

Current Issues in Chinese Linguistics

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Edited by

Yun Xiao, Liang Tao and Hooi Ling Soh

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P U B L I S H I N G

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PREFACE

We are honored to have the opportunity to bring together into this volume research reports from a wide range of perspectives and findings that originated from the proceedings of the 21st North American Conference on Chinese Linguistics (NACCL-21). NACCL-21 was successfully held at Bryant University in June 2009, sponsored by Bryant University, Office of Chinese Language Council International (HANBAN), Brown University, and Cheng & Tsui Publishing Company. We thank the sponsors for their generosity to make the event possible and those who worked diligently in preparing for the conference.

A total of 135 abstracts were received for NACCL-21, out of which 70 were selected for presentation. Scholars from China, Hong Kong, Japan, Singapore, Taiwan, North America, and UK gathered together and addressed a full range of topics in Chinese linguistics. They shared research ideas to make the conference one of the very successful scholarly gatherings.

The North American Conference on Chinese Linguistics (NACCL) embarked on its first annual convention in the Ohio State University in 1989, organized by Professors James H.-Y. Tai, Marjorie K.M. Chan, and Robert Sanders. Thanks to the great efforts of the Chinese linguistics community, the annual NACCL conferences have since thrived and become the platform for Chinese linguistics where new and exciting research is presented and the NACCL Proceedings are published in print or website forms. For the history of NACCL, please see <http://www.usc.edu/schools/college/ealc/chinling/html/naccl.htm>. And for the online NACCL proceedings, please see: <http://chinalinks.osu.edu/naccl>.

All chapters in this volume went through several rounds of rigorous journal-type reviews prior to being included. We heartily thank our contributors for making effort reviewing each other's chapters. We also thank the external reviewers who are not contributors of the book but helped with the initial review and selection process: Professors E. Bruce Brooks, San Duanmu, Roger Liao, David K. Schneider, Zhongwei Shen, and Sze-Wing Tang. We would also like to acknowledge the support from Bryant University, with special thanks to Dean David Lux for his enthusiastic involvement, and to Webmaster Scott Bates for creating our book website and maintaining it thereafter.

—Yun Xiao, Liang Tao and Hooi Ling Soh

INTRODUCTION

CHINESE LANGUAGE AND LINGUISTICS IN THE NEW ERA¹

YUN XIAO

Chinese is the most commonly used language in the world, spoken by approximately one fifth of the world's population, including the 1.3 billion people living in China and millions in the Southeast Asian countries. It is also one of the very few contemporary languages whose history is documented in an unbroken tradition extending back to the second millennium BC (Norman, 1988). Chinese is the official language in China, Taiwan, and Singapore, and one of the six working languages in the United Nations. In the United States and Canada, Chinese is the second most spoken non-English language and has entered all mainstream spheres, such as government, business, media, and education. Globally, more and more students are learning Chinese, and more and more people are interested in Chinese - its history, structure, research, new developments. With a focus on current issues on Chinese linguistics studies from various perspectives, this volume intends to be instrumental to readers such as linguists, educators, administrators, specialists, teachers and students of Chinese as a native, second, heritage, or foreign language. This chapter will give a glimpse of the new developments of Chinese language and linguistics in the new era, including a brief review of the history and background, and an outline of the scope and aim of this volume.

¹ I thank Liang Tao, Hooi Ling Soh, Hongyin Tao, Agnes Weiyun He, William Graves, and Stephanie K. Carter for reading this paper and making valuable comments. Any error in the study remains the sole responsibility of the author.

1. Chinese language in the era of globalization

As globalization and the international economic competition press on, the need for advanced proficiency in world languages becomes increasingly urgent everywhere. In the United States, immigrant heritage languages are being tapped, maintained, and developed as a national resource, and Chinese, a long-time less-commonly taught language, is elevated to be a language critical to the nation's prosperity. Learning Chinese is no longer the mere obligation of Chinese immigrant children but the American mainstream agenda as well. This "Chinese surge" is not just happening in the U.S. but world-wide. Data from HANBAN² (the International Chinese Language Council, China) show that over 3000 higher education institutions in 109 countries worldwide have established programs to teach Chinese as a foreign language, with a total enrollment estimated at 40 million. Among those institutions, 500 high schools in Great Britain have established Chinese programs with a total of 70,000 students, and 150 schools in Russia have Chinese programs with a total of 15,000 students. BBC News³ (January 9, 2007) reported that, in the UK, parents wanted their children to learn Chinese and the number of students at colleges and universities taking Chinese as their main subject doubled between 2002 and 2005.

In the United States, Chinese language learning is fast expanding through three major venues: community language schools, mainstream schools, and universities/colleges. Data show that, as of 2005, the total enrollments in community Chinese schools were around 160,000, which was 4-5 times the Chinese enrollments in K-12 schools in 2002 (McGinnis, 2005). At the university/college level, there were 51,582 students of learning Chinese in 2006, a 51% of increase over 2002 (Furman, etc., MLA survey 2006). And in K-12 schools, 779 of them established Chinese programs in 2008, a 200% increase over 2004 (College Board)⁴. Coupled with the fast increase of Chinese learners worldwide, there is a rapid influx of Chinese speakers to almost every part of the world prompted by China's

² 《汉语世界》 March 13, 2009. Report on press conference with speaker, Madam Xu Lin, Director-General of the International Chinese Language Council, General Director of the Confucius Institute. <http://hi.baidu.com>

³ BBC news. January 9, 2007. Mandarin learning soars outside China. <http://news.bbc.co.uk/2/hi/asia-pacific/6244763.stm>

⁴ College Board Internal Study. (April 21, 2008). Surge of Chinese Language Programs Requires Renewed Commitment to Realize Long-term Goal: Report Released at the Conclusion of National Conference on Chinese Language Programs in US. <http://www.collegeboard.com/press/releases/196663.html>

economic reform and open-door policy in 1979. In the United States, Chinese moved from fifth place to become the second most widely spoken non-English language, a trend that reflects the 75% increase of Chinese speakers from 1990 to 2000. By 2007, the total Chinese population in the U.S. grew to 3,538,407, forming 1.17% of the U.S. population⁵. The same surge is found in Canada and Europe. Data show that the Chinese-speaking population rose from 289,245 in 1981 to 466,940 in Canada in 2006⁶, out of which 71% arrived after 1991. In Europe, although the wave of Chinese arrivals did not surge until the early 1990s, by 2000 the Chinese-speaking population was estimated to reach 200,000 (Laczko, 2003). The notable characteristic of this trend is that it includes the largest number of Mandarin-speaking scholars and students in history. In the United States, the number of Chinese students, scholars, and their families increased 50 times from 1979 to 1999 (Li, 2002). In 2008, there were a total of 81,127 students from China alone⁷, which was 13% of the total U.S. foreign students.

One driving force behind these changes is the recent rise of China as a strong global economic leader with the fastest growing economy. At the present time, China represents 13% of the world economy and 10% of the world trade⁸. China's fast growth has been attracting business partners from all over the world, as many countries become interested in doing business with China. To understand and enhance their business opportunities, business enterprises are actively involved in Chinese language learning and preparing their students with skills to move fluently between Chinese language/culture and their own.

2. Linguistic background of the Chinese language

This section will briefly introduce the history and typological features of the Chinese language.

⁵ S0201. Selected Population Profile in the United States. Population Group: Chinese alone or in any combination. Data Set: 2007 American Community Survey 1-Year Estimates. Survey: American Community Survey.
<http://factfinder.census.gov>

⁶ The Chinese Community in Canada. Source: Statistics Canada 2006 Census.
<http://www.canadaimmigrants.com/qualityoflife/communities/chinese.asp>

⁷ Students from China studying in the United States (2008). Source: Report on International Education Exchange <http://www.opendoors.iienetwork.org>

⁸ China's Trade with the United States. U.S. International Trade Commission, U.S. Department of Commerce, and U.S. Census 2007 China's world trade.

2.1. History of the Chinese language

The indigenous dialect spoken by the people in the Han Dynasty (206 BC – AD 220), known as 汉语 *Hanyu*, the language of the *Han* nationality, or 中文 *Zhong Wen*, the language of Chinese people, was recognized as the Chinese language. Its writing symbols were recognized as 汉字 *Hanzi*, the script of the Han Chinese (*Xinhua Cidan* 2001, p. 378). However, the earliest written records available can be traced back to the Shang Dynasty (1600-1100 BC) (Norman, 1988), during which some of the texts were inscribed on metals (金文 *Jinwen*), and some on tortoise bones and shells (甲骨文 *Jiaguwen*). Due to the intensive labor of production in which many people were engaged, the Shang texts tended to be short and formulaic. This tradition was extended to the succeeding Zhou dynasty (1100-300 BC), during which some of the texts were carved on bamboo sticks (竹简本 *Zhujiaben*), with an exemplar being *the Art of War* 《孙子兵法》 (*Sunzi Bingfa*) (515-512 BC). Regarding the basic lexicon, grammar, and character shapes, *jinwen* and *jiaguwen* were already consistent with later Chinese (Duanmu, 2000, p. 4).

By the time of the Han Dynasty, the Chinese script had gone through the most important transition from the ancient form to a more purely conventionalized form of writing, represented by Xu Shen's (100 AD) dictionary entitled 《说文解字》 *Shuowen Jiezi* (Norman, 1988). *Shuowen Jiezi* was the first of its kind to present a systematically elaborated theory of the Chinese script development and analysis (Norman, 1988, p. 67) and is still the most important resource book for script study and Chinese language learning in modern times. With the long history of development, Chinese characters were rapidly accumulating, as shown in the dictionaries compiled in varied historical periods. For instance, 《康熙字典》 *Kangxi Zidan* (1716) included 47,035 characters, and 《中华字海》 *Zhonghua Zihai* (1994) contained 86,000 characters (Huang & Ao, 2009, pp. 44-45). However, a large number of the characters collected in the dictionaries are rarely used variants. *The List of Frequently Used Characters in Modern Chinese* issued by the Chinese National Language and Script Committee (1988) indicates that Modern Chinese only employs 7,000 generally-used characters, and a person only needs to master the 3,500 commonly-used characters to demonstrate a full literacy in Chinese language (Huang & Ao, 2009, p. 47).

Like the script study, the study of Chinese sounds has a long and rich tradition. As early as in the Liu Chao period (222-589 AD), Chinese scholars began to produce 韵书 *Yunshu*, “the rhyming books”, which

divided Chinese characters into different groups according to how they rhymed in verse (Duanmu, 2000, p. 3). By 601 AD, 切韵 *Qieyun* “the rhyming and pronouncing dictionary” was completed by Lu Fayuan (581-618 AD). Arranging Chinese characters by tones and rhymes, this dictionary is the oldest guide to Chinese pronunciation that has been preserved; it helped standardize pronunciations of Chinese characters in every land reached by Chinese civilization (Ramsey, 1987). In contrast to the studies of Chinese script and phonology, the study of Chinese grammar is very much a recent development. The first systematic Chinese grammar textbook is 馬氏文通 *Mashi Wentong* (1898), *Basic Principles for Writing Clearly and Coherently* by Mister Ma, written by 马建中 (Ma Jianzhong, 1845-1900), which has been followed by a number of Modern Chinese grammars. Out of them, the most influential is *A Grammar of Spoken Chinese* (1968) written by 赵元任 (Chao Yuen Ren), which represents the best of American descriptive and structuralist tradition and remains unsurpassed to this day (J. Huang, Y.-H. Li, & Y. Li, 2009, p. 3).

Chinese grammar taught in schools is however not defined by spoken Chinese but by written Chinese, which most of Chinese think is “the language” that unites them as a people (Ramsey, 1987). Conversely, spoken Chinese has abundant linguistic varieties and speech forms, especially in southern China. A typical example is that the Amoy dialect, spoken on the southeastern coast opposite Taiwan, is completely unintelligible to anyone living a hundred miles away (Ramsey, 1987, p. 22). According to the position of the Chinese government, the Chinese language encompasses eight major regional dialects, which are Mandarin (i.e., Northern dialects), *Wu*, *Xiang*, *Yue* (Cantonese), *Gan*, Southern *Min*, Northern *Min*, and *Hakka* (Luo & Lü, 1955; Lü, 1993, p. 70). However, most of these are not dialects of a single language but mutually unintelligible languages, spoken by different ethnic groups in China. Among them there are variations in speech sounds, vocabularies, and sentence patterns, but the most significant difference is the tonal values, which is in a range of four (Mandarin) to nine (Cantonese) (Sun, 2006). Due to the remarkable diversity of speakers’ linguistic backgrounds, “Chinese” has a number of synonyms. It is named *Putonghua* or *Hanyu* in China, *Guoyu* (national language) in Taiwan, and Mandarin or Chinese in the rest of the world.

In 1949, when the People’s Republic of China was founded, Mandarin Chinese was declared the nation’s official language, with both pronunciation and script undergoing reforms in the mid-1950s. Through this campaign, the multi-dialect pronunciation was standardized and represented by a new romanization system called *pinyin* (which means

“the combination of sounds”). This standardized Mandarin Chinese is called 普通话 *Putonghua*, the national “common language” or “the language of common people,” with its pronunciation based on the Beijing dialect, vocabulary on the Northern dialects (*i.e.* the Mandarin dialects), and grammar on the vernacular (白话 *Baihua*) used in modern Chinese literary classics⁹. *Putonghua* has since been mandated as the instructional medium in mainstream schools. In the meantime, the writing system was simplified, with the strokes of the 2000 most frequently-used characters reduced on average from 11.2 to 7 each (Wu, 1978).

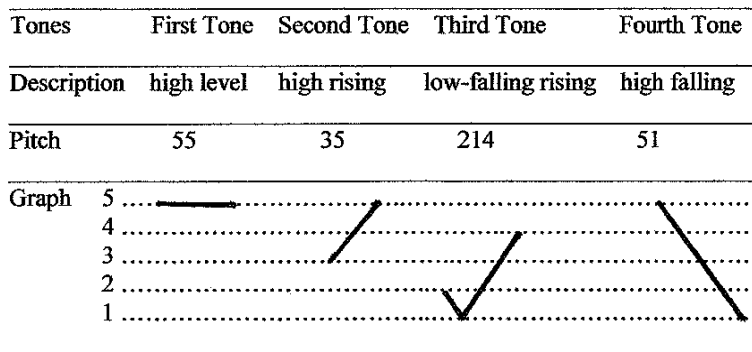
2.2. Typological features of the Chinese language

Compared with Western languages, Chinese is distinguished by its unique writing system and typological characteristics. Unlike alphabetic languages such as English, Chinese script is logographic with orthography-to-phonology mapping largely unavailable. In Chinese script, strokes are the basic spelling symbol, and characters are the basic analytical unit (Packard, 2000). Based on their internal complexity, characters are classified as simple characters (about 18 percent of the total Chinese characters), which consist of a single un-analyzable component, such as 人 (*ren*, person) and 木 (*mu*, wood), and composite characters (about 82 percent of the total), which are comprised of two or more analyzable components (Shu & Anderson, 1999), such as 打 (*da*, to beat) and 唱 (*chang*, to sing). Furthermore, the majority of the composite characters are compounds formed by two elements with distinct functions: semantic radical and phonetic component. For example, the character 唱 (*chàng*, to sing) has the semantic radical 口 (*kǒu*, mouth) and the phonetic component 昌 (*chāng*, prosperous). The semantic radical carries meaning which bears a semantic relationship with the corresponding character, such as radical 女 (*nǚ*, female) and its corresponding characters 姐 (*jiě*, elder sister), 妹 (*mèi*, younger sister), 妈 (*mā*, mother), 姨 (*yí*, aunt). On the other hand, the phonetic component conveys the pronunciation of the corresponding characters, such as phonetic 青 (*qīng*, blue or green) in characters 情 (*qíng*, feeling), 请 (*qǐng*, request), 晴 (*qíng*, sunny), 清 (*qīng*, clear), etc. The traditional Chinese writing system contains 214 semantic radicals and 1,100 phonetics, which recur in the *Hanzi* script to form the thousands of Chinese characters.

⁹ 《现代汉语规范问题学术会议决议》. (1955). 语言文字网.
<http://www.yyww.com/jt/zerun/ze060501j.htm>

Aside from its unique writing system, Chinese has a distinguished typology with features in tones, morphology, and word order that also have strong impact on Chinese linguistics studies and language learning. Like many of the Southeast Asian languages, Chinese is a tonal language, in which each syllable has a fixed pitch pattern (Norman, 1988). Standard Chinese has four tones with a pitch pattern in each: the high-level pitch in the first tone, the high-rising pitch in the second tone, the low-falling-rising pitch in the third tone, and the high-falling pitch in the fourth tone, as illustrated below:

Chinese Tones



Furthermore, unlike English which has a relatively rich inventory of suffixes and prefixes, Chinese has little or no morphological complexity within a word or in grammatical relations (Li & Thompson, 1981). Specifically, it has no case or number markers for nouns and no subject-verb agreement or tense markers for verbs. Chinese grammatical relationships were expressed either by word order or by the use of independent grammatical particles (Norman, 1988, p. 10). Due to the scarcity of morphological processes in grammatical relations, word order becomes the major device in Chinese grammar. Like its neighboring languages such as Tai, Miao-Yao, Viet-Muong, and Mon-Khmer, Chinese has SVO as its basic word order (Sun & Givon, 1985; Norman, 1988) or canonical word order, which allows variants such as SOV and OSV (J. Huang, Y.-H. Li, & Y. Li, 2009). For example, for the English sentence “he reviewed the new words,” there can be three different constructions in Chinese, such as SVO, SOV, and OSV, with slightly different interpretations, as illustrated below:

S V O
 (1) 他 预习了 生词。
 Tā yùxí-le shēng cí
 he review-PF new words

S O V
 (2) 他 生词 预习了。
 tā shēngcí yùxí le
 he new words review PT

O S V
 (3) 生词 他 预习了。
 shēngcí tā yùxí le
 new words he review PT

While Sentence (1) represents the typical SVO order describing a completed event, Sentences (2) and (3) go beyond that to arguably convey a sense of focus on the said “new words” or contrast to other works “he did not do.”

The list above serves as a brief introduction of the major Chinese linguistic features for students of Chinese. With the many distinct historical stages and regional variants, Chinese is an all-encompassing language. It is far beyond the capacity of this section to give an exhaustive account.

3. Chinese linguistics studies in the new era

The past decades witnessed a surge of research on Chinese linguistics/applied linguistics, which has, by integrating new approaches and paying significant attention to experimental and corpus data, made many breakthroughs and yielded a large body of literature. Besides the many publications collected in general linguistics journals, many more are included in Chinese-specific academic journals launched in China, North America, and Taiwan, such as *Journal of Chinese Linguistics*, *Language and Linguistics*, *Chinese Language and Discourse*, *Journal of Chinese Language Teachers Association*, 《世界汉语教学》 *Shijie Hanyu Jiaoxue*, and 《语言学论丛》 *Yuyanxue Luncong*. In addition, there are a number of influential monographs published just at the beginning of the 21st century

in, for instance, syntax/morphology¹⁰, phonology and phonetics¹¹, and Chinese language acquisition and learning¹². Collectively, these works exert significant influence not only in Chinese linguistics and education but also in the mainstream linguistic theories. This section will give an overview of the new developments of the areas within the scope of this volume, such as Chinese syntax/semantics, phonology/phonetics, and language acquisition/learning.

3.1. Studies in Chinese syntax and semantics

Compared with the other linguistic areas, syntax/semantics is the most studied area and has the richest theoretical activities in Chinese. A glimpse of any contemporary Chinese linguistic conferences, journals, or edited volumes, including the present one, would reveal that the majority of the activities are in syntax/semantics. With the descriptive and structuralist tradition (Chao, 1968) as the point of departure, research on Chinese syntax/semantics in the recent decades has followed two major distinctive lines of inquiry: generative and functional. While the former aims to account for the formal properties of Chinese syntactic constructs and their generalizations, the latter strives to establish relationships between language phenomena and their use in communications.

The generative approach was not introduced to Chinese linguistics or used for observations until the early 1980s (J. Huang, 1982a, 1983), although it began in the 1950s (Chomsky, 1957). Nevertheless, this line of research has sparked unprecedented enthusiasm and played a significant role in contemporary theoretical Chinese linguistics. Earlier works in this approach employed Government-and-Binding (GB) theory to account for many aspects of Chinese syntax (see works collected in J. Huang & Y.-H. Li, 1996; J. Huang, 2010; and elsewhere). Changes took place when Chomsky's Minimalist Program (MP) (1993, 1995) was brought forth. Generalizations made with the earlier generative theories were reanalyzed with the economy principle of MP (N. Zhang, 2000; Shyu, 2001; N. Zhang, 2010; among others). With decades of effort, we see significant advancements in this framework, represented by consistent and systematic analysis of Chinese syntax (e.g., J. Huang, Y.-H. Li, & Y. Li, 2009) and in-

¹⁰ e.g., Packard, 2000; J. Huang, Y.-H. Li, & Y. Li, 2009; J. Huang, 2010; and N. Zhang, 2010.

¹¹ e.g., Chen, 2000; Duanmu, 2000; Xu, 2001; and Y.-H. Lin, 2007.

¹² e.g., Sun, 2006; Xing, 2006; He & Xiao, 2008; Everson & Xiao, 2009; and Everson & Shen, 2010.

depth investigation of various Chinese language properties through case studies, which include, among others, those that offer new analysis on the coordinate construction (N. Zhang, 2010), the case marking (Y-H. Li, this volume), the Right Node Raising (Cheng, this volume), the expression of distributivity (G. X. Li, this volume), the realization of information focus (K. Li, this volume), and the *Ba*-construction (Kuo, this volume). In their recent monograph entitled *The Syntax of Chinese*, J. Huang et al. (2009) employ various generative theories such as GB, MP, and locality constraints to account for Chinese syntactic problems on many different levels. This is the first of its kind in generative tradition which makes comprehensive references and gives a systematic account of Chinese linguistic facts. Similarly, N. Zhang (2010) adopts the MP principle to give a unified account of the coordinate construction, in which she examines the syntactic configuration, category, constraints, and operations of the coordinate complexes in a comprehensive manner and proposes new generalizations such as binary branching, no special syntax of coordination, and the effect of Coordinate Structure Constraints to re-account for the coordination construction. These works serve to demonstrate a leading trend in Chinese linguistics for theoretical explanations of the Chinese grammar and for its connection to human language and cognition in general.

However, as any well-developed scientific enterprises, the generative approach in Chinese syntax has been challenged all along from within and beyond. For instance, with generative theories, J. Xu (2010) challenged the well-known contrast of locality conditions between the LF movement of adjuncts and that of arguments (J. Huang, 1982b). Xu proposed that such contrast was due to a fundamental property of the Chinese focus construction and could be better analyzed with the whole island constraints by which the LF movement of arguments was the same as that of adjuncts in Chinese.

The functional approach, the other major line of research on Chinese syntax and semantics, started in the 1970s but did not build a coherent and consistent theory until the early 1980s when *Mandarin Chinese: A Functional Reference Grammar* was put forth by Li and Thompson (1981). This is the first grammar which provides a functional explanation of Chinese structural properties that include word order, word and sentence structures, modal and auxiliary verbs, adverbs and prepositions, special constructions, question types, and sentence linking, among others. This work further paved the way for the establishment of a functional discourse grammar, represented by *A Discourse Grammar of Mandarin Chinese* by Chauncey Chu (1998). Chu's discourse grammar is the first extensive

description of Chinese discourse and pragmatics, supported by the earlier works of Tsao (1979, 1990) that treat Chinese as a discourse-oriented language. In a belief that Chinese grammatical phenomena must go beyond sentence-level description for explanation, Chu's grammar gives a comprehensive account of Chinese discourse facts, such as presupposition, zero pronouns, topic chains, discourse cohesive devices, and information structure. So far, these two grammars are the most studied and remain unsurpassed in the Chinese functional tradition.

As shown above, the functional approach in Chinese grammar started with the concern for the role of language in communication and cognition; however, earlier works were basically focused on structural properties inferred from constructed examples rather than empirical data (Thompson & Tao, 2010), until recent years when traditional analyses are revisited and challenged with natural speech, oral and/or written corpus data (H. Tao, 1996, 2006, 2008, this volume; W.-D. Li, 2000; S. Huang, 2003; Ming & H. Tao, 2008; Xiao & McEnery, 2008; Thompson & Tao, 2010; Lim, this volume; W. Lin, this volume; Ming, this volume). In the meantime, theories and methods from various perspectives are employed to broaden its scope, such as the role and reference grammar (Chang, 2007; L. Tao, this volume); the relevance theory (Ljungqvist, 2010), grammaticalization (Biq, 2001; Lai, 2002; Xing, 2003; Sun, 2008), and dialectal studies (Wang & Lien, 2001; H.-L. Lin, 2007; Tang, 2009); to name just a few.

Out of the many perspectives and approaches in the Chinese functional framework, corpus data analysis, including small-sized sample collections, has become one of the most productive and significant tools, although it did not start until the mid 1990s when a monograph entitled *Units in Mandarin Conversation: Prosody, Discourse, and Grammar* (H. Tao, 1996) set the example. H. Tao's study was the first of its kind using corpus to study Chinese discourse and grammar. Using intonation units as the unit of analysis, the study showed that, contrary to the dominant practice in the study of syntax that assumed clause (NP + VP (+ NP)) as the basic syntactic structure, a Mandarin sentence in spoken discourse could consist of a lone NP detached from a clause structure (53% of the time) or a VP with one (or both) argument NP missing (81% of the time in transitive clauses). The findings shed light on the understanding of fundamental properties of Mandarin Chinese grammar and showed, in general, how grammar could be examined in light of the speech context.

This section has touched upon some of the new developments in the studies of Chinese syntax and semantics from the two major perspectives, the generative and the functional. The new era is witnessing

interdisciplinary works across the traditions (Ren, this volume, for example). It is anticipated that the next-generation studies on Chinese syntax and semantics will draw upon these two and other interrelated research traditions to address a broader range of research questions in Chinese grammar.

3.2. Studies in Chinese phonology/phonetics

In its long history of 1,700 years, traditional Chinese phonology was focused on the rhyming categories of syllables and the subsequent standardization of the Chinese language in the 20th century. Significant changes did not take place until the 1990s when generative theoretical models were introduced to analyze many of the issues in Chinese phonology that had not been raised before, such as the featural representation of tones, the interaction between tone and syntax, the featural analysis of affixation and segmental changes, and the interactions among syllables, stress, and tone (Duanmu, 2000, p. 8). The new paradigm has since inspired a large body of literature, characterized by several trends, including (i) applying various theoretical models to analyze the Chinese data, such as the Autosegmental Phonology (AP), Metrical Phonology (MP), Optimality Theory (OT)¹³; (ii) experimental phonetics/phonology and phonological processing, through experiments, corpus data, or computational modeling¹⁴; (iii) analysis of Chinese dialects/dialect comparison (J. Zhang, 2007; Liu, this volume); and (iv) interface of syntax, semantics, and phonological phrasing across dialects (Soh, 2001).

In addition, at the turn of the 21st century, a number of exemplary full-length studies in the generative tradition were put forth, which included comprehensive description and systematic analysis of the phonology of standard Chinese (Duanmu, 2000), tone sandhi across Chinese dialects (Chen, 2000), and the sound system of Chinese (Y-H. Lin, 2007), to name just a few. Duanmu's *The Phonology of Standard Chinese* (2000) is the first comprehensive account of Mandarin Chinese phonology, which covers several areas that were previously thought to be either absent in Chinese or not in the domain of phonology, such as stress, the definition of word, the word length problem, and the word order problem. It also offers

¹³ e.g., Y-H. Lin, 2000; Shi, 2001; Bao, 2001; Duanmu, 2001; Y-H. Lin, 2001; Yip, 2001; Y-H. Lin, 2004; Hao, this volume; and Wu, this volume.

¹⁴ e.g., Deng, Shi, & Feng, 2008; Lee & Zee, 2008; L. Tao, 2009; Wan, 2010; Tseng, 2010; Y-H. Lin, this volume; and Y-L. Lin, this volume.

new analyses of several traditional topics, such as the phonemic inventory, allophonic variation, syllable structure, the [r] suffix, tone, and tone sandhi. Likewise, Chen's *Tone Sandhi: Patterns across Chinese Dialects* (2000) provides a most comprehensive analysis of the complex patterns of Chinese tones. Using a wealth of empirical data, Chen examines the tone sandhi phenomena across a variety of Chinese dialects and explores a range of theoretical issues such as the nature of tonal representation, the relation of tone to accent, the prosodic domain of sandhi rules, and the interface between syntax and phonology. Taking a pedagogical perspective, Lin's *The Sounds of Chinese* (2007) provides a well-rounded introduction to the sounds of standard Chinese, designed for students with no prior knowledge of linguistics. It explains the fundamentals of articulatory phonetics and phonology, and applies them to the phonetic and phonological properties of Chinese. This work not only makes a contribution to Chinese linguistics but also serves as an exemplar of filling the gap between linguistics research and language learning.

Like the other areas of Chinese linguistics, new advances are being made in Chinese phonology with interrelated perspectives. For instance, with an audio/visual sentence validity judgment test (N = 32) followed by an acoustic analysis, Deng, et al. (2008) found that, in Chinese sentences, there was a systematic relationship between sentence validity and syllable number, syllable type, and duration of the verb complement. Similarly, through three experiments (N = 14, 80, 8, respectively), L. Tao (2009) discovered a grammaticalization process in spoken Beijing Mandarin, in which a *frozen* tone on the numeral *yi*35 is emerging and shifting from purely lexical to syntactic function. Counter to the standard grammar of Mandarin Chinese, the findings suggest that countable nouns following this tone no longer require the presence of a classifier. The study shows that everyday language usage not only shapes grammar but also affects people's mental model of grammar.

3.3. Studies in Chinese language acquisition and learning

Among the many areas of Chinese linguistics studies, research in Chinese language acquisition and learning is the newest territory, which did not start until the late 20th century. The earlier works in this tradition were largely focused on skills learning in Chinese as a foreign language (CFL), such as pronunciation and tones, reading, writing, grammatical features, special usages/constructions (Ke & Shen, 2003), in which researchers identified learning difficulties and compared the target features with those of learners' first language, predominantly English, for pedagogical

implications. Although this line of research is still prevalent, the turn of the century witnessed its extension to problems in second language acquisition (SLA) and heritage language (HL) learning.

Compared with English and the major European languages, Chinese as an SL (CSL) research is just emerging. Using the general SLA theories and models, CSL studies have addressed a number of critical issues, including the acquisition order and sequence (Yuan & Dietrich, 2004; Wen, 2006), the acquisition process (Y. Zhang, 2002; Liu, Perfetti, & Wang, 2006; Chen & Ai, this volume), the developmental path (Ke, 2005), the end-point attainment of advanced learners (Y.-T. Liu, 2009), L1 transfer (Shi & Wen, 2009; Xie, 2010), assessment of learner language in fluency, accuracy, and complexity (Yuan, 2009), and linguistic development through language socialization (He, this volume).

Research on Chinese as an HL (CHL) did not start until the very recently, initially in response to the pedagogical challenges, as more and more CHL students with different degrees of proficiency arrived in the CFL classroom. The earlier works were mostly focused on the difficulty of class placement, materials development, and the CHL linguistic development by comparing HL learners' performance with their non-HL counterparts (Christensen & Wu, 1993; Xiao, 2004, 2006; among others). A clear research agenda was not established until a group of studies, collected in the monograph entitled *Chinese as a Heritage Language: Fostering Rooted World Citizenry* (He & Xiao, 2008), were brought forth. Drawing on developmental psychology, functional linguistics, linguistic and cultural anthropology, discourse analysis, second language acquisition, and bilingualism, the researchers extensively examined the characteristics, development, motivations, and internal and external factors involved in the CHL learner, learner language, and learning. Issues that researchers and linguists had been unaware of were discovered and discussed, and the findings were intriguing. Based on such findings, it is believed that, if conditions are met, CHL can be acquired, maintained, and developed along the socio-cultural, cognitive-linguistic, and educational-institutional trajectories (He, 2008).

4. Scope and aim of this volume

Written in a coherent and structured style, this volume is valuable reading for students and researchers interested in Chinese linguistics, applied linguistics, and education. It consists of 21 chapters, including the Introduction, grouped in four sections by the area of studies, as briefly introduced below.

Section 1 (Chapters 1-5) addresses current issues in Chinese syntax and semantics from the generative approach with theoretical explanations and accounts that connect Chinese grammar to human language and cognition. **Chapter 1** by Yen-Hui Audrey Li examines the conflicting findings in the case marking of Chinese clauses and argues that clauses in Chinese are not Case marked in that the apparent cases in Case positions are in fact nominal phrases. In **Chapter 2**, Hsu-Te Johnny Cheng discusses three main approaches to account for the Right Node Raising construction and proposes that such constructions may be better captured by the multi-dominance approach. Grant Xiaoguang Li in **Chapter 3** examines the expression of distributivity by comparing the required use of *dou* in Mandarin Chinese and the optional use of its counterparts *all/both/each* in English. The analysis shows that the head of the distributivity projection DistP is instantiated through V to I movement in English, but *dou* must be present in the head of DistP because Chinese lacks V to I movement. **Chapter 4** by Kening Li provides an OT analysis of the realization of information focus in Mandarin Chinese with a ranking hierarchy, by which the Chinese pattern can be described as “stress the focused element except in the sentence final position”. Pei-Jung Kuo’s **Chapter 5** discusses a subset of the *BA*-construction and argues that the affected argument following *BA* is not base generated but rather is moved there; the affected argument can be analyzed as undergoing possessor raising to the specifier of a functional projection.

Section 2 (Chapters 6-13) takes a functional approach to address issues in Chinese syntax and semantics, which not only make theoretical contributions to linguistic typology but also demonstrate language as both a resource and an embodiment of human communication. **Chapter 6** by Hongyin Tao addresses a key issue in Chinese vocabulary acquisition. Starting with some of the puzzles observed in Mandarin lexicon, he presents a solution with the high-frequency vocabulary clusters in terms of their unique forms and functions, evidenced from his self-recorded corpus of Chinese natural speech. Drawing on data from her own collection and a 7-million-word online corpus of modern Chinese (CCL Corpus–The corpus data of the Center for Chinese Linguistics at Peking University), Liang Tao in **Chapter 7** uses the Role and Reference Grammar to reanalyze a well-studied construction in Chinese, serial verb construction. She proposes a unified account of this construction that includes three syntactic patterns, i.e., the canonical pattern, the pivotal pattern, and the coverb pattern. Ming Tao in **Chapter 8** draws on data from a one-million-word corpus of written Chinese texts to analyze the distributional patterns of Chinese relative clauses. The analysis reveals that such patterns are

determined by the interaction of the information status, the animacy of the head nouns and the discourse functions of the relative clauses. Ni-Eng Lim in **Chapter 9** uses a 7-hour corpus of natural conversations to examine the discourse marker *wo juede* (I think), which reveals that *wo juede* is often deployed in managing a recipient's possible responses and positioning the speaker's pre-emptive awareness of the recipient's possible objection to a proposition. With interrelated perspectives, **Chapter 10** by Ren Fei investigates the semantic constraints on the interpretation of the modal auxiliary *yinggai* 'should' in Mandarin Chinese. The analysis reveals that the interpretation of *yinggai* correlates with the aspectual features of the modal predicate in that *Yinggai* is epistemic or deontic with a stative predicate, and it is deontic with an eventive predicate. Wan-Hua Lin in **Chapter 11** uses data from both oral and written discourses to investigate the relationship between information flow and argument roles across Chinese genres. The findings suggest that ellipsis, lack of case-marking system, text difference and topic continuity all play significant roles on the distribution of argument roles and information statuses. **Chapter 12** by Binmei Liu investigates the functions of Chinese discourse markers (DM) in natural narratives by native Chinese speakers from mainland China. Nineteen DMs are identified in the data; some of them have not been discovered before. The study offers a starting point for further investigations of Chinese DMs as part of the means in universal human communication. **Chapter 13** by Tom McClive addresses the challenges of Chinese Romanization patterns illustrated by personal names that often have multiple Romanized variants. He proposes an algorithm generated by analyses of a large corpus of personal names that can increase the degree and confidence of record linkage to match variant personal name records.

Section 3 (Chapters 14-18) provides various theoretical models to analyze Chinese phonological problems, mostly with the Optimality Theory (OT) and/or corpus-based or experimental data. **Chapter 14** by Yen-Hwei Lin presents a theoretical account of the English sound-based loan words in Mandarin Chinese. Drawing data from a large corpus, Lin rules out some of the previous theoretical models in this issue and supports the Perception-Phonology Approach as the general theoretical explanation of the processes for sound-based loan words. Yen-Chen Hao in **Chapter 15** analyzes the tonal adaptation patterns from English to Hong Kong Cantonese and applies the OT to reach a general theoretical account in Cantonese loan words. **Chapter 16** by Hsiu-hsueh Liu analyzes data from previous field work and her own collection, and applies OT to explain the interaction of root syllables for the formation of nasal diminutives in Chinese dialects. Unlike previous studies that focus on uniqueness of

individual dialects, Liu's analysis provides a unified account of such processes across dialects. With experiments on two groups of linguistically diversified speakers, native Mandarin and native Taiwan Southern Min speakers, Yu-Leng Lin in **Chapter 17** tests two artificial phonological patterns in the form of CVCV with the initial voiceless consonant stops. The findings support the analytic or cognitive bias as a fundamental human process; namely, certain phonological patterns are common across human language, yet others are more language-specific. **Chapter 18** by Chinwei Wu applies the OT to analyze a specific partial reduplication pattern in a *Fuzhou* dialect, *Fuzhou Qiejiaoci*, in which a monosyllable is reduplicated and augmented into a disyllabic word. The analysis provides evidence to support the claim of “avoidance of marked structure” as a general phonological rule in human language.

Section 4 (Chapters 19 and 20) provides theoretical models to examine the language socialization or acquisition process in learning Chinese as a heritage or a foreign language. In **Chapter 19**, Agnes Weiyun He explores the intersubjective and dynamic construction of modal stances in discourse involving learners of Chinese as a heritage language. The analysis suggests that it is not context-free frequency but the understanding of the interactional contingencies and of the range of modal meanings that indexes the learner's competence. **Chapter 20** by Jidong Chen and Ruixi Ressay Ai employs experimental data to examine the acquisition process in adult English speakers learning Chinese motion and state change, which reveals that the learners are sensitive to the Chinese way of using verb compounds to encode the target features.

In summary, each section in this volume is concentrated on a particular linguistic area to provide new advances in the study of Chinese linguistics, and each chapter is self-contained with a clear focus and theoretical framework so that any chapter can be read and understood on its own. Moreover, authors have taken effort to limit technical jargon, so the book can be read with ease by readers with or without Chinese linguistic backgrounds.

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