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Studies in

Relational Grammar 3

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Introduction

This collection represents the third—and final—volume in a series highlighting work carried out within a framework for syntactic theory and description which began to develop in the early 1970s and which has been called ‘Relational Grammar’. This approach is characterized fundamentally by the assumption that grammatical relations such as subject, direct object, predicate, etc., are theoretical primitives, undefined notions in terms of which grammatical principles and rules of grammar can be stated. More precisely, the work we are concerned with takes such relations to be characterized formally by primitive symbols called R(elational)-Signs, which are interpreted as grammatical relation names; these permit the definition of formal objects called *Arcs*, which are taken to be the fundamental building blocks of syntactic structures. Subsumed by ‘Relational Grammar’ in this sense—which might well now be more precisely and specifically characterized as ‘Arc Grammar’—are what can be termed the ‘Classical’ Relational Grammar of Perlmutter and Postal (1974) and most of the works in Perlmutter (1983), the subsequent Relational Grammar work represented by studies like those in Perlmutter and Rosen (1984), and particular developments of these such as the Arc Pair Grammar of Johnson and Postal (1980). A just available bibliography (see Dubinsky and Rosen 1987) lists hundreds of works which include inter alia essentially everything done in the arc grammar framework through May 1987.

The first volume, *Studies in Relational Grammar 1* (edited by D. Perlmutter, 1983, hereafter SRG1), introduced the concepts of a relationally based theory of grammar and presented a number of studies showing that the theory was workable, applicable to various nontrivial problems, and illuminating in accounting for syntactic phenomena in a variety of diverse languages. It also set out in a relatively explicit form the underlying assumptions of the theory as well as a number of proposed grammatical laws. These works began to define the pattern of research and the widely shared assumptions underlying relational work. The second volume, *Studies in Relational Grammar 2* (edited by

D. Perlmutter and C. Rosen, 1984, hereafter SRG2), continued in the spirit of the first volume, supporting the value of relationally based generalizations about the syntax of particular languages and about universal syntax, while refining and expanding the views presented in SRG1.

A familiarity with the material in SRG1 and SRG2 is presupposed for this third volume, which presents a selection of papers which not only draw on and support the insights, analyses, and theoretical devices developed in the earlier collections but also provide various refinements and modifications. These include the recognition of a broader class of primitive relations (as in the paper by Postal), specification of universal restrictions on verbal agreement phenomena (as in the paper of Aissen), and novel proposals about clause union phenomena (as in the papers by Dubinsky and Gerdts).

Part 1 contains four papers grouped roughly around the theme of advancement from, and demotion to, indirect object (3). Chapter 1 provides an analysis of different types of 'dative'-marked nominals in the Guatemalan Mayan language K'ekchi. The author shows that contrasts in behavior among these nominals along some nine different dimensions can be properly and generally accounted for if they are analyzed into four different types. One class involves so-called Straight 3s, a notion introduced by the author. Roughly, a straight X in a clause C is an X which heads in C only arcs with the R-sign X. A second class involves Inversion 3s, that is, 3s which are demoted subjects (1s). A third class involves what the author calls Retreat 3s, that is, 3s which are demoted direct objects (2s). The fourth class consists of 3-chômeurs, that is, earlier 3s demoted to chômeur. Notable about this work is its further support for the notion of Inversion, its documentation of the existence of 2-to-3 Retreat and, in particular, the fact that the latter is linked to extraction of the co-occurring 1. Chapter 1 provides a striking group of arguments supporting the basic RG idea that grammatical relations are stratified into levels; for only this assumption appears to offer any hope of a reasonable account of the syntactic differences between morphologically identical nominals.

Chapter 2 argues for the existence of two types of 2-to-3 retreat in Japanese. One type is lexically determined and found with such verbs as *au* 'meet'. Using a variety of tests, the author supports the hypothesis that the dative-marked nominal occurring with this verb is a final 3, but an earlier 2, of its clause. The latter, more controversial, conclusion, is supported by independently motivated constraints on the behavior of floating quantifiers and nominalizations in *-sa*. The second type of 2-to-3 retreat is associated with clause union (causative) constructions; these are clauses containing almost any basic Japanese verb plus the inflection *-sase*. Japanese causative constructions seem relationally parallel to those of many other languages; indeed these parallels were a basic impetus to the original RG recognition of clause union structures and the original RG theory of possible clause union patterns. In particular, when a transitive structure is the basis of a causative, the nominal correspond-

ing to what would be the 1 of the basic verb appears as a 3 of the overall causative. This pattern, seen in many other languages, was taken to be lawful in early RG studies. More recent work (see Gibson and Raposo 1986) has called this into question. But in this chapter, the author argues persuasively that the 3 status of the nominal corresponding to a transitive 1 has an entirely different basis, one never before, to our knowledge, documented for such a nominal. Namely, it is the result of 2-to-3 retreat. It is argued that all basic sentence 1s in Japanese causatives are mapped into 2s, with (only) some of the latter demoting to 3. This chapter thus reveals a new way of analyzing clause union structures which, while not incompatible with currently accepted RG principles, has never before been exploited.

Chapter 3 examines an unusual construction found in Chilean Spanish involving Inversion, the demotion of a nominal 1 to 3 status. The form of Inversion under consideration here shows an interesting interaction with Clause Reduction (motivated for Spanish in Aissen and Perlmutter 1983), in which the inversion property of an embedded predicate such as *gustar* 'like' optionally, in effect, is transferred to a matrix predicate such as *querer* 'want'. This phenomenon yields ambiguity for a surface string such as *te quiero gustar* ("you I-want-to-like") as either 'I want you to like me' or 'You want to like me'. The author argues that the two readings correspond to different initial structures, each of which is subject to Clause Reduction, but with, in the case of the former reading, Inversion only in the embedded clause and, in the case of the latter reading, Inversion only in the matrix clause via the 'transfer' alluded to above. The author develops arguments from ascension (Subject-to-Subject Raising, Subject-to-Object Raising, and Object-to-Subject Raising) and Equi constructions to support this proposal, at the same time motivating for Spanish the hypothesis, advanced first in Perlmutter and Postal (1983) and developed in greater detail in Postal (1986), that intransitive predicates that govern ascensions determine an initial unaccusative stratum, i.e., one with a 2 but no 1 (see also chapter 7).

Chapter 4 is, along with chapters 7 and 8, formulated in the Arc Pair Grammar subframework of arc grammar. It begins with a well-known puzzle in French clausal syntax: the fact that in the presence of a non-third person 2 clitic, a pronominal 3 cannot, as is otherwise necessary, appear as a dative clitic, but must, exceptionally, manifest as head of a prepositional phrase in *à*, as is standard for *nonpronominals*. Pursuing an account of this situation, the author argues that these facts, as well as a host of others, can be given a coherent and relatively compact treatment under the assumption that in various contexts French 3s must demote to other relations. The demotion targets are argued to be the hitherto unrecognized contrasting relations Subobject (4) and Semiobject (5). This paper contains an outline of a theory of pronominal cliticization based on recognition of a primitive relation Pronominal Clitic (c), which permits the definition of the notion Cliticizer as an arc which sponsors a

c arc. The constraints on French 3 cliticization can then be formulated as constraints on cliticizers, and it is shown how the hypothesized demotion of 3s to 4 and 5 can naturally bleed the class of 3 cliticizers, accounting both for those gaps in the 3 cliticization paradigm which mark the beginning of this study and many other intricate facts about the behavior of French 3s.

Part 2 comprises three papers grouped loosely about the theme of phenomena involving constituent combinations like raisings and clause union, cases in which an initial immediate constituent of one structure is also a *nonimmediate* constituent of another.

Chapter 5 analyzes causative clause union (CCU) constructions in Korean. On the basis of the syntactic properties of the causee in such constructions as topic formation, subject honorification, and passive, it is shown that different case-marking patterns for this nominal correspond to different CCU types. In particular, the author argues that nominative-marked causees arise via CCU without Revaluation (a CCU type first proposed by Rosen (1983) for Italian but not yet confirmed in other languages), and that accusative-marked and dative-marked causees arise via CCU with Revaluation. Moreover, it is demonstrated that the Inheritance Principle of Gibson and Raposo (1986)—in a broader form, called “total inheritance,” to allow for inheritance of 1s—is confirmed for the Korean data. The conclusion, an important one for the characterization of union constructions universally, is that both Revaluation and Inheritance are essential in the treatment of Causative Clause Union in Universal Grammar.

Chapter 6 addresses the question of whether grammatical relations must be taken as theoretical primitives, as in Relational Grammar, and more generally “arc grammar,” or can instead be defined via more basic notions available in universal grammar. In particular, the author tests against data from Chamorro the categorial grammar approach to a definition of ‘subject’ and direct object’ developed by Dowty (1982a, 1982b), in which these relations are defined by the order in which elements combine with certain syntactic categories to create other syntactic categories as a sentence is built up. A consideration of causative clause union in Chamorro, as well as facts about WH-Question formation in ditransitive structures with 3-2 Advancement, makes it clear that in a categorial grammar, a crucial distinction between the advanced 2 and the initial 2 cannot easily be captured, given the usual definitions assumed in this framework for these relations. The conclusion drawn is that Relational Grammar/‘arc grammar’ provides just the mechanism necessary for making this distinction.

Chapter 7 examines a construction in Modern Greek that bears on the question—debated by McCloskey (1984) and Postal (1986)—of whether raising to prepositional object is a possible rule of grammar. This Greek construction involves the raising of a 1 in a prepositionally marked circumstantial adverbial clause to become a prepositionally marked element itself, i.e., an ostensible

prepositional object. Some possible Arc Pair Grammar analyses for this syntagm are considered, including one in which the prepositional marker is treated as a predicate. Although not entirely unproblematic, this analysis allows the Greek construction to conform to the hypothesis of Perlmutter and Postal (1983) and Postal (1986) that all intransitive ascension predicates are initially unaccusative (see also chapter 3) and thereby to be assimilated to other attested ascension patterns. Within Arc Pair Grammar, then, only a highly restricted range of ascensions needs to be sanctioned, with raising to prepositional object *not* being one of them.

Part 3 contains two papers concerned with problems in verb agreement. Chapter 8 examines data from a wide variety of languages, including English, Tzotzil, K'ekchi, Southern Tiwa, and Georgian, among others, to determine the conditions and laws governing agreement controllers, especially in cases of nonregular agreement, e.g., in dummy constructions. The author first develops three notions relevant to the representation of agreement: ‘agreement arc’ (the arc headed by agreement affixes), ‘controller arc’ (the arc which sponsors an agreement arc), and ‘agreement arc support’ (basically the arc headed by the word containing the agreement affix). She then argues for two agreement principles: the Nominal Agreement Law, which constrains the sponsors and supports of agreement arcs, as well as the relation between them, and the Lateral Feature Passing Law, which allows for one arc to pass potential agreement features to another just in case one overruns the other. Thus, crucial to this account of agreement is the Arc Pair Grammar notion of ‘overrun’, a construct which is inherently multistratal, thereby providing additional evidence that grammatical relations are encoded at more than one level of syntactic structure.

Finally, chapter 9 presents a detailed study of one of the most complex agreement systems yet described in the literature, that of Southern Tiwa. The basic problem in Southern Tiwa verb agreement is that seemingly disparate constructions all determine similar agreement patterns. The authors argue that the assumption of a few rules in the grammar of Southern Tiwa, specifically Possessor Ascension, Passive, Goal Advancement, and 3-2 Advancement, together with some well-motivated person-hierarchy constraints on Southern Tiwa syntax, the Person Constraint (blocking sentences with a third person 1 and a first or second person 2) and the Participant Chômeur Ban (blocking sentences with a first or second person chômeur), yields a solution to the complexities of the agreement system. The properties of Southern Tiwa Possessor Ascension are developed in considerable depth, since this rule proves to be crucial in the account of verb agreement ultimately arrived at.

Several of the papers published here, specifically, those by Berinstein, Gibson, Gonzalez, Joseph, and Postal, were first aired publicly, wholly or in part, at the Second Biennial Conference on Relational Grammar and Grammatical

Introduction

Relations held at the Ohio State University, May 2–4, 1986. With the recognition on the part of the editors and other senior participants in that conference that much interesting work existed beyond that presented at the conference which was representative of current work in relational theory and description, it was decided to proceed with a collection not restricted to the program of papers actually presented at that conference.

The help of many people and institutions was crucial in making this volume a reality, though acknowledgment of all such contributions is not possible. The editors would like, however, to acknowledge specifically the perceptive comments of the anonymous reviewers of the volume, the assistance of Steve Nichols in the preparation of the index, and the general research support of the College of Humanities of Ohio State University.

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Part 1