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QIMING CHEN

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## ABSTRACT

Title of Dissertation: THE STRUCTURE OF NOUN PHRASES IN  
CHINESE AND ITS CONSEQUENCES

QIMING CHEN, Doctor of Philosophy, 1996

Dissertation directed by: PROFESSOR NORBERT HORNSTEIN,  
The Department of Linguistics

Human beings are the most intelligent species in this world. Their intelligence is clearly displayed in their innate knowledge of language, and the way with which they parameterize their innate knowledge of language to their knowledge of a particular natural language. As convincingly argued by Lightfoot (1991) and many other researchers, given certain simple and specific language inputs, the structures of that particular language can successfully be parameterized from the innate Universal Grammar by children acquiring that language. This thesis follows this line of reasoning. It explores the internal structure of Noun Phrases in Chinese, and the relationship between Noun Phrases and sentences with respect to language parameterization. It specifically studies the agreement structure of numerical noun phrases in Chinese, ~~and argues~~ that this structure is the parameterized primitive ~~primitive~~ agreement structure in Chinese. Following Chomsky's (1993) assumption that the agreement process can only be performed in a SPEC-head relation, following Kayne's theory of LCA, and following

the SPEC-head Agreement Hypothesis, we argue that in Chinese, a functional head only agrees with its complement argument but not its specifier argument. It naturally leads to the claim that a "subject", or a specifier argument, in any construction in Chinese is in an adjunction position. Given this result, the puzzle of the ease of subject extractions, and the puzzle of the frequent occurrence of null-subject phenomenon can be resolved in a unified way. In addition, this theory provides the same unified account for deletion structures within DPs, modifier structure within DPs, the modifier structure of AP, the modifier structure of VP, the structure in answers to yes-or-no questions, and other relevant constructions in Chinese. In a word, this thesis intends to show that by accessing the parametric primitive agreement structure in a language, children acquiring that language can successfully parameterize the innate Universal Grammar into a particular grammar.

THE STRUCTURE OF NOUN PHRASES  
IN CHINESE AND ITS CONSEQUENCES

by

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**Dedication**

**To my two grand-mothers**

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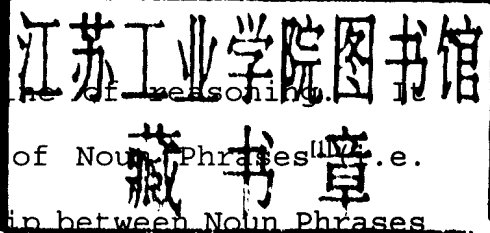
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## INTRODUCTION

Human beings are the most intelligent species in this world. Their intelligence is clearly displayed in their innate knowledge of language. In addition, the way with which they parameterize their innate knowledge of language, namely, the way with which they acquire a natural language, is really amazing. As convincingly argued by Lightfoot (1991) and many other researchers recently, given certain simple and specific language inputs, the structures of that particular language can successfully be parameterized from the innate Universal Grammar by children acquiring that language.

This thesis follows this line of reasoning. It explores the internal structure of Noun Phrases (i.e. NP) in Chinese, and the relationship between Noun Phrases and sentences with respect to language parameterization. It specifically studies the agreement structure of numerical noun phrases in Chinese, and argues that this structure is the parameterized primitive agreement structure in this language. Following Chomsky's (1993) claim that words emerge fully derived and inflected in syntax where they must be "checked" against the functional categories within their "checking domain", and



the feature checking can only be done in a SPEC-head relation, following Kayne's theory of LCA, and also following the SPEC-head Agreement Hypothesis, we argue that in Chinese, a functional head only agrees with its complement argument but not its specifier argument, on the basis of the fact that in a numerical noun phrase, the functional head, i.e. the measure word, only agrees with its complement, i.e. the noun, but not its specifier, i.e. the numerical term. This strongly suggests that a "subject", or a specifier, in any construction in Chinese is in an adjunction position. Hence, it is reasonable to argue that in a sentence in Chinese, a complex verbal head only agrees with its complement NP but not its specifier NP. In Chomsky's (1995) terminology, Chinese lacks D-feature in I and C. Given this result, the puzzle of the ease of subject extractions, and the puzzle of the frequent occurrence of null-subject phenomenon can be resolved in a unified way. In addition, this theory provides the same unified account for deletion structures within DP, the modifier structure of AP, the modifier structure of VP, the structure in answers to yes-or-no questions, and other relevant constructions in Chinese.

Given the Minimalist Program, an agreement checking

process can only be performed in a SPEC-head relation. This thesis follows this assumption, uses it to set up the parameterized primitive agreement structure in Chinese and in English, and tries to show that the differences between the Chinese-type languages and the English-type languages originate from the difference in the parameterized primitive agreement structures. In addition, it shows that a non-essential level of projection will not be projected unless it is obligatorily required, even in the process of a parameterization of the Universal Grammar to a particular grammar. This is also in the spirit of the Procrastinate Principle proposed in Chomsky (1993).

In a word, this thesis intends to show that by accessing the parametric primitive agreement structure in a certain language, children acquiring a language can successfully parameterize the innate Universal Grammar into a particular grammar.

Chapter I provides theoretical preliminaries. In this chapter, Lightfoot (1991)'s argument for Degree-0 learnability in language acquisition as well as Chomsky's (1993) revised X-bar theory and his theory of agreement within the framework of Minimalist Program are laid out



as the basis of this thesis. In addition, Giorgi and Longobardi (1991)'s theory of noun phrase structures, Abney (1987), and Szabolcsi (1994) are quoted to show the similarities of noun phrases and sentences in terms of syntactic structures. Hence, these theories serve as supporting arguments for our assumption that by accessing the internal agreement structure within a numerical noun phrase, children acquiring that language have already had access to the essential internal agreement structure in a sentence.

Chapter II studies the parameterized primitive agreement structure through the analysis of the agreement structure within numerical noun phrases both in Chinese and in English. Based on the theoretical preliminaries provided in Chapter I, and Kayne's theory of LCA, the agreement structure within numerical noun phrases is proposed as the parameterized primitive agreement structure for Chinese. This internal agreement structure is compared with its counterpart in English. Thus, a fundamental structural difference between the two languages with respect to agreement is provided, and a parametric condition that requires a head in Chinese should agree with its complement but not its specifier is proposed.