

Section 4 Linguistics

Chapter 1 Linguistics

Chapter 1. Linguistics

Academic and Research Staff

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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 1994 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 How Some So-called "Thematic Roles" that Select Animate Arguments are Generated, and How these Roles Inform Control

Seth Aaron Minkoff

Abstract

This thesis presents a theory of how the shape of lexical syntax constrains the generation of those thematic relations that require animacy in the argument to which they are attributed. The thesis also shows how these relations, termed "logophoric roles," licence logophoric dependencies.

First, I show that all logophoric roles are licensed by a single syntactic relation: Given any two coarguments X and Y, a logophoric role can be assigned to X only if X occupies the highest theta-position within some maximal projection, and there is no logophoric role assigned to Y. This finding lends support to a modified version of Hale and Keyser's hypotheses that all thematic relations ultimately reduce to configurations in lexical syntax.

Next, I show that the relations of reflexive-binding and control divide themselves into two classes of dependencies: local and logophoric.

Local reflexive binding holds whenever a binder and reflexive are coarguments of each other. Local control holds whenever a controller and the relevant infinitival clause are attached within the same

maximal projection. I argue that control, properly understood, holds between the controller and the entire infinitival clause. Therefore, I conclude that a single dependency of either kind is local only when it holds between two constituents attached within the same maximal projection.

A logophoric control or (reflexive) binding dependency is one whose acceptability requires the assignment of a logophoric role to its antecedent argument. Since all the dependencies at issue are either local or logophoric, the creation of non-local dependencies effectively "forces" the assignment of a logophoric role. Hence the formulation of locality, with its implicit revision of standard notions of Condition A, accounts for the distribution of dependencies whose antecedents appear to require the assignment of a logophoric role.

Finally, I argue that so-called "backwards binding" dependencies are logophoric, not licensed by the satisfaction of locality (Condition A) at d-structure as other researchers have claimed. There are cases of backwards binding that cannot realistically be held to satisfy locality at d-structure or anywhere else. And moreover, in these cases and all others, the "backwards antecedent" (i.e., binder) displays the hallmark trait of a logophoric dependency, namely the appearance of requiring a logophoric role.

1.2.2 On Economizing the Theory of A-Bar Dependencies

Wei-Tien Tsai

Abstract

This dissertation aims to derive linguistic variations of *wh*-question and syntactic asymmetries among *wh*-expressions from a fairly restricted set of factors under the minimalist approach: (1) binary vs. singular substitution (i.e., Generalized Transformation vs. Chain formation), (2) noun vs. adverb, and (3) weak vs. strong operator features. Correlations have been established between *wh*-question formation and quantification in terms of the structural height of binders, as well as the magnitude of unselective binding. Chinese, English, Hindi, and Japanese are examined to give a selective but representative spectrum of this relationship.

On empirical grounds, we demonstrate that unselective binding and (A'-)Chain formation are different breeds of construal. It is shown that the asymmetries between unselective binding and long *wh*-movement in general reflect the distinction between binary and singular substitution.

Our second goal is to relate the (in)definiteness/specificity of nominals to their structural properties. By extending Diesing's (1992) mapping hypothesis, we present a fairly explicit mechanism of mapping syntactic representations to their corresponding logical forms, centering on the notion of syntactic predicate. This move provides us a simple and optimal way to characterize the interaction between predication and quantification. Existential closure is also shown to observe the Greed principle if understood properly, i.e., as an interpretation procedure rather than a syntactic operation. We also explore the possibility of eliminating the lowering mechanism in favor of the copy theory, and initiate an attempt to reduce the stage-individual asymmetries to the distinction between degree and individual variables in the sense of Heim (1987) and Frampton (1990).