

Section 4 Linguistics

Chapter 1 Linguistics

Chapter 1. Linguistics

Academic and Research Staff

Professor Morris Halle, Professor Noam A. Chomsky

1.1 Introduction

The work of the Linguistics group is directed towards a better understanding of the mental capacities of human beings through the study of the nature, acquisition, and use of language. Language is a uniquely human faculty: only humans appear to be capable of learning and using a language, and every normal human acquires knowledge of one or more languages.

We are trying to understand how this linguistic knowledge is represented in the speaker's mind. The central issues of linguistics research are:

1. What is the nature of linguistic knowledge? What do speakers of a particular language such as Latvian, Spanish or Walpiri know, and how does knowledge of one language resemble or differ from that of another language?
2. How do speakers acquire this knowledge?
3. How do speakers put this knowledge to use in producing and understanding utterances?
4. What are the physiological mechanisms that provide the material basis for storage, acquisition and utilization of linguistic knowledge?

Our ability to answer these questions differs considerably, and our research reflects these differences. At present, we have progressed further with regard to answering the questions posed by item one and have made less progress with item four. Currently, our research is heavily concentrated on issues concerned with the nature of the knowledge that characterizes fluent speakers of various languages. However, we are making a significant effort to solve the other questions also.

We are studying these topics along a number of parallel lines. Linguists have investigated the principles by which words are concatenated to form meaningful sentences. These principles have been the primary domain of inquiry into the disciplines of syntax and semantics. Phonology studies the sound structure of words while morphology examines the manner in which different languages combine different meaning-bearing units (specifically, stems, prefixes, suffixes and infixes) to form

words. The latter topic has attracted increasing interest in recent years and will probably become more prominent in our research efforts in the future.

1.2 Abstracts of Doctoral Dissertations

The following are abstracts of dissertations submitted in 1996 to the Department of Linguistics and Philosophy in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Linguistics.

1.2.1 Order and Structure

Colin Phillips

Abstract

This thesis argues that (1) grammars of natural language construct sentences in a strictly left-to-right fashion, i.e. starting at the beginning of the sentence and ending at the end and (2) there is no distinction between the grammar and the parser.

In the area of phrase structure, I show that the left-to-right derivations forced by the principle *Merge Right* accounts for the apparent contradictions that different tests of constituency show. Phenomena discussed include coordination, movement, ellipsis, binding, right node raising and scope.

I present a preliminary account of the interface of phonology and morphology with syntax based on left-to-right derivations. I show that this approach to morphosyntax allows for a uniform account of locality in head movement and clitic placement, explains certain directional asymmetries in phonology-syntax mismatches and head movement, and allows for a tighter connection between syntactic and phonological phrases than commonly assumed.

In parsing I argue that a wide range of structural biases in ambiguity resolution can be accounted for by the single principle *Branch Right*, which favors building right-branching structures wherever possible. Evidence from novel and existing experimental work is presented which shows that Branch

Right has broader empirical coverage than other proposed structural parsing principles. Moreover, Branch Right is not a parsing-specific principle: it is independently motivated as an economy principle of syntax in the chapters on syntax.

The combination of these results from syntax and parsing makes it possible to claim that the parser and the grammar are identical. The possibility that the parser and the grammar are identical or extremely similar was explored in the early 1960's, but it is widely considered to have been discredited by the end of that decade. I show that arguments against this model which were once valid no longer apply given left-to-right syntax and the view of the parser proposed here.

1.2.2 Multiple Feature-Checking: A Theory of Grammatical Function Splitting

Hiroyuki Ura

Abstract

This thesis investigates some consequences of the theory of formal feature-checking in the minimalist program for linguistic theory (Chomsky 1992, 1994a, 1995b). More specifically, I will explore the significance and implications of the theory of multiple feature-checking. The main purpose of this thesis is to demonstrate that the theory of multiple feature-checking enables us to give a natural and consistent explanation of some less-familiar phenomena in the literature under the generative tradition, phenomena in which some of the grammatical functions alleged to be associated with a certain grammatical relation are split up from them into some others (Grammatical Function Splitting).

Part I offers a brief sketch of the previous studies on "grammatical relation" and "grammatical function" (chapter 1) and a concise introduction of the fundamentals of the theory of multiple feature-checking together with the other minimalist notations/techniques particularly prerequisite to the discussions that follow in this thesis (chapter 2). In part II (chapters 3 and 4), I show that some raising constructions, which have been scarcely studied in the literature under the Principal-and-Parameters approach, can be offered a consistent account by the theory of multiple feature-checking. Part III (chapters 5 and 6) argues that the theory of multiple feature-checking provides a clue for elucidating the optionality of movement, which is sometimes alleged to be seriously problematic under the theory of economy and movement in the minimalist program of Chomsky (1992, 1994a).

Part IV (chapters 7, 8, 9, and 10) deals directly with phenomena involving grammatical function splitting. There it is demonstrated that these varieties of grammatical function splitting can be given a natural and consistent explanation with the aid of the theory of multiple feature-checking. Concluding remarks together with a comment on the further applications of the theory of multiple feature-checking are in chapter 11.

1.2.3 On the Distribution of Dutch Reflexives

Fleur Veraart

Abstract

This thesis discusses the distribution of the Dutch reflexives *zich* and *zichzelf*. I show that Reinhart & Reuland's (1993) analysis of this topic poses several problems. In the present study, a wide range of data is collected, which illustrate that the distribution of *zich* and *zichzelf* needs to be accounted for in terms of a variety of factors, rather than with a simple set of binding conditions.

It is argued that the distribution of *zich* and *zichzelf* is partly determined by the possibility of replacing the reflexive with a non-reflexive element. If it is not possible to have a non-reflexive instead of the reflexive, *zich* should be used. Otherwise, *zichzelf* is usually preferred. Also, contrastive focus is shown to play a role. On the one hand, if the reflexive is focused, it has to be *zichzelf*. On the other hand, if a constituent other than the reflexive is focused, *zich* may sometimes be used instead of *zichzelf*. Locality conditions play a role as well; *zich* can occur at a greater distance from its antecedent than *zichzelf*. Another factor that plays a role in the distribution of *zich* and *zichzelf*, is the morphological nature of the predicate with which the reflexive occurs. In PPs, the factors mentioned here interact with the phonological *zelf*-deletion rule. This rule states that *zelf* is deleted from anaphora that occur in prepositional phrases whose preposition is non-contrastively stressed. More generally, the factors that determine whether *zich* or *zichzelf* should be used, interact with the fact that focus is realized by adding *zelf* or by stressing the element that is to be focused, and with the fact that *zich* cannot be stressed, but *zichzelf* can be. Further, it is argued that one needs to distinguish between opaque *zichzelf* and transparent *zichzelf*. The latter is made up of *zich* and the intensifier *zelf* which is also found as a modifier of full DPs.