

GRAMMATICALIZATION
AND
THE DEVELOPMENT OF FUNCTIONAL CATEGORIES IN CHINESE

by

Xiu-Zhi Zoe Wu

A Dissertation Presented to the
FACULTY OF THE GRADUATE SCHOOL
UNIVERSITY OF SOUTHERN CALIFORNIA
in Partial Fulfillment of the Requirements for the Degree
DOCTOR OF PHILOSOPHY
(LINGUISTICS)

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ABSTRACT

Grammaticalization and the Development of Functional Categories in Chinese

This dissertation examines how functional categories have developed in Chinese and argues for the existence of a variety of processes of grammaticalization and reanalysis on the basis of changes found in Chinese. "Vertical grammaticalization" is suggested to be a common movement-dependent reanalysis process in which elements undergo raising into the extended functional structure dominating a lexical category and then become reanalysed in the higher target head position, this process occurring in the creation of a new indefinite determiner from the general classifier *ge* (chapter 2) and in the creation of aspect and tense morphemes (chapter 6, verbal *-le*). "Horizontal grammaticalization" is argued to be a second type of cross-domain reanalysis where a functional head in one type of domain is re-interpreted as an equivalent corresponding functional head in a second parallel type of domain, this occurring in modern Mandarin with the ongoing creation of a new perfect tense/ T^0 morpheme from an original D^0 element (chapter 4, D-to-T reanalysis and the *shi-de* cleft construction). The dissertation also considers how restructuring operations may result in the creation of new functional categories. In chapter 3 it is argued that a new instantiation of evidential Mood/ C^0 is created when an original bi-clausal structure is simplified as a mono-clausal structure and the predicate of the original matrix clause becomes re-analyzed as a high functional head in the new single clause

structure (chapter 3, Taiwanese *kong* as an S-final particle derived from *kong* 'to say'). Restructuring is also suggested to be responsible for the creation of a new completive aspect projection in Chinese from an original resultative construction and significantly to be triggered by reasons of directionality and selection (chapter 5, resultative verb constructions and aspect). Generally the dissertation attempts to provide answers to a number of puzzles relating to the present identity and syntax of functional elements in Chinese and to argue for synchronic analyses of such elements in a way which also accounts for how such grammatical elements could have most plausibly come into existence.

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1. Overview

1.0 Introduction

The central focus of this thesis is an investigation of the phenomenon of grammaticalization and its manifestation in the development and the synchronic status of a number of functional categories in Chinese. A primary aim of the thesis is therefore to see how a study of various functional paradigms in Chinese may perhaps shed further light on the mechanisms of language change and grammaticalization that are generally available cross-linguistically, and also to examine how the use of diachronic information may usefully allow for insightful analyses of certain otherwise problematic synchronic phenomena in Chinese.

The thesis is divided into six chapters, each of which attempts to address the above-stated dual aims of: (a) providing a synchronic analysis of a certain functional paradigm in Chinese assisted by considerations of how functional categories may develop over time, and (b) investigating the nature of general processes of grammaticalization. Concerning the latter goal, each chapter argues for and attempts to illustrate a different process of grammaticalization at work in Chinese, and shows how grammaticalization may have important effects on aspects of surface linear word-order, frequently causing significant distortions of the underlying syntactic structure.

General conclusions of the thesis are provided chapter by chapter and outlined in brief below where an overview of the various chapters is set out. The

basic background framework and the set of assumptions adopted for the thesis is simply a broad Minimalist/Chomskyan approach with a transformational component (i.e., movement) and two interface levels, PF and LF. As in Chomsky (1993/1995a/1995b), the combination of lexical items via Merge into initial syntactic structures is assumed to lead first to a point of Spell-Out feeding PF and phonetic interpretation, and then derivationally continue on to a level of LF and semantic interpretation. Various other assumptions relating more specifically to language change and the phenomenon of grammaticalization will be introduced as the chapters proceed and as such notions become relevant.

1.1 Chapter 2 and the Classifier *Ge*: Movement and Re-analysis

The thesis begins in chapter 2 with an investigation of the general classifier *ge* in its full present-day distribution. Like other classifiers, *ge* frequently occurs with a numeral and an NP as in (1). However, *ge* is now also found in additional environments such as in (2) and (3) where other classifiers may not occur. The aim of the chapter is therefore to reach an understanding of the underlying synchronic syntax of this functional element and to see how it may have grammaticalized into a functional type different from ordinary classifiers:

- (1) ta chi-le liang ge pingguo. 他吃了两个苹果。
 he eat-Perf two *ge* apple
 'He ate three apples.'
 +two

(2) wo yao chi ge bao

我要吃饱

I want eat ge full

'I want to do a satisfying eating'

(3) ta yi-kouqi he-le ge san-ping jiu

他一口气喝了三瓶酒

* he one-breath drink-Perf ge three-CL wine

'He drank three bottles of beer in one breath.'

Considering a wide range of data, it is seen that *ge* appears to co-occur with a variety of complement types, and not just NPs/nominal complements as in (1) and (3), but also adjectival complements as seen in (2) and sentential complements in other cases. In the sense that *ge* therefore tolerates a range of complement types, it is taken to be (largely) 'unselective' unlike other classifiers. Because the output of applying *ge* to adjectives, sentential complements and nominal complements is always a nominal category, *ge* is then suggested to be functioning as a nominalizer. Such a hypothesis is subsequently supported via a comparison of *ge* with nominalizers in Korean and English and the observation that certain restrictions on the use of *ge* with adjectival and sentential complements seem to mirror common restrictions found with nominalizers in other languages.

Ge analyzed as a nominalizer is then suggested to have an important aspectual function, often converting non-nominal categories into DP/NP objects which serve to provide either an end point for an activity predicate or an object which can be 'measured-out' in the course of the event. *Ge*-XPs thus introduce a natural aspectual bound to predicates and function to make such predicates telic.

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Concerning this aspectual function it is significantly found that *ge*-XPs can only occur with perfective and not imperfective aspect-markers.

The chapter goes on to consider what syntactic category *ge* instantiates in its wider distribution. It is first pointed out that *ge* does not appear to be simply replacing other more regular classifiers in Cl^0 as seen in (4):

- (4) tiao *ge*/*tiao sheng
 jump *ge* CL-strip rope
 'do a rope jumping/*jump one rope'

跳绳子 / 跳绳

Note that *ge* also occurs with nominals which importantly already have a numeral+classifier pair as in (3). It is argued that *ge* must therefore occupy a higher functional head position in the DP than Num^0 or Cl^0 and suggested that *ge* in fact now occurs base-generated in the D^0 position as a determiner. This is further supported by the observation that *ge*-sequences of this type co-occur with the object expletive *ta* which Lin (1993) observes to only tolerate DP associates headed by weak determiners if without *ge*, as in (5):

- (5) a. kan ta san-ben xiaoshuo
 read it three-CL novel
 'do a reading of three novels'
 b. chi ta *ge* tongkuai
 eat it *ge* satisfied
 'have a satisfying eating'
 c. *chi ta tongkuai
 eat it satisfied

看三本小说

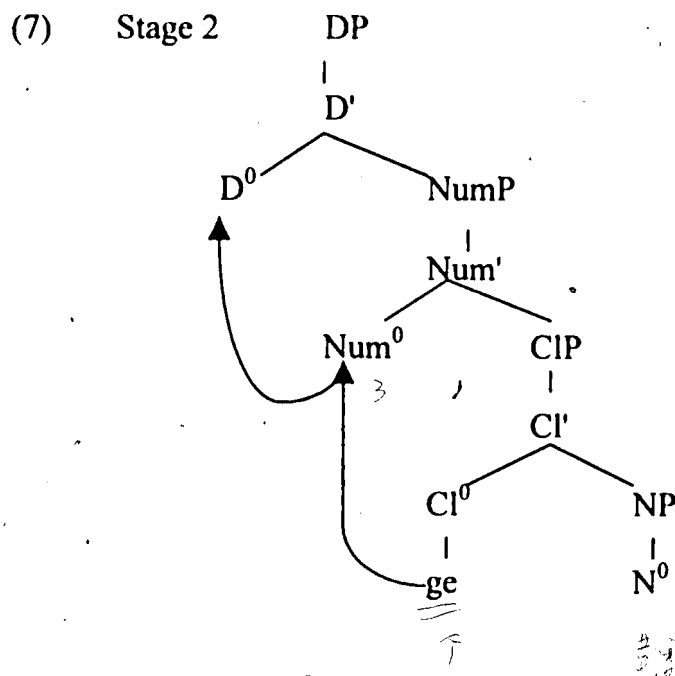
吃得痛快

*吃得痛快

Ge is consequently concluded to be an unselective weak determiner in D^0 which results in non-specific indefinite interpretations of the DP it heads. This further explains the observation that such *ge*-XPs may not occur in either subject or topic positions (which are restricted to specific/definite DPs).

Diachronically, it is suggested that *ge* was originally base-generated in Cl^0 as other regular classifiers but later underwent raising to the higher D^0 position and then ultimately became re-analyzed as an element of type D^0 directly base-generated in the D^0 head. (6) below notes the suggested stages of development and (7) the intermediate stage 2:

- (6) Stage 1: *ge* was base-generated and remained in Cl^0 as a classifier.
 Stage 2: *ge* was base-generated in Cl^0 and also raised to the D^0 position.
 Stage 3: *ge* was fully re-analyzed as a D^0 and consequently base-generated directly in the D^0 position.



The development of *ge* is thus suggested to be an example of grammaticalization which involves a simple three-stage sequence of movement and re-analysis in the functional super-structure dominating a lexical category (the noun). In such a process of 'vertical' grammaticalization, an element is originally base-generated in a lower position A and then raised higher to a second functional position B and eventually re-analyzed as being base-generated directly in B. During the intermediate stage 2 of the process, the element will instantiate both categories A and B, and in stage 3 only B, allowing for A to be occupied by a new overt instantiation of this category. This is the stage assumed to characterize *ge* in modern Mandarin examples such as (3) where *ge* base-generated in D^0 co-occurs with a distinct numeral and classifier respectively in Num^0 and Cl^0 .

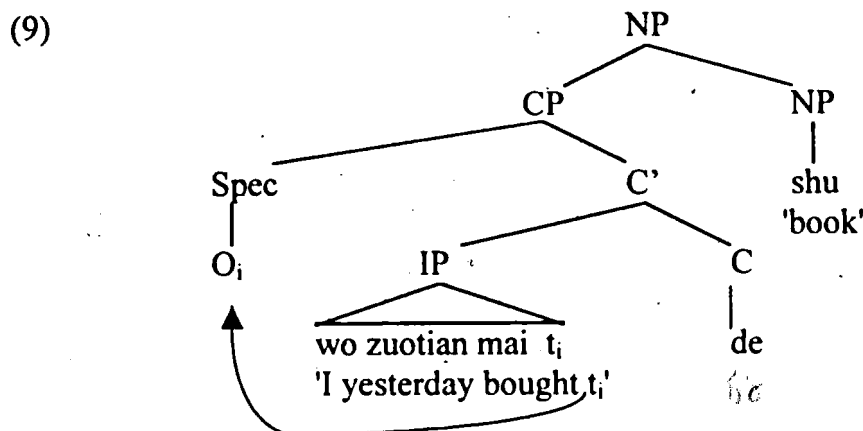
Chapter 2 thus introduces and illustrates a first type of grammaticalization process which results in categorial re-analysis critically via movement upwards in a functional structure and subsequent re-analysis ('vertical grammaticalization').

1.2 Chapter 3: Relative Clause *De*, Tone Sandhi and S-final Particles

Chapter 3 essentially has two major parts. The first focuses on the syntactic status of the functional morpheme *de* which occurs in relative clauses such as in (8):

- (8) [wo zuotian mai] de shu
 I yesterday buy DE book
 'the book(s) I bought yesterday'

Standard GB-style analyses such as Chiu (1993/1995) and Ning (1993) assign relative clauses structures such as (9) with *de* analyzed as a complementizer selecting a leftward IP complement:



Such analyses however go against the observation that the general direction of selection in Chinese is rightward as in other regular V-O languages. (9) also does not recognize in any way the fact that relative clauses in Chinese are typologically extremely marked and that Chinese is a rare case of V-O language having pre-nominal relative clauses.

Following discussion in Simpson (1997), the chapter then argues for and defends a Vergnaud (1985)/Kayne (1994) analysis of relative clauses in Chinese and suggests that *de* is actually a bleached determiner in D^0 grammaticalized from the element zhi which occurred as an early demonstrative in examples such as (10):

(10) zhi er chong you he zhi
these two worm again what know

'And what do these two worms know?' (Zhuangzi 1.10)