguistics, especially language universals and language typology, and he was a well-known figure in this field, having written a number of important articles and a textbook on English Descriptive Syntax and the English Verb (Kilby 1984), and co-authoring an introductory book on Linguistics, Foundations of General Linguistics (Atkinson, Kilby, and Roca 1982). Despite the lasting quality and importance of the work he did, he was still far from realizing his full potential. At the time of his death he was working on a book on Universal Grammar based on lectures given at Essex, which would have further established his reputation as one of the best descriptive linguists of his generation.

It was obvious to everyone who worked with him that Dave had a rare combination of qualities: a penetrating intellect of extraordinary speed and clarity, a wide range of knowledge, an apparently inexhaustible supply of patience and understanding, and an equable and optimistic temperament. This last quality was particularly evident during the last three years of his life, when, knowing that he was seriously ill, he both extended his interests in a number of directions and produced some of his most outstanding research.

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### Introduction

The papers in this volume address a variety of issues in grammatical theory. Three themes are particularly salient in the collection: first, the semantic basis for syntactic categories and relations; second, the search for linguistic universals and the study of language typology; third, the detailed description of particular phenomena, both monolingually and contrastively.

Anderson's 'Reflections on Notional Grammar' addresses the first and third of these themes. The term 'Notional Grammar' comes originally from Jespersen (1924), but its use in this context arises from Lyons (1966a). Loosely speaking, the idea is that the grammatical properties of the major 'parts of speech' are basically or prototypically determined by their semantic properties (see Lyons, this volume, for a precise formulation). For example, the fact that nouns are prototypically words (used as heads of phrases) which denote or refer to objects or individuals ('people, places, or things') provides a basis for an explanation of their most salient grammatical properties. More generally, this can be related to the well-established tradition in modern linguistics (cf. e.g. the literature on case grammar, Fillmore 1969, Anderson 1971a, 1977) which stresses the logical priority of classes and relations which are defined in semantic terms over syntactic or distributional classes. As noted in Anderson (1986), the relationship between syntactic categories and semantic concepts that such work suggests is analogous to the relationship between phonological classes (e.g. vowels, consonants, etc.) and the phonetic characteristics (e.g. sonority and consonantality) that define them. This paper takes the analogy further, using the theoretical apparatus developed in dependency phonology (Anderson and Durand 1986, Anderson and Ewen 1987).

The basic ideas of dependency phonology are that phonological segments are characterized by (unary) features which are grouped into (sub-)gestures, and which may stand in a relation of dependency, so that one may predominate over another. For example, voiceless stops might be characterized as 'pure' consonants in some sense; voiced stops are also consonantal, but there is an additional

subordinate element of 'vocalicness'. Sonorant consonants also have vocalic and consonantal characteristics, but here vocalicness predominates over consonantality. Within these major classes, further distinctions are made by components such as 'linguality' or 'gravity' which are grouped in a non-categorial gesture and may also be related by dependency. Applying these ideas in the domain of grammar, the obvious candidates for 'basic' features relate to potential referentiality, which is prototypically characteristic of nouns (more precisely, proper names), and potential predicativity, prototypically characteristic of verbs. Anderson goes on to demonstrate analyses of various syntactic categories in terms of combinations of these, and other features relating to 'partitive' characteristics.

The discussion concentrates on the properties of word classes generally associated with 'noun phrases' (quantifiers, demonstratives, attributive adjectives, common and proper nouns). These are argued to belong to the same notional class {N}—the class that introduces potentially referential subsets. They differ with respect to the subcategorial feature {abl}, which indicates whether, or how, such items relate to expressions indicating the set from which the relevant subset is drawn. For example, in an expression such as 'large pigs', the noun 'pigs' can be thought of as picking out a set from which the adjective 'large' draws a subset. Attributive adjectives are inherently partitive, and thus combine with nouns directly—compare cardinal quantifiers such as 'two' which appear in constructions such as 'two pigs', and 'two of the pigs', and the quantifier 'a lot', which requires an overt partitive marker: 'a lot of pigs', but not \*'a lot pigs'. Pursuing the phonological analogy further, Anderson suggests a treatment of 'agreement' features such as number and gender as 'prosodic' or 'autosegmental' features, reminiscent of those involved in the description of vowel-harmony systems. Among the theoretical consequences of this analysis which Anderson discusses is the exclusion of the possibility of catastrophic and semantically unmotivated changes in the development of languages, such as the innovation of the completely new syntactic categories 'quantifier' and 'modal', which has been suggested for English by Lightfoot (1979).

Comrie's paper 'Some General Properties of Reference-tracing Systems' relates to the second of the above themes, addressing the general issue of universals of coreference by proposing a typology of reference-tracking systems, i.e. '... the devices used in different languages to keep track of the various entities referred to in a discourse' (p. 37).

Comrie draws attention to two distinct approaches to the study of such devices. First, syntactic theorists have focused their attention on the distribution of anaphoric and pronominal elements in sentences, their concern being to articulate abstract, configurationally defined properties which provide the terms for an explanatory account of this distribution. The best-known account of this type appears in the Binding theory of Chomsky (1981). Second, discourse theorists have been interested in ambiguity resolution, when purely formal syntactic criteria do not provide a sufficient basis for determining the referent of, say, a pronoun. Comrie proposes to embrace both of these traditions within his discussion, bringing additional, cross-linguistic observations to bear in developing a view of the dimensions of variation of such systems.

In addition to the familiar systems of gender/class marking and anaphoric reference the less well-known systems of switch reference and obviation are discussed. The former occurs when verbal morphology is used to indicate that the subject of a clause is identical to or different from the subject of another clause, thus allowing its omission. The latter, characteristic of Algonquian languages, involves assigning discourse participants proximate or obviative status at first mention, this status being maintained throughout the remainder of the discourse by consistent morphological marking.

Comrie maintains that two parameters can readily be identified as involved in these varied systems. The first of these is whether the referential characteristics of a device are inherent or assigned. Gender/class systems epitomize inherent devices, the referential characteristics of gender/class-marked expressions being determined by the gender/class to which the expression belongs and not varying as a consequence of syntactic or discourse function. By contrast, reflexive anaphors in English refer in a manner which is clearly determined by the sentential context in which they occur, for example. The same goes for switch reference phenomena and obviation, the difference between these being that whereas switch reference appears to be syntactically determined, obviation is at the whim of the initiator of a discourse. The second parameter concerns locality and admits of gradation. Inherent devices, by their nature,

are global, but amongst the assigned devices a number of possibilities appear. Thus, reflexive anaphors pick up their reference in an essentially clause-bound manner in English, but the Japanese anaphor *zibun* is sentence-bound. Switch reference also appears to be local, at least in so far as it requires a syntactic dependency between the clauses within which it operates. Obviation, however, is global and extends across a discourse.

Among the fundamental questions raised by Comrie's paper is whether it is appropriate to recognize a class of phenomena defined in semantic/discoursal terms and attempt to systematize them. Conceivably, the 'natural kinds' for scientific investigation will be defined with reference to configurational criteria, in which case we might anticipate that while the study of anaphora and switch reference will ultimately fall together under a unified set of principles, the same will not hold for the global devices Comrie discusses.

The paper by Corbett, 'An Approach to the Description of Gender Systems', is also a contribution to language typology, proposing a framework for the analysis of gender systems, and analysing data from a number of languages. As he observes, universalist and typological work on gender systems is hampered by the lack of general agreement on the definitions of terms such as 'gender', 'noun class', and 'noun classifier'.

Developing the approach of Zaliznjak (1964), Corbett takes agreement as the defining factor for the identification of gender (the notion agreement is understood in terms of a matching of features between controller and target). First the notion of agreement class is defined, relying solely on syntactic evidence. An agreement class is a set of nouns which, when they occur with the same agreement target, in the same morphosyntactic form and agreement domain, require the target to have the same morphological realization. Drawing a distinction between controller and target gender, Corbett argues that the set of agreement classes for a particular language should not be straightforwardly equated with the set of controller genders (what he calls the 'maximalist position'). Rather it is possible to derive a (smaller) number of controller genders from the agreement classes by means of principled exclusions and conflations.

The term 'target genders' refers to the distinct sets of gender agreement markers found on the agreeing elements. Again the number of target genders is restricted in a principled manner. The failure to draw a distinction between target and controller genders, Corbett observes, has been responsible for much confusion in this area. The proposed definition of gender is helpful in determining the number of genders in a particular language, an area in which there is currently little consensus. The article illustrates the approach with respect to the problematic case of Romanian, demonstrating that there are two target genders but three controller genders in that language.

Section 3 explores a number of issues in the typology of gender systems, ranging from the relationship between number and gender to the semantic basis for target genders. Section 4 of the paper addresses the issues involved in restricting the number of genders recognized by means of the agreement-class approach, introducing notions such as subgender, consistent agreement pattern, and inquorate gender.

Dixon's paper addresses issues in both language typology and universals, and the notional/semantic basis for grammatical categories, simultaneously, examining the ways in which semantic distinctions are syntactically and lexically realized in a variety of languages. His starting-point is the assumption that the fundamental function of language is to convey meaning from speaker to hearer and that by asserting the priority of semantics we can explain many otherwise puzzling or arbitrary syntactic phenomena. More specifically, he claims that verbs can be grouped in about twenty semantic types such as GIVING, TELLING, LIKING, SHOWING, AFFECT, MOTION, etc. Following the ideas put forward in Dixon (1979), he suggests that, at the level of syntax, three core functions appear to be universally required: subject of intransitive (S), subject of transitive (A), and object of transitive (O). Based on data from a variety of languages, Dixon sets out to examine some of the mappings between semantic categories and the syntactic functions. While there appears to be fairly wide agreement between languages as to which functions map onto A (usually the initiator or controller of the activity), there is far less agreement as to which of the non-A roles become O and which become a peripheral function. The bulk of Dixon's paper is devoted to an exploration of the strategies used by languages to allow for alternations with respect to the O role. Alternate lexicalizations, morphosyntactic processes, and alternate frames are examined and exemplified from a wide range of languages. One of the interesting results is that verbs of GIVING, TELLING, and SHOWING

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tend to permit one construction only in the majority of languages, whereas AFFECT type verbs (hit, cut, dig, rub) and verbs of MOTION (fill, shake, cover) typically allow two frames (e.g. 'dig the ground for yams', 'dig yams from the ground') with a clear difference of meaning. The paper calls for a detailed investigation of these phenomena in individual languages, noting that until now the grammars and dictionaries of most languages have scarcely mentioned the topic.

The article by Hawkins, 'Competence and Performance in the Explanation of Language Universals', makes a contribution to the explanation of linguistic universals, examining the interaction between principles of different sorts in the explanation of left-right asymmetries (see below). He first distinguishes between the tradition of system-internal explanation ('competence explanations') and that which appeals to aspects of performance in the explanation of linguistic universals ('performance explanations'). Performance explanations may ultimately appeal to innate predispositions or limitations (for example, processing explanations which refer to memory limitations). In the first part of the paper, Hawkins provides some background to his main theme by presenting and discussing a number of competence and performance principles which have been proposed in universalist work. Amongst competence principles, Hawkins cites Keenan's work (1978, 1979) on principles of a semantic nature and in particular his Meaning-Form Dependency Principle, which suggests that function categories (e.g. adjectives) vary their interpretations according to the choice of argument (nouns). Amongst the performance principles which Hawkins discusses, we can cite Givón's (1983) pragmatically based explanation of the ordering constraints observed in free-word-order languages, as well as the psycholinguistic principles of language processing which are put forward as explanations of linguistic universals.

The main body of the article is devoted to a discussion of the interaction between competence and performance explanations for left-right asymmetries in syntax and morphology. That is, in a number of cases, independent syntactically based principles predicting a particular word order for a construction in languages of a given type are frequently violated, while they appear to hold for languages of a different type. The result is either a leftward or a rightward skewing in the observed ordering, vis-à-vis the predictions

of the principle in question. The article discusses and proposes explanations for three such left-right asymmetries: the position of relative clauses, the position of sentential complements, and the order of morphemes.

Section 2 discusses rightward skewing in the positioning of relative clauses with respect to the nouns they modify (the head: 'H')—the H-Rel prediction is borne out for VSO (100 per cent) and SVO (94 per cent), while the Rel-H prediction is often violated in SOV languages (only 56 per cent have Rel-H). In explanation, Hawkins suggests that the syntactically determined principles interact with processing considerations, citing the work of Antinucci et al. (1979), which suggests that prenominal relatives provide more opportunities for misanalysis of the subordinate constituents as part of the main clause, and the work of Frazier (1978), which proposes Minimal Attachment and Late Closure as universal parsing strategies (see Hawkins, pp. 136-7, for details). Where the grammar deviates from the syntactically motivated principle, it does so in such a way as to maximize Minimal Attachment and Late Closure, and to minimize or avoid misanalysis. Hence the processing principles and the syntactic principle interact to produce the observed rightward skewing.

Sections 3 and 4 provide further illustration of the interaction between competence and performance principles in the explanation of rightward and leftward skewing in the positioning of sentential complements with respect to simple NP objects, and rightward skewing (favouring suffixation over prefixation) in morpheme ordering. The explanation of the sentential complementation data is argued to involve Kuno's (1974) centre-embedding avoidance principle; while the morpheme ordering asymmetries are explained in terms of the Head Ordering Principle, which essentially states that, for a given language, word-internal structure observes the H-Mod order found in the syntax, and a processing constraint prefers stem-affix ordering (see Cutler, Hawkins, and Gilligan (1985) for both).

The notion of 'semantic ascent' that appears in the title of Lyons's paper 'Semantic Ascent: A Neglected Aspect of Syntactic Typology' refers to the ways in which languages facilitate an ascent to levels of abstractness higher than that which allows reference to individual entities. The purpose of the paper is to discuss a number of aspects of this, and the relationship between ontology and language

generally, and to promote the typological investigation of the way languages differ in this and other aspects of semantic structure. A prerequisite of this is restating and refining the ideas first presented in Lyons (1966a), and developed in Lyons (1977) and elsewhere—what we have called 'notional grammar' above, but which Lyons here suggests should be called 'ontologically based grammar'.

More concretely, the paper aims to defend two theses by discussion of the distinction between classes of nominal which differ in their degree or kind of abstractness. The these are: (i) 'that the meaning and distribution of the major grammatical categories [are] basically, or prototypically, dependent upon and determined by the structure of the external world' (p. 153), and are hence universal; (ii) that, however, 'much of the semantically relevant syntactic structure of natural languages—and more particularly their categorial structure—is non-universal' (p. 151), because it is under-determined by the external world, and languages resolve the indeterminacy in different ways. Specifically, Lyons suggests that languages may differ in the degree to which they permit higher levels of abstraction.

The paper begins by updating and clarifying the ideas and terminology of the 1966 paper, remedying its most obvious defects (such as the failure to distinguish part-of-speech from form class, entity-referring from place-referring expressions, and the question about the universality of the category of lexical nouns from the under class of nominals, such as noun phrases). The paper then turns to the specific issue of the classification of nominals along dimensions of abstractness. The traditional formulation of this classification is in terms of the concrete-abstract distinction. Definitions from a wide variety of sources are examined, demonstrating the confused and uncritical way the distinction is applied in the traditional descriptive and theoretical literatures alike. Lyons's proposal is that the distinction should be abandoned and replaced by an ontological classification more soundly based on two dimensions: first order versus second order, and intensional versus extensional.

First order entities are the entities countenanced by 'naïve realism': individuals such as persons, animals, and physical things, which can be quantified over and have properties ascribed to them in languages such as First Order Predicate Calculus. It is in keeping with traditional and current practice to define the class of nouns in a language as the distributionally distinct class of expressions (if one

exists) which prototypically denote such entities. However, it is clear that Natural Language semantics (at least for languages like English) requires us to countenance additional kinds of entity to these. In particular, there is need for such second order entities as a denotation/reference for 'singing' or 'John's singing in the bath', and more generally hypostatized properties of first-order entities, or hypostatized relations, events, situations, etc., involving first-order entities.

Moreover, apart from such extensional objects, we require (second-order) intensional entities such as propositions which are the referents of e.g. 'that' clauses. Now, it is clear that these distinctions are grammaticalized in languages like English (albeit to a limited and rather irregular extent), and Lyons makes a number of observations about relevant aspects of English grammar. But the question arises of whether they are distinguished in all languages, and whether in fact all languages provide grammatically distinct ways of referring to second-order and intensional entities. Though some related questions have been investigated, Lyons notes that this question cannot yet be answered. However, there is a real possibility that they do not, that 'semantic ascent' is a non-universal property of languages, supporting thesis (ii) above and raising the possibility that there are genuine differences between languages in terms of expressivity. This, together with a number of other aspects of the idea of semantic ascent, is taken up in the final section of the paper.

The link between grammar and meaning is further examined in Miller's paper 'Participant Roles, Synonymy, and Truth Conditions', which explores some aspects of participant roles (i.e. cases in the Fillmore (1969)/Anderson (1971a, 1977) tradition), theta roles in the terminology of Government and Binding (Chomsky 1981, 1982, 1986), with special reference to synonymy and truth conditions. Miller stresses the need to take grammatical factors into account in establishing participant roles and warns of the dangers of relying on weak notions of synonymy or referential identity in studying related sentences such as

- (1) They issued rifles to the policemen.
- (2) They issued the policemen with rifles.

which involve alternations between Dixon's (this volume) O position and peripheral functions. Sensitivity to patterns of grammar (morphology, choice of preposition, word order, transformational tests)