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Hongyin Tao
Howard Hao-Jan Chen *Editors*

Chinese for Specific and Professional Purposes

Theory, Pedagogical Applications, and Practices

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Preface

Language for specific purposes (LSP) has drawn increasing attention in the field of second language acquisition (SLA) for a number of important reasons, chief among them are the profound theoretical questions it raises (e.g., nature of language and nature of language learning) and the challenges and payoffs of LSP pedagogical practice. Chinese for Specific/Professional Purposes (CSP), however, remains a fairly new field of theoretical research and pedagogical practice in the Chinese language. As such, there has been little research conducted, especially in Western languages. In Chinese, CSP, or 专门用途汉语 / 專業華語, has been dominated by interest in a few subject areas (or professions), especially business, science, and technology, and Chinese medicine, although there are signs pointing to diversification toward multiple content areas and across disciplines. This volume attempts to fill the gap by bringing together practitioners from a wide international scholarly community who share common interests yet diverse orientations. Seventeen papers representing four broad thematic categories are included in the volume, with the major themes covering (1) academic Chinese, (2) business Chinese, (3) Chinese for medicine and health care, and (4) Chinese for other broadly defined services and industries (diplomat, tourism, wine tasting, etc.). The scope of the papers varies, yet all of them touch upon learning and pedagogical issues to some extent. Although it is not the intent of this collection to provide a comprehensive coverage of all major areas of the field, it is our hope that by presenting a diverse collection of CSP studies and presenting them in a single place, we will be able to draw more attention to CSP as a field and help build up the momentum in its rapid ascending trajectory at the beginning of the twenty-first century.

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Los Angeles, USA — Hongyin Tao
Taipei, Taiwan — Howard Hao-Jan Chen

Chinese for Specific/Professional Purposes: An Introduction

Abstract This introductory chapter first provides an overview of some of the major issues in language for specific purposes (LSP) and its counterpart in Chinese: Chinese for Specific/Professional Purposes (CSP). The major focus is placed on theoretical issues that may constitute the current and future research agenda in LSP/CSP. Then, a brief overview of the state of the art in CSP is provided. The third and the final part of the chapter provides a brief sketch of the chapters included in this volume, with concluding remarks at the end on the future directions of the field of CSP.

Major Issues and a Theoretical Overview

Chinese for Specific/Professional Purposes (henceforth CSP) is the Chinese counterpart of language for specific purposes (LSP). LSP is typically understood as teaching of language to meet specified needs of the learner incorporating both linguistic (e.g., vocabulary, syntax, discourse genres) and content area knowledge (Strevens 1988: 1–2; Trace et al. 2015: 3). LSP emerges from the field of English for Specific Purposes (ESP), as English has been the de facto international language with a wide range of applied contexts—for example, English for academic purposes and English for international business are among the most commonly and widely practiced applied ESP fields.

However, LSP became an important field of language teaching and learning only in recent decades. To wit, the First International Symposium on Language for Specific Purposes did not take place until 2012 (Sánchez-López 2013), and the *Journal of Language for Specific Purposes* was inaugurated only in 2014.

Still, LSP has drawn increasing attention in the field of second language acquisition (SLA), and studies in LSP can raise profound theoretical questions as well as important practical issues.

First, LSP raises questions about the nature of language. Traditionally, linguistic research, be it in the form of structuralism (Bloomfield 1933) or the generative tradition (Chomsky 1957, 1965), has been dominated by work that focuses on language without context. While early work in the social–cultural linguistic tradition has pointed to the importance of looking at context (e.g., the SPEAKING model of Hymes 1974), later work has argued specifically for an emergent and multiplicity grammar model. In the word of Paul Hopper, "(grammar) must be viewed as a real-time, social phenomenon, and therefore is temporal; its structure is always deferred, always in a process but never arriving, and therefore emergent' (1998: 156). With the conviction that grammar contracts as texts expand (Hopper 1998: 164) and the metaphor of a blueprint to describe the nature of grammar, Hopper goes on to state that "learning a language is not a question of acquiring grammatical structure but of *expanding a repertoire of communicative context*" (1998: 170–71, emphasis original). LSP, with the focus on language in a specific context and the emerging grammatical and discourse features associated with such contexts, provides strong evidence for, and is best understood from, the point of view of context-induced, Emergent Grammar.

Second, a related issue is the nature of language learning. Given that language cannot be understood without reference to context, it follows that language learning needs to proceed in a manner where context plays a paramount role. As the model of SPEAKING of Hymes (1974) and subsequent models (e.g., Duranti and Goodwin 1992) made clear, context involves circumstantial factors, participants and their roles, interactional goals, as well as the sequential context in which interlocutors dynamically recreate and reshape contexts through interaction. Naturally, for language learning, a context-based model is also critical. We have earlier (Tao 2005) argued that one of the major gaps between learning materials and natural discourse is the lack of incorporation of contextual elements. The rise of LSP as a field exposes one of the major flaws of prevailing teaching models, which is aptly characterized as LNOP—Language for No Obvious Purposes (Trace et al. 2015: 3); or, in the case of English language teaching, TENOR—Teaching English for No Obvious Reasons (Abbott 1978). In fact, we would like to take one step further by suggesting that, by examining language use in specific and professional contexts, LSP can inform language teaching far beyond itself—that is, even in contexts such as ordinary conversation and literacy acquisition where less obvious or no-special professional apparatuses are figured, the elements of context should also be tightly integrated into SLA models and practices.

Third, LSP informs and is strongly informed by theories of genre and intertextuality. As is well known, Bakhtin argues that genre has important places in understanding language structure and use. Bakhtin (1986: 60) defines genre as relatively stable types of utterances in specific spheres of human activity. He further justifies why genre research is so "immensely important":

> This is because any research whose material is concrete language-the history of a language, normative grammar, the compilation of any kind of dictionary, the stylistics of language, and so forth-inevitably deals with concrete utterances (written and oral) belonging to various spheres of human activity and communication: chronicles, contracts, texts of laws, clerical and other documents, various literary, scientific, and commentarial genres, official and personal letters , rejoinders in everyday dialogue (in all of their diverse subcategories), and so on. (Bakhtin 1986:62).

Such an emphasis on genre has been echoed by functionally oriented linguists who are concerned with concrete language use and its implications for language teaching. As early as in the 1960s, for example, Halliday, McIntosh, and Strevens call on linguists to engage in “detailed studies of restricted language and special registers” and develop teaching materials based on such studies (Halliday et al. 1964: 189–190, cited in Swales 2000: 59). In the case of Chinese, Tao (1999) contends that genre-/register-based methodology should be the primary basis of all Chinese linguistic structural analysis.

LSP is, by definition, context- and genre-based. Although there is a vast array of speech genres such that practitioners in linguistics and LSA must accept multiple ways to categorize genres, and there is a clear need for the teaching of genre in a controlled and selective fashion and based on learner needs, it is clear that genre research and pedagogy remain some of the most important issues in the fields for today.

From the above sketches of a few theoretical issues, we hope that it is apparent that there is strong demand for research on allied fields that can be brought to inform LSP (or its extension in CSP). From this point of view, the strong research tradition in English can trickle down to other language areas. Indeed, as Lourdes et al. (2017: 13) point out, “a stronger LSP research agenda in the United States to strengthen the non-English LSP has been a focal point of discussion in recent years.” For CSP, it is clear that reconceptualization of the nature of language and its pedagogical implications in terms of both context and discourse genres is critically needed, and we must consequently devote more energy and resources to such endeavors.

The State of the Art of Chinese for Specific Purposes

In Chinese, CSP is commonly referred to as *Zhuanmen Yongtu Hanyu* “Chinese for Specific Purposes” (专门用途汉语, Zhang et al. 2016) or *Zhuanye Huayu* “Professional Chinese” (專業華語, Peng et al. 2016). A number of studies have surveyed the state of the art in LSP in Chinese. For example, Wang and Jiang (2019) point out that “CSP has progressed from isolated instruction of Chinese for business to a wider range of various specific purposes and interdisciplinary content areas.” This, we note, is in interesting contrast with ESP where it is pointed out that the dominant content area has been academic English rather than business English (Swales 2000: 66), although a reversal new trend has been noted in recent years (Swales 2000: 66; Lourdes et al. 2017).

Zhang et al. (2016, Chap. 2) devote an entire chapter on the development of CSP in the mainland China context. They note again that Chinese for business purposes has a long history dated back to the nineteenth century (in Japan). They also describe the trend on Chinese for science and technology since the 1950s in China, followed by other content areas such as diplomacy and (Chinese) medicine which have ostensibly defined CSP over the past decades.

Elsewhere, in Taiwan, for example, effort has been made to introduce the methods and pedagogy of CSP in a systematic fashion, which has resulted in the introductory and general surveys done by Peng and her associates at Chung Yuan Christian University (Peng et al. 2016).

Based on the existing literature and the survey of the field, a number of features can be described of the state of the art of CSP. First, there is a lack of theoretical research which may be considered on a par with ESP or LSP in general. In this regard, we find Li (2011) to be notable. He especially discusses the connection with, and the need for CSP to draw on insights from, theoretical linguistic research, touching upon such linguistic areas as sociolinguistics, which focuses on language variation and context, as well as genre theory.

Second, CSP as an SLA field has been dominated by a few subject areas (or professions), chiefly business, science and technology, and Chinese medicine, although, as Wang and Jiang (2019) point out, there are signs pointing to diversification toward multiple content areas and across disciplines. Recent work on academic Chinese (Chen and Tao 2019) and a large-scale international conference taking place at the University of Hawaii, Manoa, in April 2018, the 6th Business Chinese Workshop in Conjunction with the Second International Conference on Business Chinese Education, with the theme of Beyond a Limited Scope: Chinese for Specific, Academic, and Professional Purposes, is evidence of such a trend.

Third, just as LSP in general (Swales 2000), whether LSP/CSP is a profession or a discipline is not well defined. At North America universities, for instance, most CSP courses are subsumed under the general Chinese language programs and often offered as an upper division language option (e.g., business Chinese, see Yang 2009); in some cases, however, attempts have been made to offer those courses at lower division, elementary levels (Fu and Yeh, this volume; Lai, this volume; Yang 2009), or as superior level courses in such specialized programs as the US federally sponsored Language Flagship Program (Spring 2012). There are usually no specialized academic positions or graduate fields focusing on LSP/CSP (Swales 2000).

While there are many other directions from which CSP can develop—for example, the use of technology (including corpus data and tools, Zhang and Tao 2018, Chen and Tao 2019) can be very effective (Wang and Jiang 2019)—we believe that Brown's (1995) proposal of the six core steps in the development of a LSP curriculum can serve as a useful starting point. Brown (1995) summarizes the six steps as follows: (a) needs analysis; (b) goals and objectives; (c) assessment; (d) materials selection and development; (e) teaching; and (f) program evaluation. Each of these steps can constitute an important research agenda for CSP. (For some specific illustrations of the issues implied in these steps, the reader is referred to Zhang et al. 2016, especially Chaps. 5–7.).

The Articles

The current collection, likely the very first in a Western language, aims to address some of the issues discussed above in a number of ways. The chapters are divided into four broad thematic units, covering some of the major areas of CSP:

(1) academic Chinese, (2) business Chinese, (3) Chinese for medicine and health care, (4) Chinese for other services and industries (diplomat, tourism, wine tasting, etc.). The scope of the papers varies, with some on broad, theoretical, and conceptual issues, while others offer concrete pedagogical solutions. However, all of the papers touch upon pedagogical issues to some extent. The arrangement of the sections is first of all theme-based, and within each section, the papers show different levels of specificity in pedagogical concerns, with the more concrete ones appearing later in each thematic unit, as appropriate.

The first set of papers, a total of five, addresses issues and linguistic features of academic Chinese. Haidan Wang explores ways to connect reading and writing with a genre- and task-based approach to academic Chinese. Vincent Li and Miao-Hsia Chang's paper discusses a common expression in *jiushi*, in academic Chinese, identifying three major metadiscourse functions of it, namely intensification, elaboration, and as a pause filler. Rui Liu and Shan Wang's paper focuses on reporting verbs (*renwei* "believe," *faxian* "discover," etc.) in Chinese academic papers. Yue (Luna) Peng and Wei Yan, also on academic Chinese, question the role of HSK in informing the curriculum of academic Chinese, with a proposal to address learner needs in more direct ways. Finally, another paper on academic Chinese is done by Yu Liu, where she examines the disfluent phenomenon in L2 Chinese academic oral presentations, with a proposal to develop learners' knowledge of formulaic language in improving academic presentation skills.

The second set of papers deals with Chinese in the business context. Zhongqi Shi, Qiaosi Yuan, and Mengsu Kong conduct a comprehensive survey of studies on business Chinese over the past two decades (1997–2017) in major publications across various Chinese speaking communities (the US, China, Taiwan, etc.). Cindy Lee and Li-Yu Chen investigate business professionals' perspective on learning culture in the business Chinese curriculum, aiming at reducing cross-cultural misunderstandings in the Taiwan business environment. Qiaona Yu's paper is on designing a task-based and community-integrated business Chinese course, with three types of tasks outlined (job search, work and social life, and international business and entrepreneurship).

Five papers fall into the third category: medicine and health care. The paper by Hui-Ling Lai and Yi-Chen Chen examines, from a cognitive-intercultural perspective, Chinese euphemistic expressions related to aging, illness, and death and analyze the metaphorical nature of the expressions. Wan-Hua Lin's paper investigates conditionals (*ruguo*, *ruo* "if") in Chinese medical discourse, with a comparison of spoken and written registers. The rest of the papers in this category is more directly related to discourse structure and pedagogy. This includes one by Nan Wang, which explores conversational structure of medical consultations in the Chinese pediatric clinic setting, with an eight-component system ranging from opening, history-taking, physical examination, to closing. The paper by Wei Lai is on needs analysis of Mandarin courses for health care professionals at the elementary level. Finally, from a conversational pragmatic perspective, Meng Yeh and Liang Fu present an innovative curriculum of spoken Chinese for medical purposes, with a design to develop students' interactional competence in doctor–patient conversations.

The fourth and last category of this collection covers papers on various, broadly defined, other services and industries. On a rarely researched topic, Cornelius C. Kuble provides a detailed study of teaching Chinese for diplomats in the USA, covering a needs analysis, the trainers, a detailed curriculum, among others. Chiara Romagboli explores a unique field, wine tasting, with a focus on vocabulary features reflecting China's viticulture, wine market, wine consumption, as well the related industrial standards. Shan Wang and Huiting Luo describe findings, especially lexical features, from a Macao tourism corpus they constructed. The last paper in the group, by Chan Shui Duen, presents CSP education in the Hong Kong context, which is unique as CSP practices there often involve what is known as "practical writing" or Professional Chinese, with a detailed description of the ways in which such curricula are designed and implemented in Hong Kong for practical purposes.

Thus, as can be seen from the brief summary given above, this volume covers a wide range of subject matters and highly diverse perspectives. Although it is not the intent of this collection to provide a comprehensive coverage of all major areas of the field (in fact, some of the important areas such as Chinese for science and technology and legal Chinese are unfortunately conspicuously absent), it is our hope that by presenting a collection of CSP studies—both theoretical and practical—in multiple theoretical flavors, more attention will be drawn to CSP as it evolves into the next phase of important development in the twenty-first century.

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Contents

Part I
Academic Chinese

Chapter 1
From Construction of Meanings to Meaning Design: A Literacy- and Genre-Focused Approach to Academic Chinese

Haidan Wang

Abstract Adopting the consensus view that genre- and task-based approaches are especially effective in English for academic purposes, this chapter examines the development of a Chinese for academic purposes (CAP) curriculum and assesses its potentials in light of such approaches, with particular attention paid to building learners' academic literacy. It describes: (i) rationales for text selection, instructions of genres, and text-based interaction used to guide learners in meaning construction; and (ii) a writing instructional approach aimed at transforming knowledge gained from model texts into academic textual creations. This implementation interweaves genre- and task-focused CAP with meaning design: a dynamic process engaging learners in analysis, synthesis, and evaluation during reading and writing, thus contributing to their literacy growth in humanities disciplines.

1.1 Introduction

As English has become the lingua franca of higher education and research since the 1980s, English for academic purposes (EAP) has evolved into a well-established field of second-language (L2) inquiry, characterized by distinctive research methods and practices. EAP curricula, which include reading, writing, specialist linguistic knowledge, and genre skills, aim to train learners to communicate at a high professional level in academic and other research settings (Pérez-Llantada and Swales 2017). In line with the practices of language for specific purposes (LSP), EAP curricula have traditionally been set up based on analyses of learners' needs. Numerous publications in handbooks (e.g., Paltridge and Starfield 2013, Hinkel 2017, Hyland and Shaw 2016) and EAP journals have devoted extensive attention to the genre- and discourse-analytic literature, and to the composition of EAP

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classes. A broad consensus now holds that effective teaching and learning in EAP is facilitated by a genre- and task-based approach: a cycle of rhetorical consciousness-raising in which learners are expected to notice how language is used for particular communicative purposes and intended audiences (Swales and Feak 2009). More specifically, this process exposes learners to sample texts that include a set of genres that perform social actions, and requires them to complete tasks aimed at eliciting their awareness of linguistic features, rhetorical goals, and communicative purposes. Research-based tasks for EAP include multiple stages of academic reading and writing, with critical thinking integrated into the literacy process (Chazal 2014). Having learned socio-cognitive and critical-thinking skills through a literacy-focused curriculum, learners should be able both to construe the meanings of advanced texts and to design meaning through textual composition. Meaning design is a process where language learners create and transform meanings via available linguistic resources by using the target language form and personal experiences, as well as imitating its sociocultural convention (Kern 2000).

In contrast to those of EAP, the potentials of other languages for academic purposes (LAPs)—including Chinese for academic purposes (CAP)—remain under-researched and under-appreciated. Broadly speaking, scholars and practitioners of Chinese as a foreign language or L2 have not recognized the value of CAP, and few existing advanced-Chinese textbooks are aimed at teaching the language at an academic level. Over the past decade, a number of "academic Chinese"-labeled textbooks have been published, with the majority being aimed at specific fields including science and technology (e.g., Yu et al. 2014), medicine (Mo 2012), philosophy (Zhao 2009), and law (Foster et al. 2013). Courses in "academic Chinese," meanwhile, have tended to focus exclusively on writing, and in some cases, discipline-specific writing, e.g., in education, culture, communications, and business. However, the numbers of Chinese L2 learners studying in Chinese higher-education institutions have steadily increased, to nearly half a million as of 2017; and of these, 48.5% majored in humanities subjects (Zou 2018). In the USA, Chinese Language Flagship programs have provided pathways to professional proficiency by enrolling their students in academic courses at Chinese universities. Taken together, these critical changes call for a step-change in the development of CAP curricula, and the articulation of cogent EAP approaches that cater to the disciplinary needs of CAP learners. Recent promising endeavors involved the creation of a Chinese academic word list (Liu et al. 2016) or academic corpus (Tao 2018) from more than a thousand journal articles covering the arts and sciences, commerce, and law, including field-specific calculations of the frequency of Chinese academic vocabulary clusters and collocations (Liu et al. 2017). Curricula developed using a corpus-informed approach have exposed learners to articles on various academic topics, with a focus on reading comprehension and critical analysis of texts as part of a strategic learning process (Tao et al. 2018).

The aforementioned CAP textbooks all reflect traditional top-down, expert-driven, curriculum-as-a-product design (Richards 2017). Lacking pedagogical frameworks, these textbooks, and especially those for the humanities (Foster et al. 2013; Zhao 2009), present a broad array of discipline-specific vocabularies accompanied by linguistic expressions intended to facilitate learners' understanding of academic texts or to help them communicate in Chinese academic settings. However, mere knowledge of the conventions of Chinese academic vocabulary—nevertheless abundant—cannot be expected to instill learners with in-depth comprehension of the cultural premises that underlie communication in Chinese society. In LAP learners' various disciplinary communities, they are exposed to diverse topics and methodologies associated with a range of distinct discourses, arguments, and forms of verification (Hyland 2006). Importantly, academic knowledge bases and discourses are enshrined largely in written language, and learners in academic settings thus have relatively limited opportunities to use academic language orally. By the same token, a person's development of the spoken communication abilities required for successful academic work requires a serious commitment to the study of written communication (Kern 2003). In EAP-dominated LAP, research on such matters has focused largely on literacy and genre; pedagogical approaches tend to apply the results of such research to EAP practice via tasks tailored to maximize the learning process by eliciting learners' awareness of linguistic features, rhetorical goals, and communicative purposes (Perez-Llantada and Swales 2017).

CAP practitioners have yet to recognize the value of either the body of robust EAP research on literacy and genre, or the genre- and task-based instructional approach, apart from in a few studies of business-letter genres, as reviewed by Wang and Jiang (2019). Accordingly, the present chapter explores a pedagogical endeavor to scaffold the literacy development of CAP learners by helping them to construct meanings from readings, and to design meaning through writing. Starting with a brief review of the literature on literacy and genre-focused approaches, as they apply to EAP, the chapter applies meaning construction and meaning design to a CAP curriculum (CAPc) as part of a multi-literacies framework, which also includes an overview of the pilot implementation of the focal CAPc in a Chinese program at an American university. It then discusses the potential of this approach and its implications for future CAP development.

1.2 Literacy, Genre Analysis, and Reading/Writing Connection

As part of an effort to reconcile communicative approaches that emphasize verbal interaction with the development of learners' reading and writing abilities, Kern (2000) argued that notions of literacy should be broadened to include critical awareness of the relationships among textual and discourse conventions, as well as of social and cultural contexts other than the interpretation and production of texts. For Kern, literacy is "the use of socially, historically, and culturally situated practices" (Kern 2003: 48) and can be further conceptualized as design. Written texts, also known as "available designs" (Cope and Kalantzis 2009; Kern 2000), are meaning-making resources comprised of a continuum: with lexicon-grammar and cohesion conventions at one end, and schematic resources such as rhetorical organization patterns, genre, and schemata at the other (Kern 2000). Reading is a dynamic rhetorical process of constructing meaning by interacting with available designs, during which cognitive and social dimensions of discourse are explored. Just as essential to academic-language learning as reading is, writing is a text-creation process whereby learners develop their ability to think explicitly, and to organize and express their thoughts in line with "envisioned reader's expectations" (p. 172). Notably, this broad view does not limit reading and writing to straightforward acts of information transfer, but endows literacy with a critical quality or "spirit of reflective skepticism" (Kern 2003: 44). For language teachers, adopting it would mean creating more coherent curricula that cover not only communicative skills, but also textual analysis of wide ranges of written genres, so as to better reflect the full complexity of language at all levels.

In LAP curricula dominated by written texts, especially those in foreign-language academic contexts, genre is particularly important to literacy, as it reveals the sociocultural realities of other societies through very specific cultural interactions (Kern 2000). As Flowerdew (2011) succinctly defined them, genres are "staged, structured, communicative events, motivated by various communicative purposes, and performed by members of specific discourse communities" (p. 140). Every text has at least one genre and affects its genre(s), and thus can be more or less prototypical of it/them (Shaw 2016). Genre analysis has been the predominant approach to the analysis of specialized language, and an overwhelming quantity of genre research has aimed to make the features of particular academic genres explicit, so as to "make genre knowledge available to those outside the circle of expert [textual] producers" (Shaw 2016). The concept of a *disciplinary genre* (Bhatia 2004), also known as a *genre network*, can be used as an organizing principle for an academic-language curriculum within a specific sphere of research, by clarifying what genres learners might engage with within that sphere (Flowerdew 2011). One influential feature of genre analysis is generic moves (i.e., the typical information sequencing and organization of an academic discourse), and the genre-analysis methodology can be applied in both broad and narrow contexts (Bhatia 1993). In an examination of the tradition of genre analysis that emphasizes structural moves, Flowerdew (2011) stressed the equal importance of lexico-grammatical realization of genres to both genre research and curriculum design.

In short, the combination of genre-focused research and expansive visions of literacy has important implications for LAP curricula: Notably, those learners should be provided with a great deal of knowledge not only about the conventions of academic language, but also about the beliefs and values that underlie people's written uses of the target language. Kern (2003), for instance, recommended that language-teaching professionals view reading and writing as an intertwined, integrated process of communication and frame them pedagogically in the same way. The emergence of text-sensitive pedagogies in recent years, including multi-literacies pedagogy (Cope and Kalantzis 2009), has also led many educators to regard language learning as a dynamic process of transformation. Instead of being passive receivers of static texts, learners make meaning of available designs and transform meanings in the dynamic processes of reading and writing as construction. Similarly, the multi-literacies framework (Paesani et al. 2016) implies that language professionals should more closely examine the textual genres they present in class; clearly illustrate how different purposes, audiences, and genres influence rhetorical choices; and tune students' writing toward a writing paradigm as part of their literacy journey. As part of the process of developing learners' understandings of texts and genres, teachers should also become researchers and establish a space for reflection that in turn feeds back into and improves the curriculum and their teaching (Hyland 2016).

Applying literacy- and genre-focused theoretical and pedagogical research to CAP teaching, the author and colleagues obtained US Federal funding[1] to develop this chapter's focal CAPc, and field-tested it with 19 students in a Chinese program at an American university during the Fall 2017 and Spring 2018 semesters. The specific aim of the CAPc was to elevate its students' Chinese literacy to the ACTFL's Superior Level. The following two sections provide details of the construction of this "high-advanced" Chinese curriculum, its task designs that interwove academic reading and writing, and information related to the field test's procedures and outcomes. The final section then discusses the CAPc's implications and makes recommendations for future CAP practice and research.

1.3 Reading Approach: Deriving Meanings Through Interactions with Genre Texts

To provide learners with the broadest and deepest exposure to Chinese available designs in the humanities, the focal CAPc development team decided to focus its curriculum on genres and rhetoric, with special reference to the multi-literacies pedagogical framework (Cope and Kalantzis 2009; Paesani et al. 2016). EAP genres can be classified into three subdomains—educational, research-process, and institutional—with the first including textbooks and students' products; the second, research articles; and the third, university prospectuses or homepages (Shaw 2016). As such, the materials included in the focal CAPc, chiefly academic articles in various humanities subjects, all fall into the first two of these subdomains. Based on Bhatia's (2004) paradigmatic grouping, the selected CAP materials also qualify as an academic "super-genre" or "genre colony" (p. 66), insofar as the CAPc emphasizes the similarities among these texts at the genre level, e.g., common communicative and academic purposes, despite the typological division of the selections into chapters, journal articles, lecture scripts, and so forth.

[1]This project was funded by a U.S. Department of Education Title VI grant for the "5th –year Chinese curriculum Development" through the National Resource Center: East Asia (NRCEA) at the University of Hawai'i at Mānoa for its 2014–2018 circle.

1.3.1 Scope of the CAPc

The textual difficulty level of the focal CAPc's selection of academic texts, which emphasize the expository and argumentative nature of disciplinary discourse, was assessed using Child's (1987, 1998) textual-modes framework and the Interagency Language Roundtable (ILR 2011) reading-level skill descriptions. Based on observations of the relationship between content and form, Child classified textual modes as orientation (O), instructive (I), evaluative (E), and projective (P), occupying a continuum of ascending textual difficulty from facts-oriented informational texts, O, to P: the product of "a consciousness notable for its quality of unique conceptualization or power of individuation" (1998: 386). A given text can represent a mixture of any two or more of these modes, or just one of them. The general correspondences between the four modes and current ILR (2011) reading-skill levels are summarized in Table 1.1.

The readability of complex texts can be related to various difficulty aspects, including the strength of the authorial voice; cultural specificity or markedness; assumptions of shared knowledge; inexplicitness; and abstractness. Academic texts, due to their analytical, conjectural, and literary natures, are mostly written in the P mode, supported to varying degrees by elements of the E and/or I modes.

Aimed at providing depth, the focal CAPc's materials-selection criteria were devised with reference to genre features and to Child's (1987, 1998) textual-modes framework. Each candidate article was analyzed using the rubric shown in Table 1.2.

Table 1.1 Child's textual modes as they relate to ILR reading-skill levels

Textual mode	Features	Textual type, traits, and elements of other modes	ILR scales
P	• Shared information and assumptions are minimal • Personal input is paramount	• Editorial, conjectural, and literary • Complex topics; philosophical concerns • Elements of E and I modes	5 4+ 4
E	• Expresses the author's points of view • Presumes facts or a common frame of reference	• Editorials, analyses, commentary, reports • Affective language • Elements of I and O modes	3+ 3 2+
I	• Conveys facts about events and situations	• Manual, narration, description, report • Factual, descriptive, and narrative • Elements of O mode	2 1+ 1
O	• Orients the reader to the 5 wh-s of situations and events	• News, short story • No elements from other modes	1+ 1

Table 1.2 Selection grid for candidate articles

Author(s) title		**Discipline**
Genre and/or text features	**Descriptors**	**Rating**
audience	general public or academic	
topic profundity	1–5 (most profound)	
language elegance	1–5 (*belles-lettristic*)	
text type	public speech	
	journal article	
	book chapter	
	forum article	
discourse structure	factual, argumentative, analytical	
organization	well-structured or freestyle	
text mode	E, P, or mixed	

One of the major goals of this CAPc was to prepare students to learn from articles drawn from a variety of disciplines, including Chinese language and literature, the visual and performing arts, political science, law, architecture, economics, psychology, philosophy, education, science, and anthropology. Their authors, all of whom are Chinese, comprise a mixture of academic celebrities and respected but lesser known scholars, each with a high level of expertise in his or her special academic genre and "in the communicative furtherance of its aims" within a particular discourse community (Swales 1990/2001: 26). While selecting and sorting candidate articles, consideration was also given to theses that addressed interesting issues in a humanities or social science discipline, as well as articles representing paradigmatic genre assemblages (Martin and Rose 2008) that had appeared in academic journals published in China. The finalized CAPc includes 15 articles, each presented as a stand-alone study unit (see Appendix). Each such unit is formatted in three ways: html for online use, and pdf and ebook for offline study.

1.3.2 *Structure of the CAPc*

To maximize learners' comprehension, the procedure of guiding them to generate meaning from academic texts (i.e., through an awareness of available designs) was constructed holistically and with an awareness of how linguistic resources, discourse structures, and textual references all contribute to the construction of meaning within a literacies-focused framework (Cope and Kalantzis 2009; Kern 2003; Paesani et al. 2016). This framework enabled the author and co-designers to develop a genre-based CAPc in which content-based teaching is integrated with academic-language exposure involving complex texts, abstract ideas, and higher-order thinking (Snow 2017). Specifically, the CAPc facilitates exploration of various Chinese academic genres' highly structured and conventionalized constructions, and of their linguistic and cultural content, through probing the rhetorical organization, genre features, and disciplinary content of authentic academic articles. All of these example articles typify discourse styles that are efficient for expert readers, insofar as they are structurally compressed and relatively inexplicit (Biber and Gray 2010), but for the same reasons may pose considerable difficulties for L2 learners.

Each article forms the mainstay of one of the CAPc's 15 thematic learning units, each of which contains lists of unit learning outcomes, warm-up activities, the text reading, linguistic devices, and genre features; a semantic map; information for further exploration of the unit topic; and a composition exercise. Each unit is also divided into three broad stages: pre-reading, while-reading, and post-reading, each of which will be dealt with in turn in the three subsections that follow. The three to five statements regarding unit learning outcomes serve as unit introductions, outlining the academic content, linguistic knowledge, rhetorical genres and organizational forms embedding sociocultural implications, and the expectations of argumentative compositions (as explained in the next section). Collectively, they formed a post-reading meaning redesign.

1.3.2.1 Pre-reading Stage

The pre-reading section of each of the CAPc's learning units, labeled as warm-up activities, was designed to equip learners with adequate background information via a variety of visual, textual, video, and/or audio input, with the textual material including but not limited to figures, tables, and charts. Bhatia's (1993) methodology for macro-level genre analysis recommends defining the writer/author and providing historical, sociocultural, and philosophical contexts for the community in which the discourse takes place. Accordingly, the CAPc pre-reading stage builds such contexts through extensive activities, mainly in the form of comprehension exercises and discussion, with the former targeting concepts or messages that will redound to general understandings at the while-reading stage. The discussion tasks, meanwhile, connect information about the text's author and cultural background to the learner's own experience. All pre-reading activities are structured to render the content of the main reading text more accessible by filling gaps in learners' knowledge.

1.3.2.2 While-Reading Stage

The focal CAPc's while-reading stage was constructed to guide learners through meaning construction in a multi-literacies process of interaction with texts. Unlike traditional Chinese-reading approaches, in which comprehension questions follow the texts, the CAPc provides readers with multiple opportunities to access, apply, and reapply their comprehension (Paesani et al. 2016). During this meaning-generating process, in other words, learners are expected not only to read between the lines, but also beyond the lines, to comprehend the "full ramifications" of a text in its wider cultural, political, or social environment (ILR 2011) and thus sharpen their critical thinking about it. They are also encouraged to use both macro- and micro-analysis (Bhatia 1993) to capture lexico-grammatical features, diagram text patterning, or textualization and interpret the structure of the text's genre(s).

This meaning-generating stage is presented in a three-column table-like layout, reflecting the multi-literacies approach to representational, social, structural, inter-textual, and ideological meanings (Cope and Kalantzis 2009: 175). The left-hand column, occupying three-fifths of the page by width, presents the original texts with each paragraph numbered, for ease of reference during the interactive activities listed in the other two columns.

The middle and right-hand columns, each of which takes up one-fifth of the page's width, raise interactive questions from the micro- and macro-perspectives, respectively, highlighting the essentials of the meaning-construction process. Questions or interactive activities in the middle column facilitate learners' explorations of rhetorical genres and content organization through meaning-generation. Users may identify expressions and word meanings in context (词语理解/推测); compare and contrast meanings' nuances or implications (比较分析); synopsize a long or complex paragraph (内容概括); extend their interpretation based on cues provided in the written text (拓展延伸); and/or ponder the possible answers to more probing questions by drawing upon all of their semiotic resources (内容深化). Figures 1.1 and 1.2 are examples illustrating the representational and social potentials of micro-multi-literacies exploration.

The right-hand column engages learners in multiple interpretive activities that focus on genre features, coherence and cohesion devices, and critical framing. At this macro-level of meaning-building, learners may respond to the text by envisioning or diagramming reader-textual interactions (人文互动); engaging in discussion with their peers (讨论分享); identifying the author's intention or voice (作者意图/态度); commenting on or evaluating the author's opinions from their own points of view (观点评述); and/or connecting the text to real-world situations, including their own experiences, as a pathway to deciphering its meaning in a broader context (联系实际). Figures 1.3 and 1.4 illustrate the interactive breakdowns.

It is recommended that all of the above text/reader and interactive activities be conducted in various forms of classroom discussion, which Murphy et al.'s (2009) meta-analysis of empirical studies found substantially improved learners' textual comprehension, and especially their literal and inferential comprehension. As Riley (1985) put it, "no two people ever 'read' the same discourse because they never

旅游，开放购物，于是普通话又在香港开始吃香。这种时尚潮流的变化后面，也是钱在起作用。	些汉语的典籍？
（12）以上这三个量的指标，在我来看有一定的道理。正是从这三个指标综合来看，汉语正由弱到强，正在重新崛起的势头上。我们对汉语最丧失自信心的一天已经过去了，提倡拼音化和拉丁化的改革，作为一次盲目的文化自卑和自虐，应该打上句号了。	（词语理解）“吃香”是什么意思？ （内容理解）“自卑”和“自虐”指什么？作者为什么这么说？“打上句号”是什么意思？
来自文言的汉语	
（13）前面我们是展开汉语外部的比较角度，下面我们进入汉语内部的分析，	

Fig. 1.1 An example of 词语理解/推测 & 内容概括

（3）体现在文化中却意味着对男性 / 女性间的对立与差异的取消 。当女性不再辗转、缄默于男权文化的女性规范的时候，男性规范（不是男性对女性、而是男性的规范）成了唯一的与绝对的规范。——“男同志能作到的事情，女同志一样能做到。”于是，这一空前的妇女解放运动，在完成了对女性的精神性别的解放和肉体奴役消除的同时，文化中的“女性”变为一种子虚乌有。女性在挣脱了历史枷锁的同时，失去了自己的精神性别。女性、女性的话语与女性自我陈述与探究，由于主流意识形态话语中性别差异的消	（拓展延伸）男性规范是什么？女性规范是什么？受限于男权文化的女性规范和受限于女性文化的男性规范会有什么特点？

Fig. 1.2 An example of “拓展延伸”

“宁愿坐在宝马里哭，也不愿骑着车笑”的择偶观，这是因为优越的社会地位是判断资源控制量的最通用的线索，远古时期，优越的社会地位意味着较好的食物，更为广袤的领地以及更为优越的健康护理。放至时下的社会，优越的社会地位意味着更多的物质，更多的机会，以及更为美好的未来。女性在择偶的过程中，显然更偏好那些能够给自己后代创造更多优越条件和带来安全保障的男性。 2.2.3 对于男性身体特征的关心	（句子理解）第（12）段开头说，“不同于男性”，那么这一段体现了女性与男性择偶的哪些不同？ （原文定位） 女性对于配偶的身体特征的关心体现了前面提	（联系实际） 根据自己的观察和经历，你觉得女性都是像第（12）段说的那样吗？ （对比讨论） 单纯从对于配偶的人格特征偏好来看，男性和女性有什么区别？为什么会形成这样的区别？

Fig. 1.3 An example of “联系实际” & “讨论分享”

（16）宗教倒是给予实际的信息。不过宗教给予的信息，与科学给予的信息，不相调和。所以在西方，宗教与科学向来有冲突。科学前进一步，宗教就后退一步；在科学进展的面前，宗教的权威降低了。维护传统的人们为此事悲伤，为变得不信宗教的		（观点评述）你同意作者所说的“在西方，宗教与科学向来有冲突”的观点吗？为什么？

Fig. 1.4 An example of “观点评述”

bring exactly the same knowledge, expectations and contexts to bear on the text" (p. 71). Interactive discussion in groups or plenary sessions would enable every CAPc reader to reconstruct meanings reciprocally with diverse personal experiences, knowledge, and cultural backgrounds, far beyond the context of the available designs provided by the CAPc itself.

1.3.2.3 Post-reading Stage

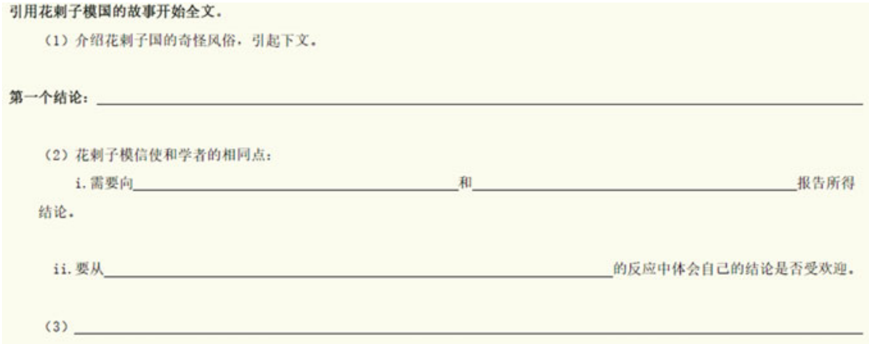
In contrast to traditional Chinese textbooks' post-reading emphasis on activities such as linguistic-pattern drills and exercises themed around word meaning and sentence structure, the proposed CAPc's post-reading stage guides learners to textual information re-sorting, knowledge application, and critical thinking. Further textual elaboration is prompted by background information (背景梳理) and semantic mapping (篇章结构图). The former recaptures the information gained from reading a text to strengthen content understanding and meaning construction, and the latter helps ensure that learners identify the textual structures' interrelationships, as well as the discourse strategies the author employed to reach his/her communicative goals. The contrastive study of the construction of rhetorical and argument structures highlights that Chinese texts are organized as circular discourse, unlike the linear discourse of English (Kaplan 1966). Some studies, despite contradicting Kaplan's characterization (Connor 2002), have shown that symmetric deference, such as absence of discourse moves, is a result of cultural considerations. Working on semantic maps after reading texts should help learners to comprehend their organization of meaning holistically, and prepare them mentally for upcoming meaning design as part of the writing process. Figures 1.5 and 1.6 are examples of textual elaboration.

［背景梳理］

根据课文中提到的政治与社会、文学、电影史上的大事记，完成下面的时间表。（注意：各项内容之间并非绝对清晰分割，而是可能有重合。）

政治、社会	文学	电影
1919 年 5 月 4 日：五四运动开始	新文化运动	
1949 年：新中国成立		1949—1959 年：男性欲望视域中的女性形象消失了在在电影的镜头语言中消失了。
		第四代导演
1966 年 至 1976 年：文化革命		第五代导演
	70 年代末开始：伤痕文学 70 年代末 80 年代初：反思文学	
	80 年代中期：寻根文学	

Fig. 1.5 An example of "背景梳理"



引用花刺子模国的故事开始全文。

（1）介绍花刺子国的奇怪风俗，引起下文。

第一个结论：______

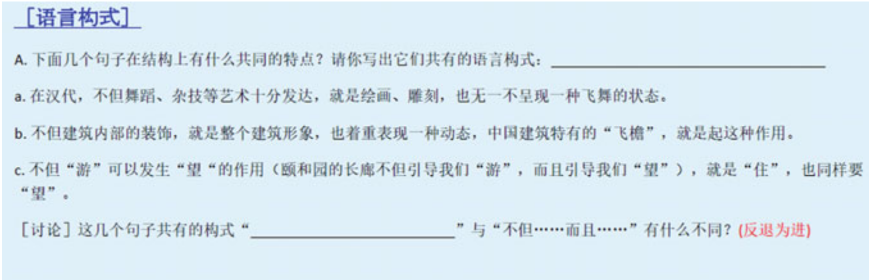
（2）花刺子模信使和学者的相同点：

i. 需要向______和______报告所得结论。

ii. 要从______的反应中体会自己的结论是否受欢迎。

（3）______

Fig. 1.6 An example of “篇章结构图”



［语言构式］

A. 下面几个句子在结构上有什么共同的特点？请你写出它们共有的语言构式：______

a. 在汉代，不但舞蹈、杂技等艺术十分发达，就是绘画、雕刻，也无一不呈现一种飞舞的状态。

b. 不但建筑内部的装饰，就是整个建筑形象，也着重表现一种动态，中国建筑特有的“飞檐”，就是起这种作用。

c. 不但“游”可以发生“望“的作用（颐和园的长廊不但引导我们“游”，而且引导我们“望”），就是“住”，也同样要“望”。

［讨论］这几个句子共有的构式“______”与“不但……而且……”有什么不同？(反退为进)

Fig. 1.7 An example of “语言构式”

This stage also furthers linguistic learning via situated practice, as opposed to sentence creation or re-modification using set patterns. The CAPc instructs its users to apply what they comprehend to re-generate meaning in new situations that it provides (语言构式), thus placing the learning focus on practicing the rhetorical moves and steps that an argumentative academic article would typically employ as discourse devices, as illustrated in Fig. 1.7. About half of the proposed CAPc's learning units provokes learners to contemplate established scholars' work using critical framing (批判思考), which can be expected to incite alternative interpretations or explanations. Figure 1.8 shows an example of this.

In general, the architecture of the focal CAPc's reading section is intended to help learners navigate the cognitive development arising from their confrontation with multiple dimensions of texts' linguistic and rhetorical features and meanings. Learners can be expected to emerge from the meaning-construction process with abilities far beyond simple cognition and be able to analyze, interact with, synthesize, thoroughly evaluate, and critically engage with not only the content but also the literacies of the target text.

三、批判思考

（一）本文介绍了众多的概念和理论，那么，文章中的说法是不是完全准确？有没有什么问题？

（二）请你评价一下本文的逻辑、结构和论证方式。

（三）请你阅读下面的材料，说一说和本文的观点有什么相同和不同。

Fig. 1.8 An example of "批判思考"

1.4 The Realization of Critical Thinking Through Genres

For decades, an emphasis on writing has been one of the key features of EAP (Hirvela 2016). Reading for writing within a wider framework of reading/writing connection is a process during which learners begin composing their own texts based on post-reading instructions or other stimuli. This process encourages them to make full use of the reading material that they have just encountered and interacted with and is thus considered indexical and essential to their success in academic writing (Shaw and Pecorari 2013). In the L2 realm of EAP and multi-literacies, reading is no longer simply a receptive skill, nor writing a simply productive one. Rather, the former has become a meaning-construction process in which learners generate knowledge and accumulate resources, both linguistically and socioculturally. Similarly, writing is positioned as a reproductive and transformational journey through dynamic sourcing from read texts, as well as through inspirations and reflections that arise during meaning design or redesign.

Writing instruction in Chinese for specific purposes (CSP) has focused heavily on the domains of business and trade. Although the existing body of research on the genre-based approach remains fairly small, its findings so far have been compelling and lend weight to its recommendations that learners should be exposed to authentic writings' structure, discourse devices, pragmatic information, strategies (Hong 1998), and communicative moves and steps (Zhu 2001). This should enable them to produce situationally appropriate CSP writing that demonstrates their awareness of cultural differences and the use of strategic approaches. Despite these research-based recommendations reflecting EAP trends, however, most current textbooks for CSP writing (e.g., Ha 2003, Lin 2009, Zhou and Li 2011) chiefly employ linguistic-building tasks. Few of them provide genre or discourse guidance, instead simply summarizing phrasal connective expressions and encouraging linguistic drills or transformations. Moreover, the writing prompts in such textbooks tend to be merely one- or two-sentence commands such as "Write a letter about…."

However, discipline-specific undergraduate writing involves much more than learning particular linguistic forms. Rather, it “relates to learning socially preferred ways of knowing and acting” (Tardy and Jwa 2016: 61), including the dynamic and social nature of genre, as well as discourse patterns shaped by rhetorical context or communities of practice.

The proposed CAPc adopted the reading-for-writing approach (Hirvela 2016) as part of its attempt to guide learners to recycle known concepts and ideas as well as linguistic and genre resources from reading via meaning construction, and to apply meaning design to their writing. The ultimate goal of this approach is to enable learners to produce writing that generally conforms to the key features of any reading model from which they have constructed meanings through textual analysis. The CAPc’s writing section was devised with reference to Wingate’s (2012) essay-writing framework, which scaffolds learners development of an argument in their expository compositions, and proceeds via pre-, during-, and post-writing stages (Chazal 2014).

1.4.1 Pre-writing Stage

The CAPc provides overt instruction on contextualizing writing goals, with explicit guidance on:

(1) generating an intriguing title addressing a critical issue scoped in the instruction;
(2) resourcing various types of information, especially knowledge and meanings generated from interaction with available designs during the reading process;
(3) organizing information cohesively in a well-formed structure, including, at a minimum:
    (a) introduction of the topic;
    (b) development of arguments with analysis and evidence, and
    (c) a cogent conclusion;
(4) imitating the reading model’s rhetorical moves, genre style, and linguistic and discourse devices; and
(5) formatting the entire composition in an appropriate academic style, including an abstract and references.

The core of this form of instruction, i.e., encouraging learners to couple rhetoric and composition (see Fig. 1.9), has been strongly influenced by the teaching of EAP writing (Tardy and Jwa 2016). Upon carefully reading and analyzing the reading assignment, students brainstorm ideas and strategies and share their initial thinking during class discussion, and then work on information-gathering and ideation in preparation for next stage.

学习课文和观看视频后，请你从文化社会的角度对比分析中国人和美国人的择偶标准，就两国的择偶心理写一篇小论文，阐述你的观点和看法。题目自拟。你可以从课文的某些观点出发，也可以从其他阅读或视频中引发的问题进行探讨。

要求：

- 基于对真实材料（例如相亲约会类电视节目、征婚广告）的统计和分析
- 结合中国和美国的社会文化特点，包括经济、政治、历史及人口构成等相关方面
- 采用论文格式，包含论文的主要结构部分：研究问题（研究目的）、文献简述、理论框架（和研究方法）、研究的原创性和意义、参考文献等。

Fig. 1.9 An example of writing instructions

1.4.2 During-Writing Stage

Although students using the proposed CAPc choose their own writing topics, they must do so within specialized subject areas that are closely related to the CAPc unit's reading material. In the drafting process, they may consult instructors for specific advice while continuing to scan additional resources and critically re-reading their earlier versions. Formal interventions are provided in the form of written corrective feedback (CF) and suggestive feedback (SF) after the first draft. Teacher–student conferencing, when initiated by students, consists of efforts to broaden the range of writing undertaken and/or clarification of feedback comments. Despite controversy about it that has endured for decades, written CF has been shown by meta-analysis to be efficacious in improving L2 writing accuracy (Kang and Han 2015); if optimally implemented, it has potential to increase the effectiveness of students' written texts (Ferris 2017). Moreover, some research has shown that learners consistently demonstrate a desire for CF and an expectation that they will receive it (Evans et al. 2010).

The CAPc's CF on linguistic forms and rhetorical devices is provided implicitly, in the form of codes that categorize different types of errors, so that students can make an effort to correct their own work. SF, on the other hand, explicitly advocates revisions that will address structural, genre, and organizational problems. At this stage, students' revised drafts might not completely satisfy the expectations stated in the learning outcomes, in that their compositions may need structural readjustment, modification to their rhetorical steps, and/or different linguistic choices.

1.4.3 Post-writing Stage

The CAPc's users are expected to compose a minimum of two drafts before receiving a score based on their final version, arrived at via a specially designed analytic rubric. For further improvement, students are instructed to choose two compositions from among all the ones they have completed, and orally present one in the middle of the semester, and the other at the end. Comments, questions, and suggestions from the audience of classmates and instructors are orally delivered during the same class session, though critiques from the instructors are also handwritten on an evaluation sheet and returned to the presenters. Should a student choose to incorporate all these deliverables into one or more further revisions, and demonstrate progressively more sophisticated levels of attainment in the newer version(s), s/he would receive a higher assessment score for this writing.

1.5 Contribution to CAP Pedagogy and Research

This chapter has detailed a rigorous attempt to integrate EAP research results into pedagogical CAPc development. Seen through the lenses of multi-literacies and genre-focused meaning design, the proposed CAPc highlights the dynamic nature of textual decoding and meaning-creation in the processes of reading and writing. Its efforts to promote textual interpretation, transformation, and creation of Chinese-language texts have the potential to be integrated into a broad array of CAP humanities contexts. Considered as representative of genres of literary texts, academic writings (including all the articles selected for inclusion in the CAPc) are not a self-contained enclave, but rather the center of an interdisciplinary network that learners can and should explore. These genres' connected feelings, collective drives, social issues, and ideologies, all of which are "transfigured through a sophisticated and imaginative use of language" (Pireddu 2008: 222) are thoroughly interrogated by the CAPc, which has met its goal of providing innovative instruction in academic Chinese that bridges language and disciplinary content via literacy-based approaches. In this dynamic process, meaning construction and meaning design or redesign are integrated through the reading of academic texts and producing augmentative compositions that cover various thematic topics. Reading and writing are no longer bound in a traditional linear relationship in which the former precedes the latter. Instead, the CAPc interconnects these two literacy processes through meaning design, as illustrated in Fig. 1.10.

The various meaning interpretations and constructions in the CAPc reading process provide representative linguistic, rhetorical, and content models that are adequate to inspire learners' composition, i.e., process (1) in Fig. 1.10. In their academic-writing adventure, students organize their thoughts, analyses of, and

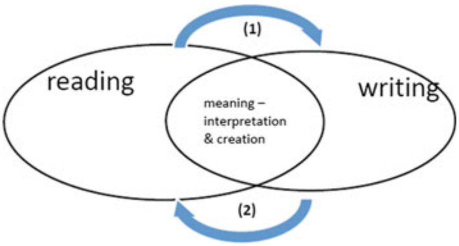


Fig. 1.10 Interconnection of reading and writing in CAPc

reflections upon their academic readings via composition, i.e., process (2). During process (2), students return to texts and re-read, resourcing linguistic, rhetorical, and stylistic elements from the readings to enrich their writing (see Kern 2000). Process (2) enables students to re-interpret texts' meanings more actively and critically during their personal endeavors in meaning-design and meaning-redesign. During recursive meaning design, the inextricable interweaving of academic materials with associated tasks constantly decodes the complexity and uniqueness of academic texts. Reading and writing work in concert to prepare CAPc learners for academic pursuits in this dynamic process. An end-of-semester survey of learners' perceptions regarding the CAPc was administered and included quantitative preferences (on five-point Likert scales ranging from 1, representing the lowest rating to 5, representing the highest) and open-ended qualitative questions. To the item "To what extent has reading the texts facilitated your writing?", the mean response was 4.2 (n = 14), with a standard deviation of 0.69. In response to the open-ended question "How have your writing experiences affected your comprehension of the texts?", one learner stated, "I have become more critical in both ideational process and analysis of the reading article"; and another stated that writing "required more analytical thinking than I had imagined, and I have strived to (work on it)."

It is clear that the CAPc designers and instructors effectively engaged learners in meaning-construction, especially with regard to raising their consciousness of the features of Chinese academic genres, along with other more "hidden" constitutive elements. In the aforementioned survey, some 71% of the participants commented that the interactive activities next to the texts evoked their comprehension profoundly. More than a quarter of the survey questions inquired about various aspects of the students' writing experiences while using the CAPc, and the great majority of the respondents (86%) credited the explicit instruction for their successful completion of writing tasks, which in turn encouraged them to, on the one hand, do more research on the writing topic and augment their knowledge, and on the other, engage in ideation with their own semantic maps and design meanings by following the model text. A more detailed study of the CAP writing these students produced, featuring analysis of one student's compositions during his two-semester enrollment in the CAPc, will be conducted (Author, forthcoming) to showcase the improvements in argumentative writing that the CAPc was able to deliver.

1.6 Limitations and Future Directions

The CAPc was piloted in a foreign-language setting, but is intended for implementation in Chinese L2 environments as well. Although the pilot revealed that the CAPc contained ample meaning-generating interactions for reading, its support for meaning design and redesign through writing was relatively insufficient. Previous work on academic-language curriculum development for humanities disciplines has shed light on "hybrid" genres in the process of pursuing academic literacies and argued that such curricula should not only enrich the learning experience during reading, but also through writing (Lillis and Tuck 2016). In this case, the provision of academically well-rounded meaning-design was challenging—not only for the learners, but for the CAPc's developers and instructors, who struggled to discern the "between-the-lines" implications and intentions in some texts. As such, consultation with the selected reading texts' authors (if possible) or other experts in their fields will be necessary to confirm, expand, and revise some of the CAPc's interactive analytical activities.

Despite its imbalance between meaning construction and meaning design/redesign, the focal CAPc nonetheless has provided important insights into the potential practical application of EAP research, while also raising questions for future investigations. Two areas in particular merit special consideration by future researchers. The first is the development of an efficient, systematic needs-analysis methodology for Chinese academic curricula, involving all stakeholders. As with any other types of specific-purpose curriculum, such a needs analysis should be based on triangulations of research methods and data gathering, as this is fundamental to a defensible curriculum. The students who used the piloted CAPc were from diverse disciplines and had a range of different learning needs and goals. Designed in the absence of a formal needs analysis, the CAPc covered a wide range of disciplinary content and thus may not reflect some disciplines' high level of integration of LAP through implementation of skill-based approaches and enhancement with discipline-specific requirements (Bocanegra-Valle 2016). As we look forward to the challenges of field-testing the focal CAPc in more diverse institutional environments, additional research should investigate how academic-literacy goals are situated differently in macro- and micro-perspectives: e.g., how learners are expected to make intertextual references during both reading and writing in different disciplines.

Second, it would be beneficial if both practitioners and researchers paid greater attention to the construction of Chinese academic corpora, as Tao (2018) and his team have been doing. As Feak (2011) has demonstrated, data-driven learning based on corpora is an extremely important consideration in LAP materials development, as it can address broad spectra of factors, genres, and strategies. A well-constructed LAP corpus provides researchers and curriculum designers with extensive access to genre- and disciplinary variations for analysis of academic registers, vocabulary, and so forth (Bondi 2016). An excellent CAP corpus, if made publicly available, would not only facilitate valuable insights into Chinese academic-language use that would be relevant to both CAP learners and designers of CAP curricula, but also foster critical readings of the typical beliefs, values, and argumentative strategies of various disciplines.

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Appendix

Authors and Titles of Articles in CAPc

(Curriculum URL can be found at: https://sites.google.com/a/hawaii.edu/chn/home) Listed in the order of the actual units

韩少功.《现代汉语再认识》Re-understanding modern Chinese [a speech script in 2004].

王小波. 2009. 《花剌子模信使问题》The issue of Khwarizmian messengers. In 王小波《沉默的大多数》*Silent majority*. Beijing China Youth Publishing Group.

李燕琴，刘莉萍. 2011. 《夏威夷对海南国际旅游岛可持续发展的启示》The implications of Hawaii's sustainable development on Hainan's international tourism.

宗白华:《中国园林建筑艺术的美学思想》Aesthetics in the art of Chinese gardening architecture.

戴锦华:《可见与不见的女性:当代中国电影中的女性与女性电影》The visible and invisible feminine: The feminine in contemporary Chinese movies and feminine movies.

一剑飘尘:《中国经济会不会崩溃》Will Chinese economy collapse or not?

黄凯杰，赵倩，李丹:《从进化心理学的角度浅析男女择偶观》An analysis of the views of espousing between man and woman in terms of evolutionary psychology.

李泽厚:《儒道互补》The mutual complement of Confucianism and Taoism.

韩春晖:《人治与法治的历史碰撞与时代抉择》A historical clash and the choice of time: Rule of man or rule of law《国家行政学院学报》2015 (3).

汤哲声:《论中国当代科幻小说的思维和边界》On the thinking and boundary of contemporary Chinese fiction novels.

冯友兰:《中国哲学的精神》The spirit of Chinese philosophy.

江婷, 熊英:《基于科举与学校关系的演变来看我国高考的改革》 Viewing the reform of China's college entrance examination from the evolution of the relationship between imperial examination and schools.

宗白华:《中西画法所表现的空间意识》The spatial conscious expressed in Chinese and western paintings.

袁行霈:《中国文学的分期》The divisions of Chinese literature periods.

袁行霈:《中华文明的历史启示》Historical inspirations of Chinese civilization

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Chapter 2
Teaching Chinese Metadiscourse in University Lectures: The Case of *Jiushi* (就是)

Vincent Yi-Lun Li and Miao-Hsia Chang

Abstract Studies have shown that metadiscourse plays a crucial role in comprehension, cohesion, and coherence of academic discourse. The study analyzed 450 min of academic lectures and identified three major metadiscourse functions of *jiushi*: intensification, elaboration, and pause filler. Intensification is further delineated as exclusiveness, concession, conditionality, and contrast, and elaborative use as reformulation and exemplification. We also provide a review and analysis of errors in the use of *jiushi* by learners of Chinese. Based on the results of analysis, material design for teaching the intensifying *jiushi* and classroom activities for teaching the elaborative and filler *jiushi* are proposed. It is hoped that this study elucidates both teaching and learning Chinese metadiscourse in academic settings.

2.1 Introduction

Harris (1959) firstly coined the term 'metadiscourse' in 1959, and this linguistic concept was later developed by scholars of rhetoric stylistics and writing pedagogy (e.g., Crewe 1990; Crismore 1989; Mauranen 1993; Vande Kopple 1985; Williams 2003) and applied linguistics (e.g., Hyland 2005; Ifantidou 2005; Thompson 2001). Following Hyland's definition, metadiscourse is defined as 'a cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage readers as members of a particular community' (Hyland 2005: 37). In other words, metadiscourse helps writers/speakers express meanings beyond the propositional content and achieve interpersonal functions at the textual level. Furthermore, it plays a crucial role in university students' lecture comprehension and the cohesion and coherence of lecturers' academic discourse (Bu 2014; Hyland 2009; Pérez and

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Macià 2002). Typical metadiscursive expressions are adverbially used by writers to signal intertextual relations (Ädel 2006: 22). In Mandarin Chinese, the adverbial/connective *jiushi* 'just+be,' among others, has been identified as a frequently used metadiscourse marker in Chinese discourse and consequently has received extensive research attention (e.g., Chen 2006; Tao 2009; Yao and Yao 2012; Zhang et al. 2016). For example, in newspaper articles (e.g., Chen 2006), Internet sources (e.g., Chen 2013), or fictional texts (e.g., Sheng and Qiu 2009; Lu 2011), *jiushi* and its variant *jiushishuo* perform emphasizing or linking functions. In spoken discourse, these expressions perform even more diverse functions (Chen 2006; Yao and Yao 2012; Chen 2013) that demonstrate different stages of grammaticalization in conversational speech (Biq 2001; Tsai 2012). While these studies have enriched our understanding of the functions and grammaticalization of *jiushi* in conversational discourse and various types of written texts, less is known about its functions in spoken academic discourse or academic prose. Furthermore, these studies either provide a limited description of the pedagogy of *jiushi* (就是) 'that is' or do not systematically discuss the design of materials to teach learners of Chinese as a foreign language (CFL). However, research on pedagogy for academic purposes highlights the importance of metadiscourse expressions in academic contexts (Hyland 2006), wherein the focused instruction of metadiscourse 'may assist…[L2] learners in developing the literacies and skills necessary to produce and comprehend academic discourses' such as monologic or dialogic academic speech (Zare and Tavakoli 2017: 163). Failure to employ them in academic discourse undermines the logical connection between ideas (e.g., Gao 2014) or affects the comprehensibility of lectures (Shi 2014). In our preliminary analysis of metadiscourse markers in spoken academic discourse, we also found that *jiushi* emerged as the most frequent two-word bundle in university classroom lectures. In light of the importance of *jiushi* in academic settings, the current study aims to uncover the uses of *jiushi* and its variants in academic discourse and offer pedagogical recommendations for CFL teaching. The focus is on the uses and teaching of *jiushi* in spoken academic discourse. By exploring the above issues, it is hoped that CFL learners will better understand the functions of *jiushi.* More important, explicit instruction would enable CFL learners to use *jiushi* appropriately to increase the logical flow of ideas and comprehensibility of their output in oral presentations in institutional settings.

In Sect. 2.2, we provide a brief overview of the previous literature on the discourse functions of *jiushi*. Section 2.3 discusses the functions of *jiushi* in academic discourse. Recommendations for the design of materials and classroom activities for teaching *jiushi* are provided in Sect. 2.4, and finally, in Sect. 2.5, the research is summarized and concluded.

2.2 Chinese Metadiscourse Marker *Jiushi*

The uses of *jiushi* have been discussed in the current literature from three perspectives. One concerns the grammaticalization path of *jiushi* focusing on its function as a discourse marker in natural conversations (Biq 2001; Li 2012; Liu 2007; Yao and Yao 2012; Zhang 2002; Zhang and Gao 2012). Another involves a concise description offered by Chinese dictionaries either for native speakers or learners of Chinese (Lü 1999; Luo 1988; Zhu 2009). More recently, the focus is on the pedagogy of *jiushi*, as evident in textbooks for CFL learners (Fan et al. 2010; Tao 2011; Teng 2015; Yeh 2013), where the functions of *jiushi* are mentioned sporadically with correlative constructions (e.g., *jiushi…ye…*'even if'; *bushi… jiushi…*'either…or…

As the present study focuses on providing recommendations for teaching *jiushi* to CFL learners, we will not delve into the vast literature on the functions thereof. Instead, to provide comprehensible input to CFL learners, we identify three main functions of *jiushi* in the discourse based on previous research and Chinese dictionaries: as (i) an intensifier used as a stance adverbial to emphasize part of the discourse and express subjective certainty, with predicative statements signaling exclusiveness, concession, conditionality, or contrast (Zhang 2002); (ii) a connective used to elaborate the previous discourse by reformulating or exemplifying; and (iii) a discourse marker used as a floor-holder device or pause filler. These three functions are briefly reviewed next.

Jiushi used as an intensifier consists of the adverb *jiu* 就 and copula *shi* 是. *Jiu* is a predicate-initial adverb with multiple meanings in different contexts (Biq 2001). When occurring with *shi, jiu* strengthens the affirmative statement expressed by the predicate and emphasizes 'the preciseness of the equation' (Biq 2001: 56). The emphatic use can signal various types of logical relations between clauses, including exclusiveness, concession, conditionality, and contrast. Examples (1)–(4) illustrate these uses, respectively.[1]

(1) 清末開始要制憲， 就像我剛剛一開始所講的， 爲的就是要救亡圖存。(*qingmo kaishi yao zhi xian, jiuxiang wo ganggang yikaishi suo jiang de, weide jiushi yao jiuwangtucun*) 'The purpose of drawing up a new constitution at the end of the Qing Dynasty, as I said in the beginning, **was to** save the country from subjugation.'

(2) 不用說/莫說/非但是那個名醫， 就是華陀再世也毫無辦法。(*buyongshuo/moshuo/feidanshi na ge ming yi, jiushi huatuo zaishi ye hao wu banfa*) '**Even** the rebirth of Hua Tuo, let alone that famous doctor, could not do anything about (it).'

[1]The translation of *jiushi* is indicated in bold. However, if there is no corresponding meaning, we leave *jiushi* in the translation to show its relation with the surrounding discourse.

(3) 只要你幫我, 就是做牛做馬, 我也要回報你。(*zhiyao ni bang wo, jiushi zuo niu zuo ma, wo ye yao huibao ni*) 'As long as you help me, I will return the favor, **even if** I have to work my fingers to the bone.'

(4) 他除了/不是在看電視, 就是在睡覺。(*ta chule/bushi zai kan dianshi, jiushi zai shuijiao*) 'He is always either watching TV or ***just*** sleeping.'

As seen in (1) through (4), *jiu* holds its canonical meaning in modifying the predicate following *shi* 'be.' That is, the propositional content of the concurring clause is specified and emphasized. In (1), *jiushi* specifies the purpose of constitutional movement at the end of the Qing Dynasty, serving as a forward-linking element that emphasizes the speaker's intention in the previous stretch of discourse. Also evident in (2)–(4) is that a given textual relation can be reinforced by a specific collocating adverbial(s) to form a construction with *jiushi* to signal the relation; e.g., the sequence *buyongshuo…jiushi...ye* 'disregarding…even…also' forms a construction meaning that the current situation still holds even with the existence of the proposition associated with *jiushi*. Without the logical indicator, the rhetorical meaning of the clausal complex would be lost.

Second, derived from the canonical function of expressing preciseness, *jiushi* can also specify or elaborate the antecedent by reformulating and thus building an appositive relationship (Halliday 1994). This use of *jiushi* expresses the speaker's concern about the listener's understanding of discourse. In the following discussion, these uses are called the 'elaborative' use. An example is provided in (5):

(5) 所以要讓各位知道, 即興演講要把握哪些原則, 即興演講就是讓你沒有任何的準備, 所以也就不用擔心, 擔心也沒有用。(*suoyi yao rang gewei zhidao, jixing yanjiang yao bawo naxie yuanze, jixing yanjiang* ***jiushi*** *rang ni meiyou renhe de zhunbei, suo yi ye jiu buyong danxin, danxin ye meiyou yong*) 'So I would like to inform you of the principles of impromptu speech. Impromptu speech **jiushi** means there is no preparation needed; thus, you do not have to worry about it. It is useless to worry.'

In (5), the topic concerned is impromptu speech, and the speaker considers it necessary to further explain this type of speech by emphasizing its unplanned nature, which is central to the definition of this term. Moreover, *jiushi* in this example not only plays an important role in maintaining the cohesion of discourse, but also facilitates the listener's inference of the causal relationship expressed in the following stretch of discourse.

The third function of *jiushi* is to fill the pause between two stretches of discourse. It can also be optionally followed by the utterance-final particle *ne* or complementizer *shuo* to fulfill the same function, as shown in (6).

(6) 那精神科的醫師呢, 了解他狀況後, 就是(說), 多層面的來指導他。(*na jingshenke de yishi ne, liaojie ta zhuangkuang hou,* ***jiushi(shuo)****, duo cengmian de lai zhidao ta*) 'And the psychiatrist, after understanding his situation, **jiushi (*shuo*)** guides him from multiple dimensions.'

Here, the canonical copula sense of *jiushi* is reduced to a mere pause filler (Biq 2001). It serves as a discourse marker that appears before the main propositional content to fill the hesitation gap to maintain the fluency of the discourse. Often, it appears at the beginning of an utterance.

While previous studies have attested these functions of *jiushi* in spoken or written discourse, these uses are not equally present in the current textbooks used to teach CFL. For example, Gao and Shi (2014) point out that students might have difficulty understanding the use of *jiushi* as a discourse marker; however, this usage is not emphasized as much in textbooks as the usage of an adverb or connective (e.g., Ma 2015). Our analysis of *jiushi* in a few frequently adopted Chinese learning materials (e.g., *Practical Audio-Visual Chinese*, Book 3) also revealed that the filler function is not included in the textbooks, except in Tao (2011), which lists the pause filler function in Unit 5. Given that *jiushi* is among the most frequent bundles in spoken discourse (see Sect. 2.3 for details), the current study provides recommendations for more thorough course design for the uses and instruction of *jiushi*, focusing on its most frequent functions in spoken academic discourse. The written academic discourse is also compared to demonstrate the differences between these two registers, which underscores the need to examine both the uses of *jiushi* in academic spoken discourse and in its written counterpart.

2.3 Data and Distribution of *Jiushi* in Academic Discourse: Written and Spoken

In the following, we first provide an overview of the distribution of *jiushi* and its synonyms in academic prose. Then, we focus on the same expressions in spoken discourse, followed by an analysis with illustrating examples.

2.3.1 Academic Prose

To test the validity of our initial assumption that *jiushi* in written academic discourse is mainly used as an emphasizer or formal connective, we searched for bundles containing *jiushi* in 86 journal papers in three disciplines representing humanities, social sciences, and natural sciences (30 articles by different authors from 3 journals in the literature and history, 29 articles from business and finance, and 27 from biology).[2] The results confirmed our initial assumptions. First, as shown in Table 2.1, *jiushi* most frequently appeared as an adverb among all related

[2]All the journals analyzed were award-winning journals granted by the ROC National Science Council between 2000 and 2009. Chang et al. (2012) used the same database in their study of attribution hedges in written Chinese academic discourse.

expressions across the three disciplines. In terms of the functions, the analysis shows that all the *jiushi* expressions carry the canonical functions of emphasizing a predicate (*jiushi*) or as a formal connective linking phrases or sentences with clear logical relations (*jiushi, jiushishuo, yejiushih,* and *yejiushishuo*). No occurrences of *jiushi* are used as a filler or to connect phrases or sentences with loose logical relations. Further examination of the occurrences of *jiushi* in the three disciplines indicates a strong disciplinary effect; that is, almost all tokens of *jiushi* are in articles in the soft sciences. This uneven distribution supports Hyland's argument (2005) that the uses of connectives differ significantly across academic disciplines. The disciplinary tendency also concurs with the finding by Chang et al. (2012: 298) regarding the nature of argumentation in the soft sciences, which contain 'a large proportion of qualitative description.' The use of *jiushi* as an emphasizer enables writers to further strengthen their argument to establish the credibility of their claims (see also Hyland 1998 for a discussion of disciplinary differences).

Based on the findings reported above, we next examined *jiushi* in spoken academic discourse. The data was collected from ten lectures in online open courses, as detailed in the following sections.

2.3.2 Spoken Academic Discourse

This section discusses the functions of *jiushi* in spoken academic discourse. Because of the availability of lectures and confidentiality concerns, we selected online open lectures from five leading national universities in Taiwan (Taiwan Open Course Consortium: http://www.oeconsortium.org). Lectures from online open courses were selected because they are publicized materials and therefore no conflict of interest is involved. Furthermore, senior professors delivered the lectures, which best represents how metadiscourse markers are actually used. Furthermore, the quality of the lectures is ensured. Regarding the disciplines selected for this investigation, lectures in the social sciences, which are the main source of *jiushi* in writte.n discourse, were chosen, because of the disciplinary tendency mentioned above. The subfields in these lectures include law, communication, culture, psychology, education, and economics (see the appendix for details).

The whole dataset for analysis comprised 7.5 h of 10 lectures from the online open courses, which contain about 110,000 words and 9200 clauses. Based on Li (2014), who classified connectives in Chinese dissertation abstracts following Halliday's (1994) classification, a selective list of metadiscourse markers was compiled. We then ran a frequency count of all the connectives in the databank, which yielded an approximate 5100 uses of metadiscourse markers.

As a metadiscourse marker with various functions, *jiushi* was used predominantly in our databank of academic lectures. The results confirmed those of our pilot analysis that *jiushi* was the most frequently used connective in spoken

Table 2.1 Distribution of *jiushi* in the Academic Written Corpus

	Discipline		
	Humanities	Social sciences	Natural sciences
# of tokens	354	183	4
Total of segmented words[a]	**319,673**	**231,509**	**105,029**
# per 10,000 words in the discipline	11.1	7.9	0.4

[a]The texts were all segmented using the online segmentation system offered by Academia Sinica (http://ckipsvr.iis.sinica.edu.tw/) (Chinese Knowledge Information Processing Group (CKIP) (1998), a Chinese Word Segmentation System with Unknown Word Extraction and Pos Tagging)

Table 2.2 Functions of *jiushi* in the Spoken Academic Monologues

Function		*Jiushi*	*jiushishuo*	Total	
Intensifying	Exclusive	228	0	228	35%
	Concession, conditional, contrast	6	0	6	1%
Elaborative		190	56	246	38%
Filler		114	52	166	26%
Total		538	108	646	100%

academic discourse. Furthermore, *jiushi* accounted for the majority (80.5%, 520/646) of all semantic variants across the ten lectures. Further analysis indicated that *jiushi* expressions performed the three major functions discussed in Sect. 2.2. Table 2.2 summarizes the results of the analysis.

As shown in Table 2.2, the three functions of *jiushi* and its variants are evenly distributed in the spoken corpus. These functions also illustrate the different degrees of grammaticalization discussed in previous studies (e.g., Biq 2001), from the more canonical function of intensification, to one that encodes metalinguistic relations between clauses/phrases, to a filler without clear semantic content. In addition to the semantic diversity, a few interesting facts about *jiushi* are observed regarding functional distribution and their corresponding examples. First, almost all the occurrences of intensifying *jiushi* carry the exclusive function. Only a few occurrences are used to denote the concessive, alternative, or conditional functions. However, these latter, non-intensifying, uses have been the focus of discussion in the pedagogy of *jiushi* (e.g., Hao 2013; Chen 2013), while nuances of the intensifying function have been ignored. The design of teaching materials should address the functional distribution reflected in authentic discourse for a more balanced presentation of uses. Second, an analysis of the utterances of *jiushi* indicates that the lack of the exact semantic content of the filler *jiushi* does not mean that it is omissible in the utterances. However, a lack thereof would affect the flow of the discourse and make the juxtaposed clauses sound odd. When trying to employ them in their oral discourse, CFL learners may find the duality of the status of *jiushi* challenging.

In the following section, we discuss the major functions of *jiushi* in the academic spoken corpus. The discussion differs from that in Sect. 2.2, as we provide representative sub-functions of each main function which meet three standards. First, the distinction between sub-functions should be clear enough that teachers can give explicit instructions and learners can practice accordingly. Second, the authentic examples are representative of the actual use of *jiushi* in an academic context, especially in the monologic spoken academic register. Correct understanding and use of these functions can help students achieve successful communication in oral presentations—an important activity in the CFL classroom. Third, these sub-functions should complement current Chinese teaching and learning materials, since most of the usages are not paid enough attention in general-purpose textbooks.

2.3.2.1 An Adverb Used for Intensification

The first main function of *jiushi* is to intensify the propositional content in a stretch of discourse. In this function, *shi* still carries its copula meaning with the emphatic modification of the adverb *jiu*. In addition, the morphosyntactic boundary between *jiu* and *shi* is comparatively clearer than that in other senses of *jiushi*; that is, the sentence is still comprehensible with the omission of *jiu*, which only plays a role in emphasizing the copula *shi*. With their high frequency of co-occurrence, however, *jiu* and *shi* have been lexicalized into a disyllabic adverb, as evidenced in modern Chinese dictionaries such as by Luo (1988) and Zhu (2009), where *jiushi* has been recorded as an independent entry (Dong 2004). Therefore, *jiushi* functions as an intensifier that modifies the following predicate and expresses the state or quality of the subject. The following excerpts are from our databank, which illustrate authentic uses in spoken discourse:

(7) 但是有些工作就是不適合女生做的。(*danshi youxie gongzuo* ***jiushi*** *bu shihe nusheng zuo de*) ‘However, some jobs are ***just*** not suitable for females.’
(8) 只要你任何鞋根進去就是很容易斷掉。(*zhiyao ni renhe xiegen jinqu* ***jiushi*** *hen rongyi duandiao*) ‘As long as any heel gets stuck, it **jiushi** breaks easily.’
(9) 程序上面就是會發生這樣子的問題。(*chengxu shangmian* ***jiushi*** *hui fasheng zheyangzi de wenti*) ‘Such problems **jiushi** occur in terms of the procedure.’

In (7), *jiushi* intensifies the extent to which women are unsuitable for some jobs. In (8), the assumption about a given situation is intensified to warn of the possibility of breaking heels. In (9), that such problems are certain to occur in the procedure is intensified. Based on these examples, we find that *jiushi* defines a semantic scope and specifies the meaning of the preceding noun phrases.

The second sub-function of intensification is to single out a nominal element and make it the topic of the present concern. Consider the following passages:

(10) 中國大陸有許多民族大學, 也有民族學院, 最重要的就是中國大陸的中央民族大學。 (*zhongguodalu you xuduo minzudaxue, ye you minzuxueyuan, zui*

zhongyaode ***jiushi*** *zhongguodalu de zhongyang minzudaxue*) ‘There are many universities and colleges for various nationalities in Mainland China. The most important **is** Minzu University of China.’

(11) 包括早期的華工…包括西班牙、葡萄牙裔的第二階段的移民…那麼當然還有一個美國裡頭最重要的，就是當年從非洲這個被當奴隸賣過去的叫黑奴。(*baokuo zaoqi de huagong…baokuo xibanya, putaoyayi de dier jieduan de yimin… name dangran hai you yige meiguo litou zui zhongyao de,* ***jiushi*** *dangnian cong feizhou zhege bei dang nuli mai guoqu de jiao heinu*) ‘It includes early Chinese laborers and immigrants from Spain and Portugal at the second stage. And then of course the most important in the US **are** the black people sold as slaves from Africa.’

(12) 那麼我可以建議各位可以去幾個地方, 第一個是各個縣市政府, 都有法律扶助跟法律諮詢的地方，法院也有，那再來當然老師就是你們最好的資源。
(*name wo keyi jianyi gewei keyi qu jige difang, diyi ge shi ge ge xian shi zhengfu, dou you falu fuzhu gen falu zixun de difang, fayuan ye you, na zailai dangran laoshi* ***jiushi*** *nimen zui haode ziyuan*) ‘Then I can recommend a few places for you. The first is a county (city) government with legal aid and legal advice, and the court. The second, of course, **is** your teacher, who is your best resource.’

These examples list a series of nominal elements. In (10), the lecturer lists a series of universities and colleges for various nationalities in Mainland China, and points out Minzu University of China as the most important one. In (11), among the large immigrant population in America, including early Chinese laborers and immigrants from Spain and Portugal, the most important are the slaves from Africa. In (12), the teacher is the best resource for students to consult for legal aid. Note that the intensifier *jiushi* used to single out a nominal element often collocates with a superlative expression, such as *zui zhongyaode* ‘most important’ in (10) and (11), and *zui haode* ‘best’ in (12). Therefore, it foregrounds the topical nominal element from a series of NP candidates.

The other sub-function of the intensifier *jiushi* is to strengthen the purpose or causal relationships between two stretches of discourse, as shown in the following.

(13) 所以憲法用來幹什麼，就是要用來這個富國強兵。(*suoyi xianfa yonglai gan sheme,* ***jiushi*** *yao yonglai zhege fu guo qiang bing*) ‘So what is the constitution for? The constitution **is** for enriching the country and powering up the military.’

(14) 爲什麼發生這個革命然後建國立憲，　主要的問題就是因爲人民。(*wei sheme fasheng zhege geming ranhou jianguo li xian, zhuyao de wenti* ***jiushi*** *yinwei renmin*) ‘Why did the revolution break out and why was a constitutional country founded? The major reason **was** the people.’

(15) 我們當然是體力可能沒有那麼好，　但是這就是我們要發明新武器的原因。

(*women dangran shi tili keneng meiyou name hao, danshi zhe* ***jiushi*** *women yao faming xin wuqi de yuanyin*) 'Of course we do not have such good physical strength, and that **is** why we invent new weapons.'

In (13), *jiushi* strengthens the purpose of the constitution, which is to enrich the country and power up the military. In (14), the reason of the outbreak of the revolution is attributed to people. In (15), new weapons are invented, because of our lack of physical strength to fight in the war. These examples show that *jiushi* either highlights the purpose of an aforementioned topic or specifies the reason for a certain event or situation, as evidenced in its collocation with explicit expressions of purpose (e.g., *yao yonglai* 'used for' in (15)) and causal relationships (e.g., *yinwei* in (13) and *de yuanyin* 'reason of' in (14)). This sub-function of intensification provides speakers with useful linguistic resources to bolster their argumentation and draw listeners' attention to the purpose or cause of a certain event in the discussion.

To summarize, *jiushi* as an adverb used for intensification serves three distinctive sub-functions. These are to (i) express the status or quality of something, with a sense of negativity sometimes implied in the utterance; (ii) single out a nominal element and make the topic in the present concern prominent; and (iii) explicitly signify the reason with collocating words such as *yuanyin* 'reason' or *wenti* 'problem' to explain the occurrence of a preceding stretch of discourse and strengthen the force of argumentation.

2.3.2.2 Elaboration: Reformulation and Exemplification

The second main function of *jiushi* is to elaborate a stretch of discourse by either reformulating an idea or by providing an example of a complex notion. Instead of using the more popular term 'conjunction' in traditional Chinese dictionaries, we adopt the term 'connective,' because *jiushi* here primarily functions as a linking device that connects prior and subsequent information at the textual or discourse level (Bondi 2013), whereas conjunctions generally deal with the grammatical structures at the sentential level (Wang and Huang 2006).

For 'elaboration,' we follow Halliday's (1994: 225) definition that 'the secondary clause does not introduce a new element into the picture but rather provides a further characterization of one that is already there.' The notion of elaboration includes three subcategories: (i) exposition, which denotes an 'i.e.' relationship; (ii) exemplification, which denotes an 'e.g.' relationship; and (iii) clarification, which denotes a 'viz' relationship. The three subcategories correspond to Hyland's notion of code glosses, which 'signal the restatement of ideational information in other ways' (Hyland and Tse 2004: 168).

Reformulation helps the speaker elaborate or explain the preceding message in another way. In academic writing, the use of reformulation markers shows the writer's intention to achieve particular rhetorical effects and thus facilitates the reader's comprehension of that text (Hyland 2007). In academic speech, reformulation markers demonstrate the speaker's awareness of the need to formulate an abstract idea or terminology, and sometimes are treated as useful linguistic resources for repair in conversation, because spoken discourse is relatively more unplanned than written text (Schegloff et al. 1977). The following are examples of the reformulation use of *jiushi,* along with a group of similar expressions.

(16) 他所想的、他所講的, 你一聽、一看, 就知道他不太好, 講得更有學問, 就是那現實感不好, 那講得更具體就是脫離現實。(*ta suo xiang de, ta suo jiang de, ni yi ting, yi kan, jiu zhidao ta bu tai hao, jiang de geng you xuewen* ***jiushi*** *na xianshigan bu hao, na jiangde geng juti* ***jiushi*** *tuoli xianshi*) 'Once you hear and see, you can tell that he is not in good shape based on what he thinks and says. More academically, **jiushi** he does not have a sense of reality. Specifically, **jiushi** he is isolated from reality.'

(17) 它所採的是內閣制, 那內閣制的意思就是說實質上有權力的是總理, 那這個大總統其實是沒有太多的實權。(*ta suo cai de shi neigezhi, na neigezhi de yisi* ***jiushishuo*** *shizhishang you quanli de shi zongli, na zhege dazongtong qishi shi meiyou tai duo de shiquan*) 'What it adopts is the cabinet system, **which means that** it is the prime minister who is essentially in power and that the president does not really have much real power.'

(18) 傳統的精神分裂症, 也就是我們現在爲了污名化的問題把它更改爲思覺失調症。(*chuan tong de jingshenfenliezheng,* ***ye jiushi*** *women xianzai weile wuminghua de wenti ba ta genggaiwei sijueshitiaozheng*) 'Schizophrenia, a traditional term, **is** what we have now renamed as "psychosis" to avoid stigmatization.'

(19) 某種程度從知識理論來看就是一個認識論, 也就是說, 他對於事情的價值觀、他的信念, 他的信念不一樣就會影響一個人在看事情的立場、視野, 還有假設。(*mouzhong chengdu cong zhishi lilun lai kan jiushi yige renshilun,* ***ye jiushishuo****, ta duiyu shiqing de jiazhiguan, tade xinnian, tade xinnian buyiyang jiu hui yingxiang yige ren zai kan shiqing de lichang, shiye, haiyou jiashe*) 'To some extent, this is epistemology from the perspective of knowledge theory. **Yejiushishuo**, he has his own values and faith. The stance, perspective, and assumption regarding things will differ, because of his faith.'

In (16), the speaker describes the observable behaviors of someone with a mental illness, reformulating a plain description with a more academic and concrete term, i.e., the lost sense of reality. In (17), the speaker thinks that the cabinet system is complicated and difficult to understand. Thus, the substantive difference between the role of the premier in the cabinet system and that in the presidential system is highlighted to clarify the new terminology. Similarly, the speaker explains why schizophrenia is renamed in (18), and reformulates the idea of epistemology with substantive elucidation. The difference between *jiushi* and *jiushishuo* lies in their syntactic status; that is, *jiushi* takes either a clausal complement (*na xianshi gan buhao* 'not having a sense of reality' or phrasal complement (*tuoli xianshi* 'isolation from reality'), as in (19), whereas *jiushishuo*, because of the complementizer *shuo*, takes a clausal predicate, e.g., *shizhishang you quanli de shi zongli* 'it is the prime minister who is essentially in power', as in (17). Note that in academic lectures most of the reformulated elements are academic jargons. It is important for the lecturer to ensure that students keep up with the logical inferences of the talk, and therefore the second unit of discourse expands on the meaning of academic terms in the first unit of discourse. Because the intrinsic function of reformulation is to explain something in detail, used as a reformulation marker, *jiushi* often collocates with verbs of saying (e.g., *wei* and *shuo*) to denote 'what I mean by…is…' meaning, as shown in (20)–(21).

(20) 所謂的多練習，就是平常你要多勤於思考。(*suoweide duo lianxi,* ***jiushi*** *pingchang ni yao duo qinyu sikao*) 'What I mean by more practice **is that** you should think more often.'

(21) 所說的本我就是在追求快樂， 也就是快樂的受益。(*suoshuo de benwo jiushi zai zhuiqiu kuaile,* ***yejiushi*** *kuaile de shouyi*) 'What I mean by id is **just** the pursuit of happiness, **that is**, the benefit of happiness.'

The other sub-function of the elaborative use of *jiushi* is exemplification. It is used '[w]hen a great degree of complexity is involved' (Quirk et al. 1985: 1470) to precede (a series of) concrete examples to clarify previous utterances and show speakers' concern about listeners' possible need for clarification (Hyland 2007). This use of *jiushi* can occur with explicit markers of exemplification (e.g., *pirushuo* in (22)). To avoid being too general, following *jiushi*, important elements for building good relationships and emotional disorders are provided to resolve the ambiguity, e.g., in (22) and in (23), respectively.

(22) 所以能夠建立良好關係的要件, 就是這些, 譬如說: 態度友善, 態度真誠。(*suoyi nenggou jianli lianghao guanxi de yaojian,* ***jiushi*** *zhexie, pirushuo: taidu youshan, taidu zhencheng*) 'The elements of building good relationships **jiushi** these, for example, friendly attitude and sincerity.'

(23) 這一群人他主觀上有一系列的情緒障礙， 就是我們心情溫度計量表裡面講的, 焦慮啦、憂鬱啦、憤怒啦、敵意啦、自卑等等。(*zhe yi qun ren ta zhuguanshang you yi xilie de qingxu zhangai,* ***jiushi*** *women xinqingwendu-jiliangbiao limian jiang de, jiaolu la, youyu la, fennu la, diyi la, zibei deng-deng*) 'These people subjectively have a series of emotional disorders, **jiushi** on what we call the Brief Symptom Rating Scale, such as anxiety, melancholy, anger, hostility, inferiority, etc.'

The two sub-functions of the elaborative use of connective *jiushi* are briefly summarized as follows: (i) a reformulation marker that clarifies the first unit of discourse with its meaning expansion in the second unit of discourse, and (ii) an exemplification marker that illustrates an abstract idea with concrete examples. With the connective use as a reformulation and exemplification marker, the canonical sense of an adverb used for emphasizing is bleached, as shown in (24).

(24) 這個研究雖然比較舊，在2006年發表，但我想是可以參考，不過也不能忽略就是，06年到現在當然已經又過了將近10年… (*zhege yanjiu suiran bijiao jiu, zai 2006 nian fabiao, dan wo xiang shi keyi cankao, buguo ye buneng hulue* ***jiushi,*** *06 nian dao xianzai dangran yijing you guo le jiangjin*

shi nian…) 'Even though this research is old and was published in 2006, I think it is worthy of our attention. However, we should also not ignore **jiushi** the fact that it has been almost ten years from 2006…'

Here, *jiushi* does not seem to be used to reformulate the previous idea that the 2006 study is worth mentioning, but it is better interpreted as a pause filler. This is also prosodically manifest in its utterance-final position. In other words, it functions more like a discourse marker that bears a different meaning to that of an elaborative *jiushi*. In the next section, we focus on the sub-function of *jiushi* as a discourse marker.

2.3.2.3 A Discourse Marker Used for Pause Filling

Jiushi as a discourse marker fills the pauses in a stretch of discourse without contributing too much substantial lexical meaning to the propositional content of an utterance (Biq 2001; Lenk 1997). In natural conversation, *jiushi* signals the speaker's difficulty in retrieving subsequent information, which is often a verbal phrase (Liu 1998). It thus reveals the speaker's communicative intention in his turn (Biq 2001). Syntactically, the verbal filler *jiushi* often but not necessarily occurs in the beginning of an intonation unit, as shown in examples (25)–(26).

(25) 比較小的孩子他的身心發展是比較快的, 啊…那可能就是會有一些明顯的一個發展啊。(*bijiao xiao de haizi tade shenxin fazhan shi bijiao kuai de, a…na keneng* ***jiushi*** *hui you yixie mingxian de yige fazhan a*) 'The physical and mental development of younger children is faster, and thus **jiushi** there may be some obvious developments.'

(26) 還有就是機器人投入戰爭齁, 就是會有很多機器人投入戰爭, 然後會討論到戰爭的議題, 像是《鋼彈》, 鋼彈有很多在談論戰爭的議題。(*haiyou jiushi jiqiren touru zhanzheng ho,* ***jiushi*** *hui you hen duo jiqiren touru zhanzheng, ranhou hui taolun dao zhanzheng de yiti, xiangshi < gangdan > , gangdan you hen duo zai tanlun zhanzheng de yiti*) 'Furthermore, robots go to wars; **jiushi** there are many robots that go to wars. And then the issue of war, such as Gundam, will be discussed. There are many issues regarding war in Gundam.'

Rather than reformulating the preceding idea, *jiushi* in both (25) and (26) occurs when there is a slight hesitation between two stretches of discourse, and it rephrases or restarts the previous utterance for a complete proposition. Note also that *jiushi* often occurs with other fillers such as *ne, ho*^{n}, or *a* to prolong the speaker's hesitation, or with hedges that withhold the speaker's full commitment to his argument (e.g., *keneng* 'possibly'.)

In academic lectures, the pause filling *jiushi* frequently follows a clausal subject and precedes the predicate of a sentence. A concurring function afforded by this position is a topicalizing effect of introducing and foregrounding a subsequent elaboration as the main predication. See the following examples:

(27) 但是也讓我們去思考就是， 爲什麼那麼少的人， 齁， 願意到精神科。 (*danshi ye rang women qu sikao* ***jiushi****, weisheme name shao de ren, ho, yuanyi dao jinghshen ke*) 'But what also makes us think **is** why there are so few people, uh, devoting themselves to psychiatry.'

(28) 所以我剛剛一直講就是說， 還是要回歸到研究的問題、你的假設是什麼。(*suoyi wo ganggang yizhi jiang* ***jiushishuo****, haishi yao huigui dao yanjiu de wenti, nide jiashe shi sheme*) 'So just now I kept saying that ***jiushishuo*** you should still return to the research questions and your assumption.'

In (27), the whole thesis of the following utterance is adumbrated by *jiushi,* which ushers in the speaker's argument. On the other hand, the variant *jiushishuo* in (28) serves as an alerter to bring the hearer's attention to a reasserted point about the research hypothesis. Both examples show that *jiushi* not only helps the speaker hold his floor in a speech or conversation, but also serves to bring the subsequent information to the foreground.

Apart from occurring before the sentential predicate with a topicalizing effect, a pause filling *jiushi* also has the effect of marking transition of topics between two stretches of discourse, as shown in (29).

(29) 所以這就是跟他們過去戰敗的歷史有很大的關係。另外還有就是， 村上隆他是當代藝術家，他的作品也會常常出現在所謂的美術館。(*suoyi zhe* ***jiushi*** *gen tamen guoqu zhan bai de lishi you hen da de guanxi. lingwaihaiyou* ***jiushi****, cunshanglong ta shi dangdai yishujia, ta de zuopin ye hui changchang chuxian zai suoweide meishuguan*) 'So this **jiushi** has a lot to do with their past history of defeat. The other thing **is that** Takashi Murakami is a contemporary artist, and his works also often appear in so-called art galleries.'

Jiushi can also be recurrently used in an utterance to fill the speech space before the speaker tries to retrieve specific terms to describe a given situation. Consider (30):

(30) 袁世凱垮台以後北方就亂成一團， 那個區就是各地就是軍閥割據。(*yuanshikai kuatai yihou beifang jiu luanchengyituan, nage qu* ***jiushi*** *gedi* ***jiushi*** *junfa geju*) 'The north was in a state of total chaos after the resignation of Yuan Shih-Kai. That region, **jiushi** almost everywhere, **jiushi** was divided by warlords.'

The above instances demonstrate that *jiushi* does not add a specific meaning to the utterance, but this 'adverbial pointer' ensures that the author or speaker's 'presupposition' of the equivalence relation between the two parts of text is conveyed to the addressee (see Quirk et al. 1985: 1471 on the use of adverbial pointers as balance strategy). On the other hand, overusing these two filler uses of *jiushi* is considered a verbose style of speaking and has an unpleasant effect on the rhetoric and coherence of the discourse (Xu 2003). Learners of Chinese should be explicitly reminded that any hesitation and too many pauses might hinder their efforts to construct coherent discourse and achieve speaking fluency.

Thus far, we have presented the three main functions of *jiushi* used in academic lectures. Next, we focus on how to transform linguistic findings into teaching materials and how these materials can be incorporated into the curriculum to help learners with their comprehension and production of the metadiscourse uses of *jiushi* in spoken academic settings.

2.4 Teaching the Metadiscourse Functions of *Jiushi*

Studies in metadiscourse have pointed out that certain factors greatly influence students' effective comprehension of lectures, including (i) unfamiliar words and specialized terminology used by the teacher, (ii) the connection between the main ideas of the teacher's presentation, and (iii) the lecture style preferred by the teacher (Flowerdew 1994; Flowerdew and Miller 1996; Hyland 2009). All these factors have to do with students' explicit awareness of metadiscourse markers and how they are used to structure stretches of discourse. It has also been suggested that metadiscourse markers are prevalent in Chinese university lectures although teachers hardly ask students to pay attention to them. In fact, teachers themselves use metadiscourse markers unconsciously in their instruction (Shi 2014).

In this section, we attempt to provide pedagogical implications for both teachers and CFL learners to raise their explicit awareness of using *jiushi* in academic discourse. The first part begins with examples based on the error analysis of common mistakes made by CFL learners, and the second offers classroom activities that teachers can use when they want to promote the metadiscourse functions of *jiushi*.

2.4.1 Common Errors in Metadiscourse and Jiushi

Richards (2014) suggests that intralingual errors reflect language learners' general characteristics of rule learning, such as (i) over-generalization, (ii) ignorance of rule restrictions, (iii) incomplete application of rules, and (iv) false concepts hypothesized (Richards 2014: 174). The following discussion of learners' errors is based on previous findings (Lu 2011; Chen 2013; Hao 2013) and our analysis of CFL learners' uses of the first 100 samples of *jiushi* in the TOCFL Learner Corpus (Chang 2014) and Chinese as a Second Language Spoken Corpus (CSLSC) (Fang et al. 2015). Taken together, the errors reflect the aspects (i)–(iv) discussed in Richards (2014), and can be delineated into five types: faulty substitution, faulty addition, omission, misinterpretation of the equivalence meaning, and overuse of fillers, as discussed below.

Faulty substitution: 'Faulty substitution' refers to the use of *jiushi* to replace an intended correct use. When students intend to express a 'not A but B' meaning, they confuse the use with the 'either A or B' meaning of *jiushi.* Moreover, the emphatic function of *jiushi* is often misapplied. Examples (31)–(32) are drawn from Chen (2013: 38–39).

(31) *這不是他直接告訴我的, 就是憑我觀察學的。'This is not what he tells me directly ***jiushi** but what I learn from observation.'

(32) *這種辦法的解決就是臨時的, 更重要的是人與人的理解。'The solution to this problem is ***jiushi** temporary, and what is more important is mutual understanding between people.'

In the first instance above, *jiushi* should be replaced by *ershi* 'but; instead.' The erroneous use of *bushi…jiushi* denotes an appositive 'either…or' relationship of alternative choice between two units of discourse, which means 'it was either that he did not teach/tell me directly or that I learned it from my observation'—a semantically anomalous meaning since the choices involve the speaker's own knowledge. The correct answer for (31) is *ershi*, which denotes an 'instead of' relationship: 'He didn't tell/teach me this directly; *instead,* I learned it through my own observation' (see also Chen 2013). The error in the second example, on the other hand, can be attributed to the learner's mistaking *jiushi* for *zhishi* 'only,' which reinforces the limited applicability of the solution in contrast to the main proposition the speaker wishes to express, i.e., mutual understanding. However, this propositional relation is not entailed by *jiushi;* i.e., it is contradictory to add a second unit after *jiushi* to indicate a preferred choice, but the first clause is sufficient to express the main proposition. According to Chen (2013: 39), the overlap of the emphatic function of *jiushi* and *zhishi* gives rise to this misapplication.

Faulty addition/redundancy: This error refers to the use of a redundant *jiushi.* Example (33) is from Lu (2011: 43), and (34) is from the CSLSC.

(33) *这些藝術當中, 音樂就是给大眾带来了深厚的影响。'Among the arts, music ***jiushi** has a dramatic impact on people.'

(34) *跟我、說…很多東西, 一定要出國留學, 這就是、對你的, 經驗、對你的, 中文能力非常好, 所以… '(He) told me many things such as "you must study abroad. This ***jiushi** will improve your experience as well as Chinese ability, so…."'

In (33), although the student seems to emphasize the causal relationship by using *jiushi,* it is redundant in this sentence (Lu 2011: 40). If *jiushi* were to be used, an exclusive meaning must be implied to warrant its use. However, no point of comparison is made to contrast with music. The error in (34) involves a cause–consequence relation between 'studying overseas' and 'high Chinese proficiency.' A better place to use *jiushi* is before the clause about studying overseas, i.e., 就是一定要出國留學. In other words, the misuse stems from the learner's misinterpretation of the causal relation between utterances surrounding *jiushi*, where *jiushi* should mark the *reason/cause* of a result/consequence stated in the preceding utterance. Therefore, students should be informed of the distinction between a cause and a consequent clause.

Omission: Another type of error is omission (Chen 2013: 40), which refers to the omission of *jiushi* when an exclusive meaning is intended but not correctly expressed. As shown in (35), *jiushi* is supposed to occur before *mama meiyou zhujian*. This example is from Chen (2013: 40).

(35) *既然自己決定跟他結婚, 何必對孩子說父親的壞話?我最討厭的事, __媽媽沒有主見, 最後聽從爸爸的。'Now that she has decided to marry him, why bother speaking ill of Father to the child? What I hate is ___ that my mother is pliant and ultimately follows my father.'

One of the sub-functions of the intensifier *jiushi* is to single out subsequent information from a series of preceding events. The omission of *jiushi* shows that the student does not correctly link pragmatic function with a syntactic requirement.

Misinterpretation of the equivalence meaning: In addition to the above misuse, we also found that learners tend to misinterpret the equivalence meaning of *jiushi.* The extracts of (36) and (37) from the TOCFL Learner Corpus and CSLSC, wherein *jiushi* is misused, illustrate this problem:

(36)? 陳漢典, 他拍的也很不錯, 沒想到他會拍的那麼的精采。最後從這部戲裡面我會學到很多東西也就是「義氣」這兩個子。'Chen Han-Dian also performed very well and I never thought he would have such a brilliant performance. In the end, among the various things I learned from the drama, **jiushi** brotherhood is the word I learned

(37)? 最深刻的事情就是, 我、外婆過世的時候, 嗯那就是…三年以前的事, 那個時候我還在上大學…的時候。'The most unforgettable thing is the death of my grandmother. That was ?**jiushi** three years ago, and I was a college student then.'

As discussed in Sect. 2.3.2.2, a connective *jiushi* links two phrases or clauses that indicate an equivalence relation, whereby the *jiushi* utterance constitutes an act of 'propositional embellishment' for the preceding concept to be more explicit (Hyland 2007: 267 on English *that is*). In (36), however, the NP *henduo dongxi* 'many things,' which is a plural concept, is wrongly equated with the idea of *yiqi* 'brotherhood,' a singular concept. Obviously, these two concepts do not stand in an 'in other words' relation. Extract (37) is also concerned with a subtle function of *jiushi.* The occurrence of this marker in (37) sounds unnatural, as *jiushi* is usually not employed to adjoin two temporal concepts. These nuances should also be addressed in the teaching material, which we turn to in Sect. 2.4.

Overuse of Filler Jiushi: The last type of error, which was found in the CSLSC corpus, involves the overuse of the filler *jiushi*. A typical example is (38), where the redundancy of *jiushi,* especially the first and fourth occurrence, seriously affects the flow of the discourse and renders a string of 'choppy' ideas.

(38) 要用晚上也是比較少人會去上網路, 網路會比較快, 找的資料呢, 當然是比較快就是可以找出來, 當然呢, 就是(那個)父母親可能就, 比較早就睡覺了, 所以就是晚上沒有人就是, 在那邊可能看電視啊, 講電話啊、還是打掃之類的。(*yao yong wanshang ye shi bijiao shao ren hui qu shangwanglu, wanglu hui bijiao kuai, zhao de ziliao ne, dangran shi bijiao kuai* ***jiushi*** *keyi*

zhao chulai, dangran ne, ***jiushi*** (*nage*) *fumuqin keneng jiu, bijiao zao jiu shuijiao le, suoyi* ***jiushi*** *wanshang meiyou ren* ***jiushi****, zai nabian keneng kan dianshi a, jiang dianhua a, haishi dasao zhileide*) 'If I need to use the Internet, I usually do it at night because the speed is faster and it is easier **jiushi** for me to find the information I want. Of course, **jiushi** my parents go to bed earlier, so **jiushi** there is nobody around at night **jiushi** watching TV, talking on the phone, or cleaning, etc.'

Although the appropriate use of *jiushi* affords speakers the extra time to organize their ideas, the overuse of such markers renders the ideas disconnected and thus does not align with listeners' cognitive expectations. Because of its omnipresence, even native speakers may overuse this marker, a problem criticized by Xu (2003) as causing miscommunication and affecting the purity of the language. While the verbosity of the filler by CFL learners may be because of their limited proficiency, which leads to disfluency and pauses, they should be advised to use this marker with caution to avoid too much redundancy.

2.4.2 Design of Teaching Materials

To improve students' acquisition of the various uses of *jiushi,* teachers can follow a few teaching strategies and design their teaching materials accordingly. In terms of the intensifying function, one strategy is teaching *jiushi* in its frequent collocated construction, e.g., *shemedou…jiushi…* 'anything…but' (什麼都…就是…), instead of isolating it in a construction that would otherwise be more meaningful taught together. In this way, students do not learn a stand-alone function, but a meaningful contrast between the first and second unit of discourse, thus enhancing their ability to transform sentence patterns. The following example is adapted from our spoken academic data. It is recommended that teachers modify the practice according to the level of their students.

(39) a. 除了薪水以外，這裡的東西什麼都漲。(*chule xinshui yiwai, zheli de dongxi sheme dou zhang*) 'Excepting the salary, the price of everything here goes up.'
→這裡的東西什麼都漲，就是薪水不漲。(*zhelie de dongxi* ***sheme dou*** *zhang,* ***jiushi*** *xinshui* ***bu*** *zhang*) 'The price of **everything** here goes up, **jiushi excepting** the salary.'
b. 這裡的上將退伍沒經過真正的戰火洗禮，小兵也沒有。(*zheli de shangjiang tuiwu mei jingguo zhenzhengde zhanhuo xili, xiaobing ye meiyou*) 'Even a veteran general does not have real experience of war, and neither does the soldier.'
→不用說是小兵，就是上將退伍，也沒有經過真正的戰火洗禮。(***buyong-shuo*** *shi xiaobing,* ***jiushi*** *shangjiang tuiwu,* ***ye meiyou*** *jingguo zhenzhengde*

zhanhuo xili) ‘**Buyongshuo** the soldier, **jiushi** a veteran of general ***ye*** does not have real experience of war.’

c. 他所謂的敵人都和他理念不同。(*ta suoweide diren, dou han ta linian butong*) ‘All his enemies have different viewpoints from his.’

→只要跟他理念不同, 就是他的敵人。(***zhiyao*** *gen ta linian buhe,* ***jiushi*** *ta de diren*) ‘**As long as** someone has different viewpoints from his, (s/he is) ***jiushi*** his enemy.’

These examples, respectively, show the exclusive, concessive, and conditional meaning of *jiushi*. For (39a), if the unit following *dou* ‘all’ is positive, the unit following *jiushi* is negative and vice versa. In (39b), the construction *buyongshuo* A…*jiushi* B *ye*… ‘not to mention A, even B…,’ instead of a plain juxtaposition of ‘general’ and ‘soldier’ as neither having experienced wars, highlights the grudging concession that even generals have not been in wars. Note that *buyongshuo*… *jiushi*…*ye* is also followed by a negative marker, i.e., *meiyou* to strengthen the concessive meaning. Regarding (39c), an ‘as long as’ relation is marked by *jiushi*, which includes all those whose beliefs differ from the protagonist. Of the three sub-functions, the exclusive meaning is pervasive in our spoken corpus, whereas the concessive and conditional meanings occur only sporadically. Therefore, to teach *jiushi* in spoken discourse, the first type of construction should be taught first. The latter two types of exercises can be provided at later stages.

The second strategy focuses on teaching the contrast between similar correlative patterns, e.g., *bushi*…*ershi* ‘not…but’ and *bushi*…*jiushi* ‘either…or…’ Faulty substitution has been identified as the most common error made by CFL learners, so teachers need to help students capture the nuances of their semantic meaning. The practice can be designed as either multiple-choice questions or a sentence completion exercise (Chen 2013: 44).

(40) (About a Japanese cartoon character) 他是一個在城市裡面的偵探, 不是跟黑社會混在一起, ______會跟黑社會有關, 藉以調查黑社會的案子。(*ta shi yige zai chengshi limian de zhentan,* ***bushi*** *gen heishehui hun zaiyiqi, ___ hui gen heishehui youguan, jieyi diaocha heishehui de anzi*) ‘He is a detective in the city, often hanging around with gangsters. He is either hanging around with gangsters, **or** has to do with gangsters.’ (A) 而是 (B) 就是 (C) 只是 ((A) *ershi* (B) *jiushi* (C) *zhishi*).

(41) 精神官能症在主觀上有一系列的情緒障礙。若你的朋友有此類問題, 你要讓他了解, 他不是心理有病, ____ 情緒的問題影響大腦功能, 造成自律神經失調。(*jingshenguannengzheng zai zhuguanshang you yi xilie de qingxu zhangai. ruo ni de pengyou you ci lei wenti, ni yao rang ta liaojie, ta* ***bushi*** *xinli youbing, ___ qingxu de wenti yingxiang danao gongneng, zaocheng zilushenjing shitiao*) ‘Neurosis includes a series of emotional disorders. If your friend has such problems, s/he is not mentally ill **but** (s/he) has a dysfunctional brain affected by emotional problems, which results in dysautonomia.’ (A)而是 (B)就是 (C)只是 ((A) *ershi* (B) *jiushi* (C) *zhishi*).

Students are easily confused by the form of *bushi…ershi* and *bushi…jiushi*, not noticing that only *bushi…jiushi* a selective ‘either….or’ relationship. When *jiushi* is used, the two connected elements in this correlative pattern should be (i) identical in the grammatical category, and (ii) the choices offered in the two clauses/phrases are *both* viable options intended by the speaker. In (40), both ‘hanging out with gangsters’ and ‘being related to gangsters’ are used to characterize the urban detective. In contrast, *ershi* ‘instead’ selects a predicate that is the *only* predication intended by the speaker. In (41), the emotional problem, rather than true mental illness, leads to neurosis. In spite of the fact that *bushi…jiushi* is taught in beginner to intermediate-level textbooks, such as Book 2/Unit 4 in *Far East Everyday Chinese* and Book 3/Unit 7 in *Practical Audio-Visual Chinese*, it is suggested that the teachers take the cognitive burden of students’ learning into consideration. Instead of listing all similar patterns at once, the teachers are advised to conduct a detailed comparison among these patterns so that students have a full understanding of each construction.

The third strategy is teaching metadiscourse functions with reference to other markers (e.g., causal marker *yinwei*). As discussed in Sect. 2.3.1, one of the sub-functions of intensifier *jiushi* is to strengthen the causal relationship between two units of discourse. When there is an explicit marker accompanying *jiushi*, it is easier for students to identify the cause marked by *jiushi*, e.g., (14)–(15), in an argument. Therefore, teachers can break the argument into several essential parts and ask students to put them in the correct order. The following example is taken directly from our spoken databank. Teachers can modify this practice in combination with what students have learned in previous lessons.

(42) ______, ______ ______。.
(A) 就是 (*jiushi*).
(B) 日本人其實很依賴科技 (*ribenren qishi hen yilai keji*) ‘The Japanese, in fact, rely much on technology.’
(C) 因爲他們希望從科技的發展他們可以強盛起來 (*yinwei tamen xiwang cong keji de fazhan tamen keyi qiangsheng qilai*) ‘Because they want to be prosperous by virtue of technology development.’

To complete this task, students need to know that *jiushi* should precede *yinwei* ‘because’ and therefore it can strengthen the cause of the argument expressed by the *yinwei* clause. This practice is expected to reduce the aforementioned second type of error commonly made by CFL learners, i.e., faulty addition (see examples (33)–(34)).

Briefly, three suggested strategies that help teachers with their instruction and teaching material design are (i) teaching *jiushi* in its frequent collocated construction and giving sentence transformation exercises; (ii) comparing *jiushi* with its similar correlative patterns and designing either multiple-choice or sentence completion exercises; and (iii) highlighting the syntactic position of *jiushi* with reference to other explicit markers and providing sentence recombination exercises. Essentially, when teaching various uses of *jiushi,* the semantic and pragmatic nuances should be clearly pointed out, and the presentation of these meanings and functions should be based on their frequency of use and students' sequence of language learning. Most of this section dealt with the intensifying function of *jiushi,* leaving the elaborative and discourse functions to the pedagogical implications for classroom activities, which are discussed in the following section.

2.4.3 Classroom Activities

The elaborative and filler functions of *jiushi* are better taught through in-class activities involving students' active participation in two types of exercises: perception and production. Both exercises aim to equip students with the ability to use *jiushi* as a metadiscourse marker in their spoken language.

2.4.3.1 Perception Exercise

In the perception exercise, a selected video clip from large-scale online open courses can be used. One criterion for selecting the video clip is that the lecture should include an introduction to academic theories and concepts, which necessitates more uses of *jiushi* because of its reformulating and clarifying functions. Students therefore can have greater exposure to how the lecturer elaborates abstract ideas in his/her talk. The other criterion is that most students should be familiar with the lecture topic, enabling them to focus their attention on the language used, not on figuring out unfamiliar knowledge in the lecture.

The first step of instruction is to familiarize students with the elaboration and discourse functions of *jiushi.* Before watching the video clip, the instructor can briefly introduce the idea of metadiscourse and provide examples from other academic talks. Note that unfamiliar words should be kept to a minimum to let students concentrate on the use of metadiscourse. The following examples are for demonstration purposes only (reformulation, exemplification, and pause filler, in (43)–(45), respectively). Of course, the vocabulary can be modified to meet students' requirements. Syntactically, students should be made aware that *jiushi* occurs after the sentential subject, whereas *jiushishuo* is used as a full-fledged connective at the sentence-initial position.

(43) 他產生了一種模糊的意象，這就是所謂的統合的，統合型危機的人，另外一種所謂的，所謂的早閉型統合的人，就是說他提早的成熟，沒有進行自我探索。
(*ta chansheng le yizhong mohu de yixiang, zhe* ***jiushi*** *suowei de tonghe de, tonghexing weiji de ren, lingwai yizhong suowei de, suowei de zaobixing tonghe de ren,* ***jiushishuo*** *ta tizao de chengshou, meiyou jinxing ziwotansuo*)
'He has a vague image, and this **is** so-called an individual with so-called

identity crisis. The other kind of individual with a so-called identity foreclosure **is that** he is premature and has not explored his inner self.'

(44) 那躁鬱症的話，躁已經提過，鬱相反，躁的話就是覺得能力超強、靈感超多，活動量增加，愛講話啦。(*na zaoyuzheng dehua, zao yijing tiguo, yu xiangfan, zao dehua* ***jiushi*** *ijuede nengli chao qiang, linggan chao duo, huodongliang zengjia, ai jianghua la*) 'As for bipolar disorder, the depressive episode is contrary to the aforementioned manic episode in which one **jiushi** feels super powers, has many thoughts and ideas, craves activities, and is talkative.'

(45) 並不是說所有的學習都一定要怎麼樣子，了解意思嗎？有很多的東西就是…阿…就是說這一個概念的學習它有一些步驟。(*bing bushishuo suoyou de xuexi dou yiding yao zenme yangzi, liaojie yisi ma? you hen duo de dongxi* ***jiushi****...a...****jiushishuo*** *zhe yige gainian de xuexi ta you yixie buzou*) 'It does not mean all learning has to be like that. Got it? Many things **jiushi**… uh…**jiushishuo** the learning of a concept has its own steps.'

When the elaboration and filler functions are explicitly introduced to the students, the second step is to play the video clip at least twice and ask students to take notes on the uses of *jiushi* in the talk. It may be challenging for them to take notes when first watching the video; thus, the instructor can extract relevant parts from the video transcript and leave where *jiushi/jiushishuo* occurs in the blank. This offers students specific prior and subsequent context information.

The third step is to walk students through all the extracts from the video transcript. The instructor's main task is to draw students' attention to the preceding and following unit of *jiushi/jiushishuo*. When an abstract concept is given in the preceding unit, students should be aware of the use of *jiushi,* which provides a restatement or explanation of the abstract concept or clarifies the abstract idea by listing relevant characteristics. Students should be aware of the appropriate use of *jiushi* to fill a pause: If the lecturer hesitates slightly before continuing his elaboration, a pause filling *jiushi* can be used.

In short, the perception exercise is to raise students' awareness of *jiushi* in the spoken language. The elaboration and discourse functions should be taught explicitly, and students are expected to be able to explain how an abstract idea can be elaborated with *jiushi* and how the lecturer deals with the situation when he/she has slight hesitation in elaborating.

2.4.3.2 Production Exercise

When students have a basic understanding of the elaboration and the pause-filling functions of *jiushi,* production exercises of different levels can be assigned to students according to their Chinese proficiency.

For beginners, instructors should avoid using academic vocabulary and jargon, so they can start by discussing the culture and customs of their own country, e.g., festivals, cuisine, and the lifestyle. After the instructors' demonstration, students can work in groups to share the culture and customs of their own country with their classmates. Discussing culture and customs benefits students' learning, because they do not have to use academic terms to share their ideas. In addition, the custom they share is familiar to them, but unfamiliar to the other group members, so they have to employ all their linguistic resources to explain an idea that is probably not easily understood by students from other countries. In the process of the discussion, group members can ask for further clarification when they think the explanation is unclear to them. This provides an opportunity for the speaker to reformulate a specific term or give concrete examples to help the listener. When the speaker is retrieving words and phrases for elaboration, he/she may hesitate slightly and have to use *jiushi* to retain the listener's attention. Here, in the process of discussion, the instructor can walk around, listening carefully and providing immediate feedback to each group. Finally, the instructor can summarize the discussion or invite volunteers to share their newly learned culture and customs. This practice requires students' production of utterances containing *jiushi* and offers an interesting exchange among different cultures.

For intermediate and advanced learners, the production practice can be centered on delivering a short presentation. There are some suggested steps for the instructor to follow. First, the instructor should quickly go over the metadiscourse functions of *jiushi,* ensuring that all students understand how *jiushi* can help them restate an abstract idea. At the same time, the instructor should remind the students that overusing the pause filling *jiushi* might influence speech fluency; thus, verbosity should be avoided. Next, the instructor hands out blank sheets for all students to take notes. The students are asked to brainstorm a concept they would like to present, either academic, e.g., *sheme shi yinxiangpai* 'what is impressionism,' or non-academic, e.g., *chi qingcai de haochu* 'the benefits of eating vegetables.' The instructor can help students construct such sentence patterns as (46a–b). These patterns integrate the reformulation and exemplification functions of *jiushi,* and students are likely to use it naturally to make two adjacent speech units compatible.

(46) .

a. 所謂的印象派就是______________, 比如說就是______________ (*suo-weide yinxiangpai jiushi* ___________, *birushuo* ***jiushi*** _____) 'The so-called impressionism ***jiushi***_______, for example ***jiushi***______)'

b. 吃青菜的好處就是_____________, _____________. (*chi qingcai de haochu* ***jiushi*** _________, __________.) 'The benefits of eating vegetables ***jiushi***_______, _______.'

The third step is to ask students to deliver a three-minute presentation on what they have just come up with. The focus of evaluation is whether the listeners can understand the speech. If the presentation is comprehensible, a slight disfluency in speaking is allowed. Fourth, all listeners must be encouraged to take notes on the content of the presentation. When a presentation is finished, the instructor can pick a student to briefly summarize the presentation. Finally, the instructor can collect students' notes and check whether they have fully understood the functions of *jiushi*.

In summary, two classroom activities for students with different proficiency levels were provided in this section. For students at the beginner level, a group discussion on culture and customs can be conducted. For intermediate and advanced students, delivering a short presentation is a way to consolidate their understanding of *jiushi.* The knowledge of the content and how interesting it is are also considered when designing the activities.

2.5 Conclusion

This paper has attempted to elucidate the teaching of three metadiscourse functions of *jiushi,* namely intensification, elaboration, and pause filling, because of its high frequency in academic spoken Chinese. Often, metadiscourse is not singled out as a unique lesson in teaching Chinese as a foreign language, although it plays an important role in language communication. Therefore, in the second part of this paper, we provided pedagogical suggestions in terms of the design of teaching materials and classroom activities. When instructors design courses for teaching metadiscourse, it is recommended that they consider students' language proficiency level and assign them specialized practice activities accordingly. In this way, we can make students aware of metadiscourse markers that appear in their university lectures and enable them to have a fluent command of various metadiscourse functions. The material design and activities suggested can also be modified and applied to teaching other connective adverbials in Chinese. Overall, we hope this paper has made contributions to both the teaching and the learning of Chinese metadiscourse in academic settings.

Appendix: List of Online Courses Used (Retrieved November 2017)

1. ROC Constitution and Government
   https://drive.google.com/open?id=1KQhF7KP9S3lHPGJ1KGXxLEMZwdErRFNh
2. Psychological Health and Prevention of Suicide
   https://drive.google.com/open?id=1VyORqjvKbwdKvopcyeku-oPqdh8LhC4m
3. Training of Expressiveness in Communication
   https://drive.google.com/open?id=1vLh5w7ebBAjS6K8Trs34s7Jw02qJTU2F
4. Qualitative Research
   https://drive.google.com/open?id=1qRzoN5gZwPjODY_20hhs6lb1ObH6mKxg =

5. Educational Psychology
   https://drive.google.com/open?id=1dy5iW5GxLfuTrzcRKyGRC9OpZLRgz08G
6. Quantitative Research
   https://drive.google.com/open?id=1IF9muu0QhpLV_2dIAc2zoQ7rvZjiC5HG
7. Gender in Animation Culture
   https://drive.google.com/open?id=1IQtQf2kxz4aCfQW3gPu0f02uFz1zBtlA
8. Love, Sex and Law
   https://drive.google.com/open?id=1AMTT0OGbCrhvkAUmK5Ts8lnvUjCoyp6D
9. Classical Works in Hakka Research
   https://drive.google.com/open?id=1GAfSf1ZtHqONQC77Hyw7j-qhC1ISISg6
10. Economics
   https://drive.google.com/open?id=17rVY1lZ2w88QBz701Go89Zc6d6vRvKAL

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Chapter 3
How Citation Is Signaled: A Corpus-Based Study on Reporting Verbs in Chinese Academic Papers

Rui Liu and Shan Wang

Abstract Reporting verbs (RVs) are an important language resource for academic writing, and using such verbs is a language feature of academic articles. Through investigating 30 research articles in the three disciplines of economics, politics, and linguistics, this paper examines the forms and sentence patterns, functions and classification, and frequency distribution of Chinese RVs. In addition, a comparison is made between Chinese RVs and English RVs. The study has the following findings: (1) Chinese RVs are characterized by four forms, five basic sentence patterns, and three categories, i.e., research verbs, discourse verbs, and cognition verbs; (2) the function of RVs reflects the attention of a referrer to the research of a referee and shows the referrer's evaluation attitudes; (3) regarding the distribution of RVs, Chinese writers use RVs less frequently than English writers. In addition, Chinese articles have more research verbs than English, which reflects that Chinese writers are more likely to cite other people's research behaviours and report their research results instead of evaluating them. The findings on RVs in this study can not only provide support for Chinese academic writing, but also facilitate the exploration, application, and education of Chinese for Academic Purposes.

3.1 Introduction

As an important type of language for special purposes, academic language is a functional genre that is used in the context of school and academic communication. It plays an important role in literacy education and research. English as a de facto lingua franca for international academic communication, English for Academic

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Purposes (EAP) research and teaching has been carried out worldwide (Flowerdew and Peacock 2001). In comparison, due to the strong position of English, the research for other languages as academic languages is much less developed. As the most populous language in the world, Chinese has a large number of academic language users. However, Chinese for Academic Purposes (CAP) has not received sufficient attention for a long time. Until recently, some scholars with broad vision have begun to carry out CAP research from the perspective of Teaching Chinese as a Second Language (Gao and Liu 2016).

When language is used for academic purposes, it shows unique lexical, grammatical, and discourse features. Therefore, studying these features is the foundation for academic language teaching. CAP has the nature of written language, so a large number of studies on written language can be used as the basis for CAP research (e.g., Cui 2017; Feng 2013; Tao 1999). However, the research on CAP is not equivalent to that on Chinese written language. Instead, Academic Chinese should be regarded as an expression resource to be studied from the perspectives of language features, discourse practices, and communicative skills, which can be used for teaching practice.

Citation is one of the important language resources used in academic papers to establish relationships with other members of the academic community and create a research space (Swales 1990) for the writer himself. Many scholars have conducted research on it (Swales 1990; Hyland 1999; Thompson and Tribble 2001; Harwood 2009). Reporting verbs (RVs) are an important signal for citation, and thus have become a focus issue in citation studies and academic language teaching (Thompson and Ye 1991; Thomas and Hawes 1994; Hyland 2002).

Under the background that research on CAP has not yet been fully developed, the research on RVs in Chinese academic papers is not sufficient, which also limits its application in teaching. This article selects RVs as the research object, adopts a corpus-driven method, and conducts a comprehensive investigation on the forms, functions, and usage in Chinese academic papers. A comparison was made between our findings and the related research of English RVs. Following it, the teaching implications are discussed. This article shows the process of studying the language features of CAP and will help to promote relevant research.

3.2 Literature Review

The citation is a defining feature of academic research articles (Hyland 2002), which is used by writers in academic writing to report the prior research and to quote other researchers' thoughts and opinions aiming to create a research space (Swales 1990). As an explicit signal for citation, RVs have attracted the attention of researchers since Swales (1990) explored its definition, function, and classification in his early research. The researchers then discussed the classification framework for RVs (Thompson and Ye 1991; Thomas and Hawes 1994; Hyland 2002) and analyzed their features in semantics, tense, syntactic functions, voices, and stances (Hunston

1995; Hawes and Thomas 1997; Shaw 1992; Charles 2006; Rowley-Jolivet and Carter-Thomas 2014).

The study of RVs in English academic articles is teaching-oriented, to help non-native speakers master the precise usage of RVs. For instance, Manan and Noor's (2014) investigated the use of RVs in Malaysian master students' thesis in order to help instructors better guide their students' thesis writing. Yeganeh and Boghayeri (2015) compared the frequency and function of RVs in research articles written by native Persian and English speakers. The findings were used to design tasks and materials for teaching writing. Chen (2011) and Zhang (2012) analyzed the problems and causes of the use of RVs in Chinese native speakers' English academic papers, hoping to improve their academic writing ability and communicative competence. The establishment of a large-scale academic discourse corpus provides the basis for the extraction of RVs. For example, the British Academic Written English Corpus (BAWE) provides a RVs' list.[1] Based on academic discourse corpus, researchers have developed teaching aids for RVs, such as an online RVs teaching system developed on the basis of Michigan Corpus of Academic Spoken English (MICASE) (Bloch 2009).

In recent years, research interest in academic words and chunks in Chinese papers have seen a significant increase. Liu et al. (2016) compiled a Chinese academic wordlist including 2405 words based on a corpus. This interdisciplinary academic wordlist contains some potential RVs, such as 表明 *biǎomíng* 'show,'表示 *biǎoshì* 'represent,' 报道 *bàodào* 'report,' 呼吁 *hūyù* 'appeal.' This result shows that RVs are a part of commonly used interdisciplinary academic words. Liu et al. (2017) extracted 300 lexical bundles from a corpus composed of Chinese academic writings from humanities and social science. Although RVs are not their direct research objects, the methodology used by Liu et al. (2016, 2017) has an important implication for this paper.

There are a few studies on RVs in Chinese academic articles. Wang (2016) examined 10 high-level journals in Chinese linguistics and applied linguistics and obtained 91 RVs (see Appendix 1). Combining transitivity analysis from systemic-functional linguistics with Hyland's evaluation methods, a framework was established. The findings suggest that writers are more inclined to use RVs that represent mental process and verbal process to cite the affirmative or neutral opinions of different authors. He and Lei (2017) extracted 267 RVs from 20 papers in Chinese applied linguistics journals and found that compared with English papers, the number of textual verbs in Chinese papers is much less than those in English papers. These studies have set a good starting point and gained some empirical data; there are, however, some deficiencies: (1) The corpora used in Wang (2016) and He and Lei (2017) are only from linguistic articles, which limit the breadth of the investigation of Chinese RVs; (2) the frameworks for the study on English are directly used by He and Lei (2017) without considering the situation of

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[1]Retrieved June 7, 2018, from https://www.coventry.ac.uk/research/research-directories/current-projects/2015/british-academic-written-english-corpus-bawe/.

the Chinese academic language itself; (3) the lack of discussion on the pedagogical implications of Chinese RVs.

In view of the shortcomings of the previous research, this paper improves it from the following aspects: (1) Expand the scope of the corpus by collecting papers from three areas of linguistics, economics and political science so as to reduce the influence of subject factors on language use tendency; (2) establish a new classification framework of RVs by combining the existing RV classification framework with the use of the RVs in the Chinese academic papers; (3) deepen the analysis of RVs. In addition to the existing research on the distribution types of RVs, this paper also discusses the structure of the reporting sentences, the similarities and differences between the distribution of Chinese and English RVs, as well as the pedagogical implications.

3.3 Collecting the Data

3.3.1 The Corpus

The corpus used in this study comes from a 3 million-word medium-sized Chinese language terminology repository (Liu and Wang 2017), which contains a total of 300 highly cited journal articles extracted from the 10 social science fields such as pedagogy, management, and literature in China National Knowledge Infrastructure (CNKI). The reason why we focus on social science is that we agree with the Social Science Priority principle raised by Wen Qiufang.[2] Considering this principle and the workload, this study selects 30 papers from three typical social science fields, i.e., linguistics, economics, and political science, and consequently generates a sub-corpus containing more than 400,000 Chinese characters. AntConc (Version 3.4.4) (Anthony 2012) software is used to compile statistics and conduct concordance analysis.

3.3.2 The Scope of RVs

We manually annotate the RVs and identify their categories. 541 tokens (a total of 129 types) are extracted, and the average frequency of each type is around 4. Furthermore, the frequency shows a long tail distribution with only 13 types showing up more than 10 times, but 69 types appearing only once (see details in Appendix 2). The most frequently used type is 认为 *rènwéi* ‘believe’ with a frequency of 82, which is much higher than other types.

[2]This principle was referred in Prof. Wen Qiufang’s speech at the “Language Strategy in National Security” Summit at Shanghai on December 29, 2017.

Compared with the results of Wang (2016), the number of RVs in this study is shown in Table 3.1. The number of RVs extracted in this paper is 129, which has 91 more RVs than in Wang (2016). There are 49 RVs common to both studies, while there are 80 RVs unique to this study and 42 unique to Wang (2016). The common RVs account for 53.85% in Wang (2016) and only 37.98% in this paper. On the contrary, the percentage of unique RVs is high, with 46.15% in Wang (2016) and 62.02% in this study.

There are two reasons for the differences between the two research results. (1) The corpus range of the two studies is obviously different. Wang (2016)'s materials are mainly from linguistics, while the materials in this paper are composed of linguistics, economics, and political science. The corpus used in this study is interdisciplinary and has a wider scope, so the number of RVs is larger, and the coverage is wider; (2) the selection criteria of RV are inconsistent. Wang (2016) emphasizes that RVs are words, so the percentage of words in its wordlist is particularly high, reaching 97.80%, and non-words only account for 2.20% (only 2). In contrast, based on the observation of the interdisciplinary corpus, this study finds that the form of RV can not only be words, but also non-word forms such as verbal phrases, discontinuous constructions, and chunks. Therefore, the percentage of words in our wordlist is relatively low (89.92%), but the percentage of non-words is relatively high (10.08%), which enlarges the difference in the wordlists between the two studies.

In terms of the form of RVs in Chinese academic articles, although He and Lei (2017) stated that RVs can be words or phrases and several trisyllable phrases such as 弄清楚 *nòng qīngchǔ* 'figure out' and 称之为 *chengzhiwei* 'call sth. as sth.' were included in the list presented by Wang (2016), little study takes a close look at the form of RVs. A close observation to the RVs extracted here shows that the form of the RVs in Chinese is quite flexible. It can be either a) verbs, b) verb phrases, c) discontinuous constructions, or d) chunks.

(a) **Verbs** This is the most common form (e.g., example [1]),[3] and it is also a reference when we examine whether other structures are RVs.

[1] 勒弗维尔认为, 控制文学创作和翻译有内外两个因素。[Linguistics]
(Lefevere believes that there are two factors internally and externally in controlling literary creation and translation.)

(b) **Verbal Phrases** This type is not a word, but a phrase composed of words. The entire phrase is verbal and functions like a RV.

[2] ……学者把与托克维尔类似的观点称之为倒"J"假设。[Politics]
(… scholars call similar views to Tocqueville as inverted J assumptions.)

[3]For ease of understanding, we translated the Chinese example into English and underlined the reporting verb in the sentence. The source of the corpus is indicated in square brackets at the end of the sentence.

Table 3.1 Comparison of the RVs in Wang (2016) and this study

RVs in…	Total	Common RVs (%)	Unique RVs (%)	Word-type RVs (%)	Non-word-type RVs (%)
This paper	129	49 (37.98)	80 (62.02)	116 (89.92)	13 (10.08)
Wang (2016)	91	49 (53.85)	42 (46.15)	89 (97.80)	2 (2.20)

(c) **Discontinuous Constructions** This is a type of RV that is very distinctive in Chinese. It is composed of RVs (or nominalized RVs) and other prepositions or verbs to form a framework that can fill in the content. A discontinuous construction is often used as an adverbial or predicate to mark the cited content. There are several types of discontinuous constructions. For example:

[3] 在他看来，对翻译进行研究，特别是对翻译进行批评时，不能不把重点放在“翻译主体”上。[Linguistics]
(In his opinion, when studying translation, especially when criticizing translation, we must focus on ‘the subject of translation.’)

[4] 正如Nunan(1997) 分析的那样，香港大学生从中学考入大学后对英语学习的动力不足……[Linguistics]
(As Nunan (1997) analyzes, Hong Kong college students are less motivated to learn English after entering college from high school…)

[5] Morck等(2000)和Wurgler (2000)……的研究则提供了大股东的“掏空”行为降低了资本市场资源配置效率的证据。[Economics]
(Studies by Morck et al. (2000) and Wurgler (2000)…provide evidence that the ‘tunneling’ behavior of large shareholders reduces the efficiency of capital market resource allocation.)

[6] Foss et al. (1988)的类似研究也得出了相似的结论:在英语作为第二语言的课堂中存在交际畏惧，它似乎成了学生掌握英语的绊脚石。[Linguistics]
(A similar study by Foss et al. (1988) also came to a similar conclusion: …)

Among existing studies, no such structures have been included in Chinese RVs. It is necessary to include them in the scope of the RVs for the following reasons. (1) In Chinese academic articles, discontinuous construction is a device used by authors to cite or quote others’ thoughts, theories, opinions, findings, or research process, which serves the same function as a RV; (2) Among the 541 RVs that we extracted, 78 of them are discontinuous, accounting for 14.4%, which can be regarded as a significant and commonly used form of citing signals and should be identified as a kind of RVs.

(d) **Chunks** There are phrases such as 将重点放在 *jiāng zhòngdiǎn fàng zài* ‘put emphasis on’ in the Chinese academic articles. These chunks also function as signals for citations. However, their number is quite limited, and the frequency is low, for only two cases appearing among the 541 RVs.

3.4 The Structure of Reporting Sentence

The sentence containing a RV is regarded as a reporting sentence. The study of the structure of such sentences is also one of the aspects involved in the research on RVs. Thomas and Hawes (1994) pointed out that the typical structure of an English reporting sentence is a proposition clause introduced by a RV, but it can also be composed of RVs and noun phrases without having quoted clauses. Wen and Bi (2009) summed up six common reporting sentence patterns from the Academic English corpus of Shanghai Jiao Tong University, including: (1) *Sb. V-s/V-ed that-clause*, (2) *It be V-ed by sb. that-clause*, (3) *As V-ed by sb., …*, (4) *As sb. V-ed, …*, (5) *Sth. be V-ed by sb…*, and (6) *As be V- Ed by sb…*. He and Lei (2017) pointed out that RVs can be followed by simple sentences or complex sentences.

Through the investigation of the corpus of this study, the structure of reporting sentences has the following five types:

(1) NP + RV + CLAUSE, which is a complex sentence structure composed of *'noun phrases + RVs + quoted clauses'* (e.g., example [7]). It is the typical structure considered in Thomas and Hawes (1994). In addition to using the author[4] as the subject, there are also a large number of sentences that use non-living things as the subject, such as literature or research (as shown in example [8]).

[7] 另有学者认为，虽然同时满足非政府组织所有特征的组织在中国微乎其微,但……[Politics]
(Other scholars think that although the organization that satisfies all the characteristics of non-governmental organizations at the same time in China is minimal, but…)

[8] 石永珍(2002)的研究表明非英语专业高分组学生积极参加课外英语交际活动, 以提高自己的语言能力。[Linguistics]
(Shi (2002)'s research shows that non-English majors in the high score group actively participate in English extracurricular activities to improve their language skills.).

(2) NP + RV + NP, a single sentence structure composed of 'noun phrase + RV + noun phrase.' In this type of structure, the cited content does not directly relate to the author's point of view or the specific content of the study, etc., but refers to the relevant content in a general way, as shown in example [9].

[9] 高海虹(2000)考察了交际策略的使用与英语水平的关系。[Linguistics]
(Gao (2000) examined the relationship between the use of communication strategies and the level of English.)

[4]We use the terminology of Thompson and Ye (1991), referring to referrer as writer and referee as author.

(3) NP + PP + Light V + RV, a sentence composed of ‘noun phrase + prepositional phrase + light verb/formal verb + RV’ (example [10]). In this structure, the research process of the author is cited by RVs, while the source, object, or method of the research behavior are introduced using the preposition structure.

[10] ……何浚(1998)对上市公司股权结构进行了详细描述, …… [Economics]
(He (1998) gave a detailed description of the equity structure of the listed companies, …)

(4) PP (RV) + CLAUSE, which is a sentence composed of ‘preposition phrase in which the verb is located + quotation clause.’ The preposition phrase is often used as an adverb of the sentence to mark the author, as shown in example [11].

[11] 在德赖辛克看来, 协商民主的理论基础, 一方面是基于自由主义理论……[Politics]
(According to Dryzek, the theoretical basis of deliberative democracy is based on liberal theory…)

(5) A phrase lexicalized from the sentence in which the RV is located. Sometimes the RV does not occupy the predicate position of a main clause but serves as a modifier in a nominal phrase, which is lexicalization according to Halliday and Matthiessen (2008). As in [12], the nominal phrase *‘the economics of property rights developed by Coase (1937; 1960)...,’* in which the RV 发展 *fāzhăn* ‘develop’ is contained, can be seen as lexicalized from the reporting sentence, ‘*Coase (1937; 1960) developed the economics of property,*’ in which the studies of Coase (1937; 1960) were reported and cited.

[12] 由Coase(1937;1960)……等发展起来的产权经济学强调产权和制度环境在决定经济行为中的相互作用……[Economics]
(The economics of property developed by Coase (1937; 1960) … emphasizes the interaction between property rights and the institutional environment in determining economic behavior …).

3.5 The Classification and Functions of RVs

Various perspectives are used in the classification of RVs, but the core purpose is to distinguish the functional differences between different verbs. Swales (1990) roughly classified the RVs into two categories from the perspective of whether to express the author’s attitude. One is the word that expresses the attitude of the author and the author is responsible for the information transferred, such as *show*, *demonstrate*, *establish*; the other one is, in contrast, the word that does not express the attitude of the author, but objectively refers to others’ theories, opinions, or comments, such as *suggest*, *propose,* and *examine*. Thompson and Ye (1991) further pointed out that the classification of RVs should consider its denotation and evaluative potential, as well as the stance of the writer and the author. According to this framework, the denotation of RVs can be categorized into *textual verbs*, *mental verbs,* and *research verbs* from the perspective of the author and can also be categorized into *comparing verbs* and *theorizing verbs* from the perspective of the writer. The evaluation meaning of RVs can be divided into *positive*, *negative,* and *neutral* from the perspective of the author and can also be divided into *factive*, *counter-factive,* and *non-factive* from the perspective of the writer.

The study of Thompson and Ye (1991) laid the basis for the classification of RVs. On one hand, the three categories of RV denotative meanings have been widely accepted. Both Thomas and Hawes (1994) and Hyland (2002) divided RVs into *discourse verbs*, *cognition verbs*, and *research/real-world verbs*. He and Lei (2017) also used this method in classifying Chinese RVs. On the other hand, the evaluation of RVs is integrated into the three-category system. Thomas and Hawes (1994) divides *discourse verbs* into *qualification verbs*, *tentativity verbs*, and *certainty verbs*, which includes considerations of evaluation. Hyland (2002) distinguishes three evaluation meanings of finding verbs, i.e., *factive*, *counter-factive,* and *non-factive*, four evaluation meanings of cognitive verbs, i.e., *positive*, *critical, neutral* and *tentative*, and *doubt*, *assurance,* and *counters* in discourse verbs. Although adopted the transitivity analysis framework was used to classify Chinese verbs, Wang (2016) still subdivided them from the dimensions of evaluation tendencies.

This paper uses the three-category framework developed by Thomas and Hawes (1994) and Hyland (2002) which can comprehensively cover the general, functional types of RVs. Furthermore, we changed some details in the subcategories to make this framework more appropriate to the data collected based on Chinese academic papers. Additionally, we rethought the distinction on the perspective of the writer and the author in Thompson and Ye (1991) and pointed out that all the RVs can reflect the writer's description and evaluation of the author's behavior and opinions, which can help us to distinguish between categories of RVs.

As pointed out by Thomas and Hawes (1994) and Hyland (2002), the boundary between RVs is not always clear and some RVs may belong to multiple categories. This situation is also encountered in this study. For example, 表示 *biǎoshì* 'represent' is a process verb in example [13] but a discourse verb (means *point out*) in example [14]. However, this kind of overlap does not affect the use of these frameworks to analyze their meaning and functions (Hyland 2002).

[13] ……Romer(1986)用从事研究和开发的科技人员数量来表示人力资本……[Economics]
(… Romer (1986) represented human capital by the number of scientific and technical personnel engaged in research and development….)

[14] ……副司长杨进……表示，"近千万留守儿童的成长问题需要特别关注"。[Politics]
(… Deputy Director Yang Jin… pointed out that 'the growth of nearly 10 million left-behind children needs special attention.').

3.5.1 Research Verbs

Research verbs are words used by writer to describe author's research behavior in the real world, including the processes and the results of the research. Thus, they can be divided into procedural verbs and finding verbs. For instance, 区分 *qūfèn* 'distinguish' in the example [15] refers to the author's behavior in the research process, belonging to the process verb. On the contrary, 发现 *fāxiàn* 'find' in the example [16] reports the author's research results, belonging to the finding verb.

[15] 克瑞斯和勒文还区分了穷尽的和包含的分析性过程、地形学的和拓扑学的过程等。[Linguistics]
(Kress and Leeuwen also distinguished between exhaustive and contained analytical processes, topographic and topological processes, and so on.)

[16] Claessens, Djankov and Lang (2000)发现, 在亚洲市场中, 交叉持股和金字塔式的股权结构非常普遍。[Economics]
(Claessens, Djankov, and Lang (2000) found that cross-shareholdings and pyramid-type equity structures are common in Asian markets.).

There are 264 research verbs in total, of which 81 cases are finding verbs, a total of 15 types, and the token-type ratio (hereafter TTR) was 5.4. The high-frequency finding verbs are 发现 *fāxiàn* 'find' (42) and 表明 *biǎomíng* 'show' (13), which account for 67.9% of the total frequency of finding verbs. Therefore, they are typical verbs quoting research results. There are 183 procedural verbs, a total of 67, with an RRT of 2.7. The high-frequency procedural verbs are 研究 *yánjiū* 'study'(22), 定义 *dìngyì* 'define'(13), 提供 *tígòng* 'provide'(11), 分析 *fènxī* 'analyze'(10), and 调查 *diàochá* 'investigate'(8). There are various procedural verbs, such as 计算*jìsuàn* 'calculate,' 估算*gūsuàn* 'estimate,' 假定 *jiǎdìng* 'assume,' 区分 *qūfèn* 'distinguish,' 培训 *péixùn* 'train,' 描述 *miáoshù* 'descript,' 观察 *guānchá* 'observe,' and so on. Theoretically speaking, any specific behavior in the research process can be converted into a process verb to be quoted.

The process verbs can be used to refer to the general or specific research process. For example, 研究*yánjiū* 'study' is a verb summarizing the research process instead of pointing to a specific research behavior (see [17]), while 计算*jìsuàn* 'calculate' in example [18] indicates a specific research behavior, i.e., calculation. In general, the research process can be quoted using a general process verb, while a specific verb should be used when there is a need to emphasize a specialized research activity. In addition, the light verb 进行*jìnxíng* prefers to be combined with a process verb to form NP + PP + Light V + RV structure (see [10]). The process meaning contained in *jinxing* makes the RV put more emphasis on the research process.

[17] Huang 和 Van Naerssen (1987)研究了学习策略与口语成绩的关系。[Linguistics]
(Huang and Van Naerssen (1987) studied the relationship between learning strategies and oral performance.)

[18] ……他们(2005)计算了留守儿童在全体儿童中所占的比例……[Politics]
(… they (2005) calculated the percentage of left-behind children in all children…)

In terms of evaluation function, research verbs are used to report objective facts, expressing neutral evaluation. However, there are a few research verbs refer to evaluation, like 开创*kāichuàng* 'pioneer' in example [19], which expresses a positive evaluation of the writer to the cited author.

[19] 索洛残差法开创了经济增长源泉分析的先河，是新古典增长理论的一个重要贡献(Lucas, 1988)。[Economics]
(Solow residual pioneered the analysis of sources of economic growth and was an important contribution to neoclassical growth theory (Lucas 1988).)

3.5.2 Discourse Verbs

The discourse verbs reflect a writer's attention to an author's verbal activities. The discourse verbs chosen by a writer show his understanding of the relationship between the author and his listeners, which is constructed by the author himself in academic texts. As in [20], the discourse verb 强调*qiángdiào* 'emphasize' reflects that the writer believes that the author (herein referred to Swain) wants listeners to pay enough attention to his point of view. The speech activity here is emphasizing.

[20] Swain特别强调, 只有当学习者受到推动时, ……[Linguistics]
(Swain emphasized in particular that only when learners are promoted,…)

There are 239 discourse verbs, a total of 32 types, with a TTR of 7.5. The high-frequency finding verbs were 认为 *rènwéi* 'believe'(82), 指出*zhǐchū* 'point out'(42), 提出 *tíchū* 'propose'(29), 说*shuō* 'say'(17), 所说 *suǒshuō* 'as…said'(14) and 强调 *qiángdiào* 'emphasis'(11), where the frequency of 认为 *rènwéi* 'believe' is 34.3% of all cases, which is a typical discourse verb.

There are functional distinctions between discourse verbs. 认为 *rènwéi* 'believe,' the typical discourse verb, is more inclined to mark indirect speech, as shown in example [21], while the 'say' verbs (including 说 *shuō* 'say'/如…所说 *rú... suǒshuō* 'as…said'/讲 *jiǎng* 'say,' 用…的话来说 *yòng ...de huà lái shuō* 'in the words of') tend to mark direct quotations, as shown in example [22].

[21] Holec (1981:3)认为, 学习者自主就是……[Linguistics]
(Holec (1981:3) believes that learner autonomy is…)

[22] 正如Denis and McConnell (2003)所讲, "…公司治理是企业内部机制和外部机制的总和……"[Economics]
(As Denis and McConnell (2003) said, '…Corporate governance is the sum of internal and external mechanisms of the company…')

Discourse verbs also change depending on what kinds of contents are cited. The cited contents are usually either key concepts (grammatical representations are usually noun phrases) or related viewpoints (grammatical representations are usually clauses). These two kinds of reference content are, respectively, marked by different discourse verbs. The discourse verbs such as 认为 *rènwéi* 'believe,' 指出 *zhǐchū* 'point out,' 说*shuō* 'say' tend to refer to related viewpoints. Therefore, the reporting sentences they locate in are mostly in the form of NP + VP + CLAUSE, as shown in [21] and [22]. In contrast, discourse verbs such as 探讨 *tàntǎo* 'discuss,' 强调 *qiángdiào* 'emphasize,' and 提出 *tíchū* 'propose' prefer to cite key concepts. Thus, these discourse verbs are more distributed in sentences in the form of NP + VP + NP, as shown in [23]. 提出 *tíchū* 'propose' is a typical member of these words, and its collocation objects are 概念*gàiniàn* 'concept,' 定义 *dìngyì* 'define,' 公式 *gōngshì* 'formula,' 模型 *móxíng* 'model,' 论点*lùndiǎn* 'argument,' 语法单位 *yǔfǎ dānwèi* 'grammatical unit,' 元功能 *yuángōngnéng* 'meta-function,' 口号*kǒuhào* 'slogan,' 看法 *kànfǎ* 'view,' 假说 *jiǎshuō* 'hypothesis,' and so on.

[23] 刘津开(2002)通过对猜词策略的实验, <u>探讨</u>阅读过程中母语学习策略迁移问题。[Linguistics]
(Liu (2002) <u>explores</u> the problem of mother tongue learning strategies in the process of reading by experimenting with guessing strategies.)

The discourse verbs more often reflect the writer's evaluation of the author's point of view. The verbs such as 指出 *zhǐchū* 'point out,' 警告*jǐnggào* 'warn,' 呼吁 *hūyù* 'appeal,' 主张 *zhǔzhāng* 'claim,' and 所指出*suǒ zhǐchū* 'indicated by' express that the writer affirmed the quoted contents; 'say' verbs, 报道 *bàodào* 'report' and 披露 *pīlù* 'reveal' express the writer's neutral attitude; while 认为 *rènwéi* 'believe' and 强调*qiángdiào* 'emphasize' are used to express a tentative stance of the writer; i.e., the attitude they hold is neither neutral nor inclined but leaves room for discussion.

There are fewer discourse verbs that express a critical attitude. The example [24] expresses a slightly critical attitude, using a discourse verb phrase—将重点放在 *jiāng zhòngdiǎn fàng zài* 'put emphasis on.' However, the phrase itself does not have a clear tendency to criticize, but the contexts, especially phrases such as 大部分 *dàbùfèn* 'majority,' 某一特定方面 *mǒu yī tèdìng fāngmiàn* 'a specific aspect,' make the position of criticism more prominent. Hyland (2002) shows that there are only a few reported verbs that directly express criticism, which is the same with the data in the Chinese corpus of this research. If we want to know which RVs in Chinese academic articles are inclined to express criticism and negation, more corpus samples need to be collected.

[24] 在研究公司治理和企业绩效间关系的学术文献中，大部分<u>将重点放在</u>公司治理的某一特定方面……[Economics]
(Most of the academic literature that studies the relationship between corporate governance and corporate performance <u>puts emphasis on</u> a particular aspect of corporate governance…)

3.5.3 Cognition Verbs

Cognition verbs reflect a writer's speculation on an author's cognitive process and psychological process. According to Hyland (2002), cognition verbs are concerned with a researcher's mental process. Taking [25] as an example, the RV 考虑 *kǎolǜ* 'consider' shows that the writer reports on the mental process during which the authors consider *the shareholding ratio of the largest shareholder* as a key point into their research.

[25] 孙永祥和黄祖辉(1999)考虑第一大股东持股比例对托宾Q值和对兼并与管理者变化的影响。[Economics]
(Sun and Huang (1999) considered the impact of the shareholding ratio of the largest shareholder on Tobin's Q and changes in mergers and managers.)

Compared with the research verbs and discourse verbs, the number of cognition verbs is small, only 38 cases, a total of 15 types in our corpus, with a TTR of 2.5. This distribution is also consistent with the observation on English in Hyland (2002). The cognitive verbs that appear more frequently are 在…看来 *zài…kàn lái* 'in one's opinion; according to' (13) and 考虑 *kǎolǜ* 'consider' (6).

Through the analysis of 38 reporting sentences containing cognition verbs, the result shows that cognition verbs tend to express the broad affirmation of cited content by the writer. We believe that cognition verbs and discourse verbs are interchangeable. By using cognition verbs, writer converts extravertive behaviors (marked by discourse verbs) into introversive behaviors (marked by cognition verbs), expanding the distance between the author and the academic circles, and narrowing the distance between the author and the writer. This is the mechanism by which cognitive verbs express the writer's broad affirmation.

However, according to the study of English (Thompson and Ye 1991; Thomas and Hawes 1994; Hyland 2002), cognition verbs also express suspicion, criticism, and even negative evaluation. These samples are not observed in the corpus of this article. Further research depends on the expansion of the scale of the corpus.

3.6 Results and Discussion

3.6.1 Distribution of RVs in Different Categories

The overall situation of the RVs in this paper is shown in Table 3.2. It can be seen that there is a total of 541 cases, of 129 types, with a TTR of 4.2 and an average frequency of 18 per article. Among the three types of RVs, research verbs accounted for the highest percentage, with a total frequency of 264 times, accounting for 48.8%, and an average frequency of 8.8 times per article. The number of research verbs is also the most abundant, with a total of 82 types,

Table 3.2 Distribution of RVs in categories

Category	Token	%	Average per paper (n = 30)	Type	Token-type
Research V.	264	48.8	8.8	82	3.2
Procedural V.	*183*	*33.8*	*6.1*	*67*	*2.7*
Finding V.	*81*	*15.0*	*2.7*	*15*	*5.4*
Discourse V.	239	44.2	8.0	32	7.5
Cognition V.	38	7.0	1.3	15	2.5
Total	541	100	18.0	129	4.2

accounting for 63.6% of the total number of RVs, and the TTR is 3.2, which is lower than the overall average (4.2).

The frequency of discourse verbs is close to research verbs, but its richness is lower than research verbs. The TTR of discourse verbs is 7.5, which is much higher than the research verbs and the overall average, which reflects that there are fewer discourse verbs used and the use is concentrated on some high-frequency words.

In contrast, the absolute number of cognition verbs is the smallest, the frequency of occurrence is only 38 times, and the average frequency per article is only 1.3 times. However, the TTR of cognition verbs is 2.5, which is the lowest among the three. This shows that the use of cognition verbs in academic discourse is diverse.

There are six expressions which belong to two categories. They are 证明*zhèngmíng* (procedural v. and finding v.), 说明*shuōmíng* (finding v. and discourse v.), 论述*lùnshù* (procedural v. and discourse v.), 表示*biǎoshì* (procedural v. and discourse v.), 研究*yánjiū* (procedural v. and finding v.) and 讨论*tǎolùn* (procedural v. and discourse v.).

3.6.2 Comparison with English RVs

Comparing with the findings in Hyland (2002: 6), English writers use RVs more frequently than Chinese writers, because the frequency of verb usage in each article is 28.6, which is significantly higher than the average of Chinese papers (18). To be more specific, English articles are different from their Chinese counterparts in terms of functional usage patterns. In English articles, discourse verbs account for the highest proportion (57%), followed by research verbs (35%). On the contrary, in Chinese articles, research verbs account for a higher proportion (48.8%) than discourse verbs (44.2%). Therefore, through combining the usage pattern with the function of RVs, it is plausibly concluded that Chinese writers are more likely to quote other people's research behaviors and report their research results (resulting in a bias in the using of research verbs), while English writers tend to focus more on establishing conversation between the writer and author, the author and academia (resulting in a bias in the using of discourse verbs). However, the English articles share a similarity with Chinese articles in terms of the lowest percentage of cognition verb usage (with 8 and 7%, respectively). Likewise, we could conclude that the English writers and the Chinese writers are less likely to speculate on the psychological cognition process of the cited person in the academic discourse. This may be related to the fact that the subjective feature of this behavior does not conform to the requirements of the academic writing (neither in English style nor in Chinese style).

3.6.3 Pedagogical Implications

Teaching Chinese as an International Language (TCIL) has been becoming more refined and specialized, which relies on in-depth research in all directions of Chinese for Specific Purposes. The use of RV is an essential grammar device in Chinese academic writing, but there is limited research about them in TCIL. We argue that more attention should be paid to the teaching of lexical and grammatical devices in Chinese academic writing.

Adequate research on relevant lexical and grammatical devices is the basis of teaching applications. This study has the following implications: (a) Provide specific content for citation teaching in CAP. The characteristics and functions of RVs analyzed in this article can be used as a teaching content to help us guide learners to understand and grasp citations and enable them to select appropriate words and grammar devices in academic writing. For example, in the teaching of literature review writing which usually comprises a bunch of citations, learners should be taught to use a finding verb like 发现 *fāxiàn* 'find' to emphasize what the researchers have discovered, while to use a procedural verb like 调查*diàochá* 'investigate' if they want to focus on the methodology the researchers use. (b) Distinguish the level and sequence in the teaching of RVs and focus on the difficulty of writing course. As RVs are rich in form and number, we must follow the principle of gradual improvement to teach them. We suggest that the focus of teaching should be on discourse verbs and research verbs, which should be combined with functions and sentence patterns. To be more specific, a transformation drill could be conducted to help learners grasping NP + RV + NP clause and NP + PP + Light V + RV clause to achieve diverse expressions in different reporting scenarios. (c) In terms of learning sequence, we suggest that learners can first learn the most frequently used general expressions among various types of RVs, for instance, 研究 *yánjiū* 'study' and 定义*dìngyì* 'define' out of procedural verbs, 发现 *fāxiàn* 'find' and 表明*biǎomíng* 'show' out of finding verbs, 认为 *rènwéi* 'believe; think' and 指出*zhǐchū* 'point out' out of discourse verbs, and 在…看来 *zài…kàn lái* 'in one's opinion; according to' and 考虑 *kǎolǜ* 'consider' out of cognition verbs, followed by expanding to other RVs, and finally achieve the goal of full mastery. A RVs' word list should be developed to scheme the entire learning process of RVs if possible.

3.7 Conclusion

Through the investigation of academic articles in three disciplines, this paper describes the forms and sentence patterns, functions and classification, and frequency distribution of the Chinese RVs. There are four forms of Chinese RVs, including verbs, verbal phrases, discontinuous constructions, and lexical chunks. They usually occur in five reporting sentence patterns: (1) NP + RV + CLAUSE, (2) NP + RV + NP, (3) NP + PP + Light V + RV, (4) PP(RV) + CLAUSE, and (5) a phrase lexicalized from the sentence in which the RV is located in. According to the functions, RVs can be divided into three categories. Among them, research verbs are used by a writer to focus on an author's real-world acts, which have the highest percentage and are the most abundant type. Research verbs have two subcategories, i.e., process verbs and finding verbs, which are used to quote research behaviors and results, respectively. Discourse verbs are also frequently used. They express the concern of a writer on the interactive relationship between the author and the academic community, where the writer often expresses his own evaluation. The least frequent verbs are cognition verbs, which are used by a writer to speculate on the mental activities and cognitive activities of the cited person. They tend to be used to express the broad affirmation of the cited content of the writer. These findings on RVs in this study can not only provide support for Chinese academic writing, but also facilitate the exploration, application, and education of Chinese for Academic Purposes.

Appendix

Appendix 1. 129 RVs in this paper

Research V. (82 types)	Procedural V. (67 types)	研究(22)、定义(13)、提供(11)、分析(10)、调查(8)、采用(8)、计算(7)、考察(6)、估计(6)、假定(5)、界定(4)、描述(4)、培训(4)、区分(4)、估算(3)、解释(3)、涉及(2)、发展(2)、推算(2)、表示(2)、总结(2)、归纳(2)、探索(2)、阐述(2)、延伸(2)、建立(2)、引用(2)、论证(2)、设计(2)、出版(2)、研讨(1)、采用(1)、梳理(1)、公布(1)、丰富(1)、叫做(1)、概括(1)、颁布(1)、探寻(1)、称为(1)、发布(1)、举行(1)、规定(1)、称之为(1)、测量(1)、列举(1)、使用(1)、论述(1)、观察(1)、构造(1)、讨论(1)、做法是(1)、替代(1)、分解(1)、推测(1)、培养(1)、训练(1)、剖析(1)、换算(1)、倒推(1)、引入(1)、比较(1)、证明(1)、参考(1)、假设(1)、深化(1)、代替(1)
	Finding V. (15 types)	发现(42)、表明(13)、证明(4)、得出(4)、证实(3)、推动(3)、显示(2)、开创(2)、结论是(2)、说明(1)、反映

(continued)

(continued)

Research V. (82 types)	Procedural V. (67 types)	研究(22)、定义(13)、提供(11)、分析(10)、调查(8)、采用(8)、计算(7)、考察(6)、估计(6)、假定(5)、界定(4)、描述(4)、培训(4)、区分(4)、估算(3)、解释(3)、涉及(2)、发展(2)、推算(2)、表示(2)、总结(2)、归纳(2)、探索(2)、阐述(2)、延伸(2)、建立(2)、引用(2)、论证(2)、设计(2)、出版(2)、研讨(1)、采用(1)、梳理(1)、公布(1)、丰富(1)、叫做(1)、概括(1)、颁布(1)、探寻(1)、称为(1)、发布(1)、举行(1)、规定(1)、称之为(1)、测量(1)、列举(1)、使用(1)、论述(1)、观察(1)、构造(1)、讨论(1)、做法是(1)、替代(1)、分解(1)、推测(1)、培养(1)、训练(1)、剖析(1)、换算(1)、倒推(1)、引入(1)、比较(1)、证明(1)、参考(1)、假设(1)、深化(1)、代替(1)
	Finding V. (15 types)	发现(42)、表明(13)、证明(4)、得出(4)、证实(3)、推动(3)、显示(2)、开创(2)、结论是(2)、说明(1)、反映(1)、得到(1)、归因于(1)、结果是(1)、根据……的研究(1)
		(1)、得到(1)、归因于(1)、结果是(1)、根据……的研究(1)
Discourse V. (32 types)		认为(82)、指出(42)、提出(29)、说(17)、(正)如……所说(14)、强调(11)、探讨(6)、讨论(3)、介绍(3)、论述(3)、评价(3)、谈到(2)、肯定(2)、按照……的说法(2)、主张(2)、说明(2)、记载(1)、推广(1)、警告(1)、如……所讲(1)、展示(1)、披露(1)、报道(1)、所谈(1)、提到(1)、如……所指出(1)、用……的话来说(1)、将重点放在(1)、呼吁(1)、谈过(1)、评论(1)、表示(1)
Cognition V. (15 types)		在……看来(13)、考虑(6)、注意(4)、思考(2)、相信(2)、当作(2)、作为(1)、归结(1)、接受(1)、投向(1)、看成(1)、关注(1)、充满(1)、尝试(1)、谋求(1)

Note The number followed in the blankets shows the frequency of the expression

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Chapter 4
Walking the Garden Path Toward Academic Language: Perspectives from International Students in Chinese Higher Education

Yue Peng and Wei Yan

Abstract With the increasing number of international students pursuing academic degrees at Chinese universities, it is essential to understand their experiences with academic Chinese language. Employing two focus group interviews with a total of eight students, this study was conducted at a university in Southwest China. The study found that the Chinese language preparatory programs aiming to prepare students for the Chinese language proficiency test (Hanyu Shuiping Kaoshi, HSK) build a foundation for the continuous learning and use of academic Chinese language and equip students with necessary interpersonal communication skills to support their academic study. However, the language preparatory program mainly taught students language for social purposes, which was one of the key factors contributing to their significant linguistic challenges when they start academic studies. Despite all the efforts and strategies employed by students, some prominent gaps still existed between the students' current academic language proficiency and the desired proficiency in an academic context. Therefore, both the university and the instructors had to take measures to accommodate international students' linguistic challenges, particularly around assessment. Although encountering substantial linguistic difficulties when transitioning into academic study, students reported that their proficiency of academic language gradually developed through their experiences at the university. A Chinese for academic purposes approach with a focus on students' needs in the academic context is desired. Implications for the re-orientation of the focus and content of the Chinese language preparatory program and the language assessment with a practical focus on academic Chinese language were discussed.

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4.1 Introduction

Over the past decade, the number of international students attending Chinese post-secondary institutions has increased substantially. According to China's Ministry of Education (MoE), the number of international students in Chinese universities has more than doubled over the past ten years from 195,503 in 2007 to 459,200 in 2017 (MoE 2008, 2018). During this same period, the Chinese government has launched numerous scholarships to provide financial support for international students. For example, the Study in China Scholarship Program supports international students at undergraduate and graduate levels across a wide range of subjects. More recently, together with the Chinese government's Belt and Road Initiative, new scholarship programs were made available to students from the Belt and Road region including more than 60 countries in Middle and Southern Asia, East Europe, and East Africa. These students came to China for various reasons including short-term (e.g., to study Mandarin, gain cross-cultural experiences) and long-term stays (e.g., pursuing an academic degree; MoE 2018).

To be admitted into an academic program in a Chinese university, non-native Chinese speakers must demonstrate their Chinese language proficiency by taking a standardized test, the Hanyu Shuiping Kaoshi (HSK; MoE 2009). The threshold for admission into an academic program ranges from HSK Level 3 to Level 5, depending on the institution and the program. Students are either admitted directly, if they have met the required level of HSK, or offered a conditional admission dependent upon achieving the required level of HSK by the end of a language preparatory program. The language preparatory program is offered to help students achieve the required level of HSK for admission. Admission is hence based on the assumption that passing the required level of HSK indicates students' adequate Chinese proficiency to study in academic programs. That is to say, as an admission criterion, the HSK is assumed to be an indicator of students' adequate language proficiency to function properly at university academic settings.

Despite the efforts taken at the policy and institutional level, various researchers have noted international students' significant linguistic difficulties in academic programs (Gao and Liu 2016; Shan 2008; Shan and An 2009; Wang and Curdt-Christiansen 2016). However, while students' challenges with academic language have been commonly recorded, there remains little understanding regarding the processes that contribute to students' linguistic challenges. With such large governmental and institutional expenditure (e.g., financial, manpower, resources), an in-depth understanding of the process that supports international students development of academic Chinese language is critically needed.

4.2 Literature Review

The literature reviewed in this section is intended to situate our study in the academic field and also to familiarize readers with the relevant literature pertaining to the research focus. We first present a brief history of Chinese for academic purposes (CAP) instructional practice in China followed by an overview of the CAP research. We also include a section on assessing academic language, as instruction and assessment function are two sides of the same coin.

4.2.1 CAP Instruction

Following Hyland and Shaw's (2016) definition of language for academic purpose, we use the term Chinese for academic purposes (CAP) to refer to instruction and research that focuses on the communicative needs and practices of individuals working in an academic context through Chinese language. CAP instruction in China started in the 1950s with addressing the practical needs required to prepare international students for academic studies at Chinese universities (Zhao 2015). As early as late 1950s and early 1960s, practical attempts were made to target Chinese language teaching toward students' needs in studying their specific academic areas at Peking University (Zhang 2013). These early endeavors entailed spending one to three months in the language preparatory program on reading materials in students' academic disciplines such as Political Economics and Engineering. In the 1970s at Beijing Language and Culture University, after the first 15 weeks of general Chinese courses, customized courses were offered separately to learners in four areas, namely Liberal Arts, Sciences and Engineering, Western Medicine, and Chinese Medicine (Lv 1990). In addition, instructional materials were published for the teaching and learning of Chinese in specific disciplines, such as <科技汉语教程> (A Course in Scientific Chinese) (Du 1990) and <中医汉语> (A Chinese Course for Chinese Medicine Majors) (Wang and Yan 1999).

In the 1990s, international student population at Chinese universities started to change substantially. Cheng (1992) noted that while the total population of international students at Chinese universities continued to increase, the number in the academic areas of Science, Engineering, Agriculture, and Medicine dropped sharply. The number of international students coming for short-term language programs or degree programs in Chinese Language and Literature increased. Therefore, the needs for CAP in particular disciplines are decreasing. As a result, the distinction between CAP and Chinese for general purposes (CGP) in teaching became less clear (Zhao 2015). After 2000, there has been a shift back on an increasing number of degree-pursuing students registered in various academic disciplines (Zhao 2015). Thus, preparing these students with academic Chinese language proficiency has again become a critical concern for Chinese universities.

4.2.2 CAP Research

The field of CAP research has been dominated by the language-focused approach (Hutchinson and Waters 1987), with a primary focus on analyzing the linguistic features of language used in different subject-specific situations. For example, early works focused on lexical, grammatical, and style features of the Chinese language used in the context of Science and Technology (e.g., Du 1981, 1982, 1988; Huang 1986). In a more recent article, Dong and Han (2014) suggested four major areas for studying CAP. Three of the proposed four areas were centered on the language system and its uses, including examining the lexical and grammatical elements of the language through register analysis, analyzing the linguistic functions and notions in academic setting (e.g., providing definitions and explanation, and categorizing and giving examples), and studying the situations where academic Chinese was used (e.g., in class and at laboratories).

Only the fourth area in Dong and Han's (2014) article, focusing on the relationship between CAP and CGP, touches upon the teaching and learning process of academic Chinese. Unfortunately, the empirical studies examining the process of CAP teaching and learning remained limited. While language-focused studies are of importance, they are not sufficient for a full understanding of CAP, as the CAP research should include study on effective learning, teaching, and assessment, and not solely descriptions of the linguistic and discoursal structures of academic texts, and analysis of the textual practices of academics (Hyland and Shaw 2016).

Shan and An (2009) conducted one of the few studies illuminating the CAP practices in Chinese universities. They investigated 20 universities specializing in Science and Engineering, including participants of administrators, teachers, and students. Through interviews and surveys, they found that less than 1/3 of the universities offered CAP courses. Several conceptual and practical constraints were identified that prevented such courses from being offered. One constraint reported by Shan and An was that university administrators lacked understanding of students' challenges as some administrators assumed that since students had passed the required level of HSK, they would have few linguistic problems and would gradually become familiar with Chinese language in academic settings over time. The lack of understanding about the nature of the CAP courses and their objectives among educators was another conceptual constraint that impeded offering such courses. Practical constraints included the diverse background of students from a wide range of subjects and the lack of instructional materials. In the study, the researchers also ranked students' linguistic needs in the order of: (1) knowing the technical vocabulary in the subject areas; (2) understanding reading materials; (3) understanding lectures; (4) engaging in academic discussion; (5) writing assignments; and (6) writing papers. In general, receptive skills (i.e., reading and listening) were perceived more pressing than productive skills (i.e., writing and speaking).

Wang and Curdt-Christiansen (2016) examined the Study in China Program at a Chinese university and also found tensions around CAP practice in Chinese universities. By analyzing policy documents, interviewing students and teachers, and conducting classroom observations, their study identified major tensions between policy and reality at both individual and institutional levels. One important tension was found between the actual teaching of Chinese for interpersonal communication and students' needs in academic Chinese language. This tension was revealed in academic instructors' frustrations toward international students' inadequate progress and students' despair about the language preparatory courses. According to the researchers, this tension forced faculty and students to compromise academic studies. The findings of these studies call for further investigations on the CAP practice, particularly from students' perspectives as academic language proficiency derived from practical needs, and are in the center of international students' academic study.

4.2.3 Assessing Academic Chinese

In the current path leading to academic programs as presented previously, HSK is used to determine a student's readiness for participating in academic studies and thus plays a critical role in this process. According to the developer of the HSK, Chinese Testing International (CTI 2018), the six levels of the written exam aligns with *Chinese Language Proficiency Scales for Speakers of Other Languages* (CLPS) (Hanban 2009) and the Common European Framework of Reference for Languages (CEFR; see Table 4.1). An independent speaking test (i.e., Hanyu Shuiping Kouyu Kaoshi; HSKK) was required by some universities, dependent upon institutional policies. HSK has a broad scope of uses as specified by the test designer: "It assesses non-native Chinese speakers' Chinese proficiency in their daily, academic, and professional lives" (CTI 2018). As for the academic setting in particular, HSK could serve as "a reference for an educational institution's decision-making concerning recruiting students, assigning students to different classes, allowing students to skip certain courses and giving students' academic credits" (CTI 2018).

Weigle and Melone (2016) noted that as an assessment tool for academic purposes, the test needed to reflect content relevance, which suggests that the content or topics, the nature of the language used in the assessment, and the nature of the

Table 4.1 HSK levels, CLPS, and CEFR

HSK		CLPS	CEFR
Advanced	Level six	Level V	C2
	Level five		C1
Intermediate	Level four	Level IV	B2
	Level three	Level III	B1
Beginners	Level two	Level II	A2
	Level one	Level I	A1

test tasks need to reflect academic settings. Following this line of argument, Zhao (2015) critiqued using HSK in the academic setting and argued that what HSK assesses was not closely related to students' linguistic needs in academic studies. Not only does a test play an important role in recruitment and admission decisions, but washback effects arising from the test have shown to impact how teachers teach and how learners learn (Cheng 2008). Zhao noted that using HSK as an admission criterion tended to narrow the language preparatory program to teach Chinese for general purposes only; however, this anecdotal account has yet to be supported by empirical evidence. Therefore, as an integral component of the CAP practice in Chinese universities, it is vital that we gain a better understanding of the role of HSK.

4.3 Conceptual Framework

Jordan (1997) summarized three approaches to language teaching and learning, including language for general purposes (e.g., school exams), language for social purposes in communicative situations (e.g., shopping, letter writing, and telephoning), and language for specific purposes (e.g., studying or working in a specific discipline). It is noteworthy that what was often referred to as language for general purposes by some other researchers (e.g., Hutchinson and Waters 1987; Li 2011; Zhao 2015) include both language for general purposes and language for social purposes in Jordan's framework, and Jordan's language for general purposes only applies to young learners who use languages for school work.

Language for specific purposes was further divided into language for occupational/vocational/professional purposes and language for academic purposes (LAP; Jordan 1997). Similarly, in Chinese literature, researchers such as Shan (2008) and Li (2011) also specified that the concept of CAP instruction itself falls under a broader framework of Chinese for specific purposes. However, what constitutes LAP as conceptualized by Jordan and Li diverges. Li noted that Chinese for academic subject referred to the language needs in specific subject areas, such as Science, Engineering, and Medicine. However, this subject-specific notion of LAP was merely regarded as one sub-area of LAP by Jordan. For Jordan, LAP was composed of two sub-areas: language for specific academic purposes and language for general academic purposes. This divergence was noted by Gao and Liu (2016) that CAP as conceptualized in Li and by other Chinese scholars actually corresponds mainly to Chinese for specific academic purposes, referring to the language needs for a particular academic subject. What was often missing in the literature was Chinese for general academic purposes, which refers to the needs of Chinese language in all, or nearly all, academic settings (Jordan 1997), including study skills (e.g., note-taking, academic writing, seminars, and discussions) and academic register (i.e., general academic register and formal, academic style). For the purpose of this study, we adopt Jordan's framework of approaches to LAP as presented in

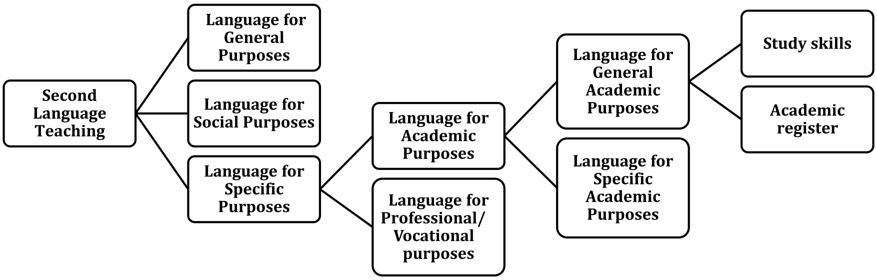

Fig. 4.1 Conception of LAP (adapted from Jordan 1997)

Fig. 4.1 as a conceptual framework to guide the design and interpretation of the study.

4.4 The Study

This study aims to gain an in-depth understanding, from the students' perspectives, about their experiences of learning and using the academic Chinese language in Chinese higher institutions under the current path: from language preparatory program, via admission tests—HSK, to academic studies. In particular, the study addresses the following three research questions:

1. What conditions affect international students' experiences with academic Chinese?
2. What strategies do students employ to navigate their academic study in Chinese language?
3. What are the outcomes resulting from the current path of admission and instruction?

4.4.1 The Site

This study was contextualized at a major university located at a provincial city in Southwest China. When the fieldwork was conducted in early 2018, the university had been accepting international students for over 20 years and in 2017 recruited over 1000 international students. According to the university website, thirty-six percent of these students were degree-seeking students and registered in undergraduate or graduate programs, while 64% were language students and exchange students.

The university offers 4-year undergraduate programs, 3-year master's programs, and 3-year doctoral programs. Most of these programs are taught in Chinese, with some options in English. To be eligible for academic programs taught in Chinese, students are required by the university to pass HSK Level 4. Alternatively, students could choose to take a one-year language preparatory program with pre-admission and promoted into academic programs on the condition of passing HSK Level 4 or a higher level toward the end of the language preparatory program. While the university has specialized in Finance and Economics, programs in other areas such as in Journalism, Laws, and Computer Applied Technology are also available.

4.4.2 Participants

Eight international students participated in the study. The researchers first developed a profile of the potential participants: any degree-seeking students who are currently undertaking academic studies in undergraduate or graduate programs at the chosen university. Networks established from a previous research project brought us the first two participants. The first two participants suggested and helped to recruit others who fit in the profile, representing a process of snowball sampling (McMillan and Schumacher 2009). The recruiting process finished when 10 students confirmed participation. However, due to logistic issues, two students failed to take part in the study. Table 4.2 presents the demographic information of the eight participants (all the names included were pseudonyms). The eight participants came from seven different countries, and seven of them were graduate students and had Chinese government funding, while the only undergraduate student was self-funded. These students were in the different stages of their study, either in the 1st year or the 2nd year of their master's programs, and the undergraduate student

Table 4.2 Demographic information of participants

Student	Gender	Country of origin	Program	Year in the program	HSK level before admission
Wangyang	Male	Uzbekistan	Bachelor in Logistics	4th year	Level 5
Baiyun	Male	DR Congo	Master's in Finance	2nd year	Level 4
Mulan	Male	Ivory Coast	Master's in Computer Applied Technology	2nd year	Level 4
Qiaodan	Male	DR Congo	Master's in Finance	2nd year	Level 4
Aihua	Male	Afghanistan	Master's in International Trade	1st year	Level 6
Liming	Male	Turkmenistan	Master's in Finance	1st year	Level 5
Meili	Female	Thailand	Master's in Business Intelligence	1st year	Level 5
Kehan	Male	Pakistan	Master's in Finance	1st year	Level 4

was in the 4th year of his study. All of them had taken language preparaotry programs. While four students were admitted into the academic program with HSK Level 4, three of them passed HSK Level 5 before admission and one student passed HSK Level 6 before admission.

4.4.3 Data Collection and Analysis

Semi-structured focus group interviews were employed to increase the quality and richness of data by creating a social environment in which group members are stimulated by one another's perceptions and ideas (McMillan and Schumacher 2009). The focus group interviews were conducted mainly in Chinese, while students were allowed to speak English whenever they felt it was necessary to better express their opinions. An interview protocol with guiding questions was designed to facilitate the exchange of ideas. The questions focused on the knowledge and skills students learned from the language preparatory programs, the relationship between HSK and their academic study, and use of the Chinese language in academic studies. To collect demographic information (e.g., name, age, nationality, first language) and background information (program, year in the program, HSK level and scores and attendance in the language preparatory program), participants completed a Student Information Form. One of the researchers served as the facilitator for the focus group, and a research assistant audio recorded the session, took notes on turn taking, and asked clarifying questions. The eight participants were arranged into two focus groups based on their availability. The first group included Wangyang, Baiyun, Mulan, Qiaodan, and Aihua, and the second group included Liming, Meili, and Kehan. Each focus group interview lasted for about 60 min.

Audio recordings obtained from focus group interviews were transcribed verbatim and prepared for manual analysis. Three stages of coding were performed on the transcripts: open coding, axial coding, and selective coding (Strauss and Corbin 1998). The two researchers first conducted the open coding separately, after reading the transcripts repeatedly to become immersed in the data; phrases and sentences relevant to the research purpose were labeled as initial codes.

For the second stage of analysis, axial coding, the two researchers met to discuss, compare and revise the initial codes. Initial codes that were found to be similar were grouped together and labeled with an initial list of categories. Disagreements related to category names, definitions, and their scope were discussed in-depth and resolved until the 8 final categories were established (Beach 2017):

- Preparing Chinese for social purposes;
- Language for social purposes supporting academic studies;
- Demands and challenges with academic Chinese;
- Making self-efforts;
- Seeking for additional resources;
- Institutional and instructors' accommodations;

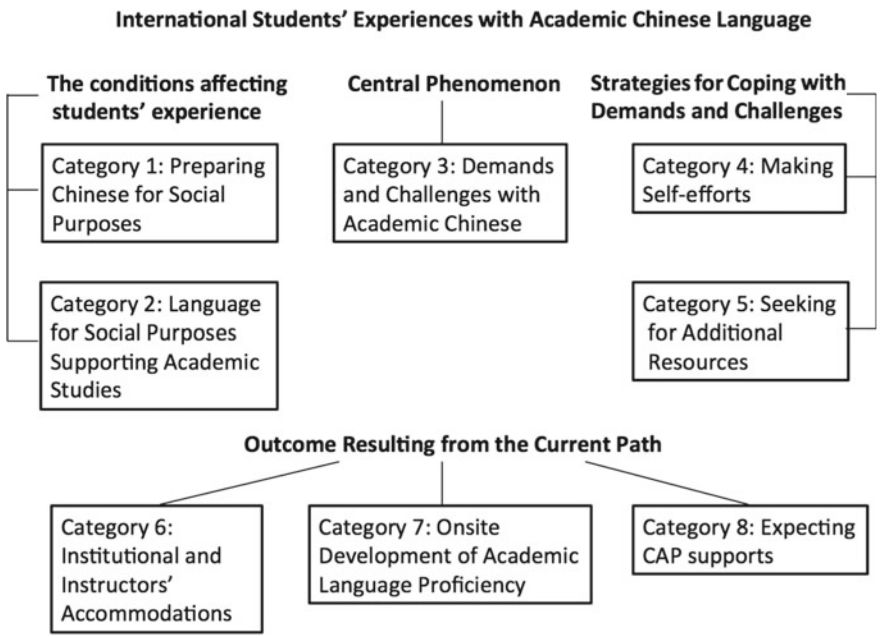

Fig. 4.2 Grounded theory model of international students' experiences with academic Chinese language

- Onsite development of academic language proficiency;
- Expecting CAP supports.

The last stage of data analysis involves selective coding: selecting the core category and specifying relationships between the core category and other categories (Charmaz 2014). The eight categories were organized into the following four components of the grounded theory model: conditions, the central phenomenon, strategies, and outcome (Strauss and Corbin 1998), as shown in Fig. 4.2. Demands and challenges with academic Chinese were deemed the central phenomenon because all other categories could be related to it, and it appeared frequently and consistently in the data (Beach 2017).

4.5 Results

This section reports the eight categories that resulted from the qualitative analysis, organized into the four components of the grounded theory model (Strauss and Corbin 1998).

4.5.1 The Conditions Affecting Students' Experience

4.5.1.1 Category 1: Preparing Chinese for Social Purposes

Since all students had taken the one-year language preparatory program before beginning their respective areas of study, it is important to understand how they were prepared during the program. Students talked about the kind of courses they were offered, a comprehensive Chinese course as the core and an oral course. HSK preparation was an element of the comprehensive course to help prepare students for the test by the end of the year.

During the preparatory program, our data suggested that students were primarily trained in Chinese for social purposes: using the target language for daily communicative situations, such as shopping, ordering food, seeing a doctor, and opening a bank account. As stated by Qiaodan, "In our Chinese class, teachers taught us how to converse with friends, and how to shop." Another student, Kehan, acknowledged his proficiency development in survival Chinese, as he felt comfortable using Chinese in daily situations to make friends, talk to the doctors, and shop in the market.

Since HSK was the sole admission criterion regarding Chinese language proficiency, students reported it as one of the most important goals to achieve in the language preparatory program. Therefore, the nature of HSK had a washback effect on the teaching and learning of Chinese language. Students generally perceived HSK as not closely related to academic settings, as Mulan commented, "HSK 4 is general, very general." Kehan also noted that "after HSK, the first thing we know is how to buy apples." He further added: "According to me, HSK Level 4 makes you being able to speak Chinese; makes you being able to write Chinese on your cell phone; and makes you being able to listen to Chinese; whereas in study, it's of limited use." All of the participants had successfully met the admission criterion on HSK during or after the preparatory program, with the fastest in six months, and others in eight to ten months.

While students learned new vocabulary, sentence structures, and characters along the course, the focus of the course gradually shifted to test preparation and test-taking strategies toward the latter half as the test date was approaching, such as practicing on retired tests. For example, Aihua noted that they were taught various test-taking strategies such as how to compare and choose among various options in multiple-choice questions. He acknowledged that when writing HSK Level 6, he benefited from such test-taking strategies.

4.5.1.2 Category 2: Language for Social Purposes Supporting Academic Studies

After meeting the language admission requirement, students started their academic studies in their respective programs through the medium of Chinese language. Although students perceived the language preparatory program and HSK as not closely related to the actual language used in academic settings, they acknowledged that the language preparation had contributed to their learning of content knowledge study in two aspects. First, it established a solid foundation for learning and using academic Chinese language. Second, it equipped students with necessary interpersonal communication skills to support their academic study.

At the beginning of their academic studies, students believed that achievement of HSK Level 4 indicated a strong foundation in Chinese language. For example, Kehan stated that he learned more than 1000 Chinese words in a relatively short time. These most commonly used vocabularies served as a foundation for the academic study in Chinese and also helped him to learn more new vocabulary on his own. Liming also mentioned that he could read the characters in his textbooks thanks to his study in the language preparatory program.

Furthermore, many of the participants claimed that they had developed interpersonal communication skills that were supportive for their academic study. As Mulan stated,

> In our class, some of Chinese students don't speak English, so if your Chinese is not good, you can't communicate with them. You can't communicate with the instructor, either. When you have questions, you have to ask in Chinese, so I think it's very helpful in this regard.

Another participant Baiyun echoed this point by stating that his proficiency in Chinese helped him communicate with his team members during group work. Wangyang also believed that interpersonal communication in Chinese is essential in academic studies as "Chinese allows us to communicate with the instructor and our peers whenever we ran into difficulties" and "no matter what problem you encounter, you can solve it because you can speak Chinese." These examples clearly indicated that students' interpersonal communication skills developed from the language preparatory program contributed to their academic study.

In sum, what students were prepared at pre-admission stage was mainly Chinese for social purposes, together with some test-taking strategies to pass the required test. The Chinese language skills developed from this preparation contributed to students' academic studies in two ways: It functions as a foundation for students to transit into academic language, and it also equipped students with interpersonal communication skills to support their academic studies.

4.5.2 *The Central Phenomenon—Category 3: Demands and Challenges with Academic Chinese*

Even though the language preparatory program made every effort to prepare and equip students with necessary Chinese skills, and they had passed the required admission criterion on language, students were still faced with a variety of linguistic challenges as they navigate in various aspects of academic life. The data suggested that students' demands and challenges with academic Chinese were primarily bound to four major tasks, including listening to lectures, academic writing, writing exams, and academic reading.

Listening to lectures is a daily routine for all the students, although its weight varied for students in different stages of study and in different areas. While Liming believed that lecturing is the major channel that knowledge was taught in his program in Finance, Meili studying Business Intelligence had more hands-on projects than lectures. Although there were PowerPoint slides and in most cases they helped students grasp the key points of the lectures, listening to lectures was still a major task for them, as noted by Aihua:

> I think PowerPoint slides are not complete, but a summary. What the instructor said was in fact the most important. We must understand what the instructors were talking about, not the slides.

Various factors were found as impeding students' comprehension of lectures, and vocabulary was reported as the biggest barrier. For example, Kehan mentioned that he wrote down 65 unknown words during the first half of his first few classes. Moreover, this issue was not only a lack of vocabulary in general, but more specifically, a lack of subject-specific vocabulary. As Banhua said,

> Every subject has its own vocabulary, both Finance and Computer. What we've learned for HSK Level 4 was "outside" vocabulary: everybody can use for chatting and shopping purposes. But these are not academic vocabulary, so we had trouble understanding the lecture. Instructors use academic vocabulary in class, so this is the challenge we have for academic study.

Kehan, currently in the first year of his academic study, reported that he was unable to understand the lectures because he did not even have knowledge of the very basic academic vocabulary, such as "plus," "minus," "multiply," "divide," and "percentage" in math. He further explained his difficulty in balancing content comprehension and attending to language during lectures:

> When we are sitting in the class, and when the laoshi (the instructor) says something, we are not able to understand those words. I used to use Pleco to translate the words, and by the time I translated the words, I missed the class content. That's the kind of dilemma we are facing right now.

Other than vocabulary, accent placed another linguistic barrier for students to understand the lectures. In this case, the accent issue relates mainly to the local dialect as a variation of Putonghua (the standard Mandarin). Although the local dialect differs from Putonghua in various aspects, pronunciation was the most distinct feature. Multiple participants reported that they could not understand instructors' dialects. Aihua commented, "Even Chinese students have difficulties, what shall we foreigners do?" So is the speech rate. Once students were placed into academic programs, they became the minority population among the native Chinese-speaking students, and one of the most obvious changes they experienced was instructor's speech rate. For example, in Meili's class, there were only two international students among 90 students. Therefore, "the instructors speak really really fast, so do the other Chinese students," commented Aihua.

Academic writing is another important task for students. For academic writing, the major challenge that students faced was the formal academic style. Wangyang was actually in the process of writing thesis for his bachelor's degree. He elaborated this challenge as:

> When I sent my thesis to my supervisor, he said he couldn't understand it. I then had to explain my writing to him face to face. I used a lot of spoken language, not written language in my writing, and the meaning was completely different. My supervisor had to help me change a lot into written language.

Vocabulary knowledge is intertwined with academic writing. When talking about writing in a formal style, Aihua made the comment: "Collocation is also very challenging. I think Chinese grammar is not very difficult, but the collocations are. The collocations we use are wrong which is the biggest problem."

Writing exams is another important aspect of academic life for every student. Our data revealed that handwriting characters for open-ended questions poses a special difficulty for international students when writing exams. Unlike typing essays or reports, students have to write by hand at exams. Aihua noted that, "During exams, we are not able to write every character." Wangyang had also commented, "At exams, there are a lot of characters that we don't know how to write."

Academic reading is another major academic situation where students need their Chinese language skills. The various materials they read include course slides, textbooks, and academic papers. Again, academic vocabulary posed difficulties in the process. Subject-specific vocabulary was again mentioned by participants like Aihua, Qiaodan, and Meili as a barrier for comprehending the subject content in the reading materials. Aihua and Kehan also reported having trouble with recognizing the Chinese words translated from other languages in reading, such as people's names in their subject area and Greek symbols translated into Chinese. Reading speed is another challenge that students were facing. Reading efficiently is always desirable for students as they all have a heavy workload and busy schedule. However, students generally found that reading academic materials in Chinese was very time-consuming. Various factors were reported as the reason for slowing down the reading speed, such as encountering unknown words and phrases, facing unknown characters, and the lack of background knowledge in the content area.

4.5.3 Strategies for Coping with Demands and Challenges

In order to alleviate the previously reported challenges, students applied various coping strategies to support their own study, including making self-efforts and seeking additional resources.

4.5.3.1 Category 4: Making Self-efforts

Students usually started with making self-efforts, such as through preview and review. For example, Meili noted: “If possible, I read the course material in advance. No matter in what language I read, it is helpful.” Mulan was strongly motivated and worked diligently. He believed reading in Chinese was the way to help him understand the lectures and also a way to improve his language proficiency in academic Chinese continuously: “Reading in English is fast for me, but I want to have myself get used to reading in Chinese. It’s tough and a slow process, but I chose to read Chinese materials…otherwise, I will never get the lectures.” Mulan also developed a routine to study the academic language: Each day, he summarized all the new words and phrases that he encountered in academic study and read the summary out aloud. Similarly, Qiaodan noted that when he encounters unknown vocabulary at lectures, he writes down the pronunciation, looks them up in the dictionary after class, and memorizes the new words.

4.5.3.2 Category 5: Seeking for Additional Resources

Participants reported two types of additional resources that they commonly relied on: language and personal resources. Majority of the participants reported taking advantage of English language to support their study. Since many of the textbooks were translated from English, instructors would provide the English version to the students as well. Some students, such as Liming, chose to read only in English because “reading in Chinese is very time-consuming.” Other students such as Aihua made choices to read in English or Chinese depending on the difficulty of the content: “If the subject content is easy, I would definitely read in Chinese. But if the subject content is difficult, I would read in English.”

Seeking additional help from other people is another strategy that students used to deal with the challenges. When there were questions arising from the lectures, international students would first discuss among themselves. As Aihua explained:

> I think it is easier to discuss with international students. When there are questions, it might be difficult to ask Chinese students because you may not have yourself fully understood. If it’s between two foreigners, we would use English. It’s more convenient. After discussing within us, if we still can’t solve the problem, then we go to Chinese friends.

International students were actively seeking help from their Chinese classmates and their instructors. Qiaodan, one participant mentioned that he would ask his Chinese classmates for help after class: "Sometimes I have trouble understanding the content or the instructor's assignment requirements. I ask for explanations or clarifications from my Chinese friends in the class." Another participant Baiyun mentioned whenever he needed to submit a written assignment, he asked Chinese friends to check for grammatical mistakes. International students usually ask questions and discuss with their instructors after class. In the case of thesis, they would ask their supervisor to provide feedback, such as what Wangyang did with his supervisor on writing in a formal academic style.

4.5.4 Outcome Resulting from the Current Path

4.5.4.1 Category 6: Institutional and Instructors' Accommodations

Despite all the efforts and strategies employed by students, some prominent gaps still existed between the students' current academic language proficiency and the desired proficiency in an academic context. Therefore, both the university and the instructors had to take measures to accommodate international students' linguistic challenges, particularly on assessment. For example, Wangyang, the only undergraduate student among the participants, was exempt from examinations in the first two years of his study. It was from the third year of his study, he was required to participate in examinations as other Chinese students.

At the classroom level, most of the participants noted that it was not rare for instructors to allow international students to use cell phones as dictionaries or write pinyin (phonetic system for transcribing Chinese characters) instead of Chinese characters in quizzes. Several participants brought up that some instructors offered international students the option of doing writing assignments and conducting oral reports in the English language.

4.5.4.2 Category 7: Onsite Development of Academic Chinese Proficiency

Although encountering tremendous linguistic difficulties when stepping into academic study, students reported that their proficiency of academic language gradually developed in the process. The gradual accumulation of academic vocabulary while studying different subjects was noted by several students and thus leading to less linguistic difficulties within specific subjects. Qiaodan acknowledged that through writing down unknown words and studying them after class, he gradually enlarged the size of his academic vocabulary. Aihua reported that the first couple of weeks of a new course were usually the hardest due to a large number of new subject-specific vocabularies. However, as he made efforts to learn these new words, he could more or less follow the instruction after about a month. Therefore, Aihua believed: "Lectures are helpful for learning subject-specific vocabulary… By the fourth week of a semester, the problem becomes much smaller, because your academic language has been improved."

Liming completed his undergraduate study at a Chinese institution, and now he is in the first year of his master's program. He recalled the earlier days when he had major problems with academic language. However, now he has become more competent and he regarded time as the most important factor: "I have experienced what they are experiencing. For me, that time has passed… Time is the most important thing." It seemed that as time passed, students' proficiency in academic language improved and hence the problems became less prominent.

4.5.4.3 Category 8: Expecting CAP Supports

Students reflected on how they could be better prepared in Chinese language for their academic studies. One of the prominent themes emerged among the students was the gap between the kind of language skills they had currently and the actual skills they needed for study. Therefore, students reflected on how they could be better prepared with academic Chinese language and particularly with subject-specific vocabularies. Students believed this could be achieved in different ways, and one of the options was by offering specialized courses. Aihua made the point by stating that they need to be taught the kind of language needed for their academic study in advance, particularly the vocabulary and the context of using them. Even though the kinds of vocabulary they need differ from area to area, the participants found that a big portion of core vocabulary was common in many subject areas. Kehan illustrated this point below:

> Our university has four major disciplines: One is finance, and others are business management, economics, and international relations, I think. So if you ask students in the highest say the 4th or 5th year to give us some hundred words in their subjects, you will get the most basic words… Out of all these words, there are some we use in almost every subject, like plus, minus. If you make students learn these basic and common terminologies, I think it will be much easier. After learning that, I would be able to take my level from 15% to 70%. So it would make a really big contribution.

Another suggestion that students made was to have a better division of time during the preparatory program on the language skills that they needed most. For example, character writing is an important element in Chinese for general purposes. However, while recognizing the importance of reading characters, Kehan perceived differently toward the importance of handwriting characters:

> I would put less focus on writing the Chinese characters, because in the future we will use pinyin to write by mobile phones or computers. So I think we lost a lot of time. I remember we lost a lot of times on writing the Chinese language in the classes. If we just save this time from writing, we can save this time for learning the technical words.

The admission test is another way to bring changes as suggested by students. Many of them believed that it would alleviate their linguistic challenges if the admission criterion were adjusted to HSK Level 5 from Level 4 as HSK at an advanced level include certian formal language that they need. However, others perceived it differently. Aihua who has passed HSK Level 6, the highest level, believed that the key to bring good changes is not the required level on HSK, but the nature of the test. As noted by Aihua:

> I think HSK needs some revisions. I believe no matter which level, 4 or 5, we pass, we will still have trouble in academic study. Because what the instructors use was not the words from HSK 4 or 5, but vocabularies in different areas. So I think there should be a component in the test about the academic studies for us to prepare.

4.6 Discussions and Conclusion

An important finding of this study is that the nature of the language preparatory program actually follows the approach of teaching Chinese for social purposes, which is consistent with Wang and Curdt-Christiansen's (2016) findings drawn from another Chinese institution and also in line with Zhao's (2015) observation that the distinction between Chinese for academic purpose and for general (social) purpose in teaching was not clear. Our data also suggest that since the language preparatory program is directly bound to HSK preparation, the nature of HSK has a close bearing on the nature of the program, suggesting the absence of the academic context in both. Therefore, the misalignment between the context that students were prepared for and the actual contextual demands would be considered as one of the key reasons that have led to students' significant challenges with academic Chinese, especially at the early stages. However, this does not mean that the language preparatory was not beneficial. In fact, students were equipped with the Chinese language foundations that contributed to their learning of the academic language and also the communication skills to seek personal supports.

While HSK test is widely being adopted as the admission criteria, its content relevance (Weigle and Melone 2016) in the academic context is under scrutiny. While a particular test for accessing Chinese in academic contexts is still not available, we suggest re-considering the justification of using HSK Level 4 as the cut-off level for admission. Some of our participants believed that HSK Levels 5 and 6 include certain formal language that they need in their academic study. This observation is in line with the descriptions in the CLPS (Hanban 2009). According to the test developer, HSK Level 4 corresponds to the Band 4 in the CLPS while HSK Levels 5 and 6 correspond to Band 5. Band 4 of the CLPS defines learners' Chinese proficiency as being able to use basic communication skills, describe one's experience, express one's opinions with simple reasons and understand materials with familiar topics; while Band 5 of the CLPS is defined as being able to communicate with various strategies, express one's opinions and attitudes, participating in discussions in *specialized areas*, and understand and synthesize materials in multiple areas including *specialized areas*. Such descriptions in the CLPS suggest HSK Level 5 and 6 might serve as better criterion for admission into academic programs in Chinese universities. This study also suggests that a language test targeting at Chinese language proficiency used in academic context is pressing to better support the teaching and learning of Chinese for academic purposes.

This study suggests the lack of support on the kind of language skills that are common in studying almost all academic subjects prior to students embarking on the academic study (i.e., what was considered as language for general academic purpose; Jordan 1997). According to Jordan, one core aspect of the language for general academic purposes was the formal academic register, which was needed in academic writing as well as formal speeches. However, participants in this study reported significant challenges with academic writing, for example, the unfamiliarity with the formal collocations. Therefore, we suggest that developing students' command in formal academic language style should be included as one of the teaching objectives in the language preparatory program. Pedagogical tasks were recommended in many of the LAP literature (e.g., Hamp-Lyons and Heasley 1987; Thompson 1994) to help students see how language was used in academic fields distinct from social purposes. Language-focused study had much to offer regarding what features and aspects of language contribute to the academic style. As another core component of language for general academic purposes (Jordan 1997), study skills such as note-taking, referencing, and summarizing and paraphrasing were not reported as major challenges by the participants. Since study skills are transferrable from students' first language (Jordan 1997), our participants of graduate students and undergraduate students at senior years are likely to encounter less difficulty with study skills.

Despite a lack of support on various aspects of academic language, students reported that they gradually accumulated the language needed for specific subjects along the way, especially the subject-specific vocabulary. This supports the previous literature that subject-specific vocabulary could be left for subject teachers to teach (Spack 1988), especially considering the scarcity of instructors who have knowledge in both academic contents and second language teaching. However, an area that could better support students was the core subject vocabulary (Hyland 2006), indicating the most commonly used vocabulary within a subject or among similar subjects. For example, students claimed that the basic vocabulary in math as simple as "plus," "minus," "multiple," and "divide" could hinder their study in academic programs at the early stages. One participant Kehan described "the basic common academic words" and believed that studying these words in advance would significantly advance his future study. Therefore, we call for some supports to equip students with the core subject vocabulary, such as in the broad area of Economics and Finance, considering the specialization of this university. Early endeavors of CAP practice in the 1950s to 1980s could inform such a practice while short-term courses were offered by the university to give students some foundations of the core subject vocabulary in some similar subject areas (Lv 1990; Zhang 2013).

Under the current path, it seems that the institution and the instructors make great efforts to accommodate students' linguistic difficulties. However, it is noteworthy that these accommodations should be made upon the condition of not sacrificing the targeted learning objectives, particularly these assessment accommodations. Some accommodations, such as using pinyin instead of Chinese characters, raise no such concern. However, when international students are exempt from examinations, alternative assessment methods need to be in place so that the university ensures that these students meet the related degree level expectations. When such alternative assessment methods are implemented, such as a written or oral report, the instructors need to take necessary measures to make sure that they assess all necessary learning objectives and both domestic and international students feel the differentiation in assessment methods are fair.

In sum, this study uncovers students' experiences with academic Chinese language under the current path of language preparation, testing, and immersion into the academic studies. Enlightened by the research findings, we suggest re-orienting the language preparatory program to clearly reflect LAP, considering focusing on the common demands across different subjects, such as a formal academic register and a core subject vocabulary. We also suggest a better justification of adopting a certain language test at a certain level as the admission criteria.

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Chapter 5
Disfluency in L2 Chinese Academic Oral Presentations and Formulaic Language Instruction

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Abstract This chapter reviews discussion and findings in the research of second language speaking fluency and its relationship with formulaic language instruction. It examines the disfluent phenomenon in thirty-nine L2 Chinese academic oral presentations. There are eight types of disfluencies found in the data. It is suggested that training in common formulaic sequences in Chinese presentations can provide learners useful framing structures for their presentations. Knowing formulaic sequences can help them conserve mental effort in areas such as transitions and sentence building, thus allowing them to focus their attention on the content and more challenging vocabulary related to the subject. A Chinese Academic Formulas for Presentation (CAFP) list of four subcategories of formulaic sequences is therefore created in order to offer useful language tools for L2 learners to improve fluency in their academic oral presentations. Activities used to develop learners' knowledge of the formulaic language in the presentation are also proposed to enhance formulaic language instruction in the classroom.

5.1 Introduction

Fluency is one of the main dimensions in assessing second language (L2) learners' speaking performance. Becoming fluent in L2 while maintaining accuracy is difficult for an L2 learner because both ends require consuming attention in language processing (Skehan 2009). The challenge for L2 learners expands when using more advanced-level speech to include more dimensions, such as complexity and pragmatical appropriateness when it comes to more advanced-level speech. Over the last few decades, researchers have shown an increased interest in investigating the effect of formulaic sequence instruction on improving L2 learners' speaking performance. Formulaic language, also referred to as formulaic sequences, lexical bundles,

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chunks, or multi-word expressions, is believed to be both an important component of fluent linguistic production and a key factor in successful language learning (e.g., Hyland 2008a; Schmitt 2004, 2010; Wood 2010a; Wray 2002, 2008). Especially in an academic context, the frequent use of formulaic sequences signals competent language use. Teaching formulaic language was found to be able to enhance L2 learners' performance in academic writing (AlHanssan and Wood 2015; Li and Schmitt 2009; Schmitt et al. 2004; Staples et al. 2013).

While the vast majority of research on formulaic language has been focused on academic English, only a limited number of studies have investigated the same problem within academic Chinese, especially L2 academic speech (Li 2006). In this chapter, I first review previous discussion and findings in the research of second language speaking fluency and its relationship with formulaic language instruction. The second section will examine the issues of speaking fluency in L2 Chinese academic oral presentations. Finally, the third section will outline common formulaic language in Chinese academic speech under the framework of formulaic language instruction, in order to offer useful language tools for L2 learners to improve fluency in their academic oral presentations.

5.2 Second Language Speaking Fluency

According to Levelt's (1999) "blueprint" of the monolingual speaker, speech is generated through the following stages: (1) conceptualizing the message, (2) formulating the message through grammatical encoding, morpho-phonologic encoding and phonetic encoding, (3) articulating, and (4) self-monitoring during and after the above stages (Levelt 1999). When any of the first three stages are not processed at the regular speed or being interrupted by self-monitoring, speaking fluency will be affected.

Lennon (1990, 2000) distinguished speaking fluency into two senses. The broader sense of fluency can be seen as general speaking ability, while the narrow sense of fluency has a more specific scope of the degree of automaticity and fluidity of speech. This narrower definition of fluency is used more commonly in the research and, as such, will be the definition used in this paper. Speaking fluency can be viewed from three perspectives: perceptual fluency, utterance fluency, and cognitive fluency (Segalowitz 2010).

Perceptual fluency refers to the judgments that listeners make in terms of the speakers' speech fluidity. It is found that Chinese native speakers are most sensitive to speech rate and silent pauses of Chinese L2 speech (Liu and Wu 2016). Utterance fluency refers to the temporal features of speech. It can be judged according to three different measures: speed fluency, breakdown fluency, and repair fluency (Tavakoli and Skehan 2005). Speech rate, pruned rate, articulation rate, and length of utterance are used to calculate speed fluency. The number of silent pauses, length of silent pauses, and number of filled pauses (also referred to as fillers) are the measures for breakdown fluency, and the number of repetitions and number of repairs are the measures for repair fluency. Cognitive fluency refers to the cognitive ability of automaticity in language processing. The efficiency of retrieving words in lexical encoding is believed to be an important factor that affects fluency in speech production.

Disfluencies in native speech are normal, but they appear more frequently in L2 speech. Due to the lack of automaticity, L2 production is much slower and requires more effort compared to L1. Studies have shown that the speech rate and the mean length of runs are considerably lower in L2 than in L1 (e.g., Deschamps 1980; Raupach 1984; Wiese et al. 1984). Disfluencies such as pauses within words or clauses instead of at clause junctures are common in L2 speech. According to previous research studies, near-native fluency is determined by the availability of formulaic language, which can be retrieved from the memory as a whole (Logan 1988; Pawley and Syder 1983). Even though formulaic language may vary in phrasing structure, these phrases are retrieved from the memory as whole units (Logan 1988; Pawley and Syder 1983). There is a strong link between form and meaning within a formulaic language that is unanalyzed unless necessary (Wray 2008: 17). Chunking information into single complex units increases the overall quantity of material that can be stored in a speaker's working memory (Miller 1956; Bower et al. 1969; Simon 1974). Formulaic phrases are thus processed faster than the non-formulaic phrases. Moreover, formulaic language is also found to have the processing advantage over creatively generated language (Conklin and Schmitt 2008; Jiang and Nekrasova 2007). When L2 learners automatically retrieve lexical chunks from memory at the speed of conceptualizing messages, they are able to produce fluent and correct speech. Formulaic language therefore is an effective means of promoting automaticity in the process of second language acquisition.

5.3 Formulaic Language and Second Language Teaching

Over the last two decades, a large and growing body of literature has investigated the role of formulaic language in L2 development (e.g., Bardovi-Harlig 2002; Bardovi-Harlig and Stringer 2017; Bestgen 2017; Jones and Haywood 2004; Serrano et al. 2015; Schmitt et al. 2004; Wood 2009; Wray 2002). The topic of formulaic language has been discussed from the perspectives of corpus linguistics, second language teaching and learning, and psycholinguistics. Researchers generally agree upon the fact that L2 learners and native speakers performed differently in terms of the number and the range of formulaic phrases that the speakers use (Serrano et al. 2015). That difference between L2 learners and native speakers also applies to the speed of processing formulaic language (Siyanova and Schmitt 2008). A number of empirical research studies have been conducted to investigate the effect of formulaic language instruction on L2 learners' speaking fluency, and they found positive results (Boers et al. 2006; Guz 2014; Serrano et al. 2015; Stengers et al. 2011; Wood 2005, 2006, 2009).

There are two key questions researchers focus on in the practice of applying formulaic language instruction in the classroom to improve L2 learners' speaking fluency: (1) how to identify the formulaic language, and (2) how to teach formulaic language.

5.3.1 Identifying Formulaic Language

Formulaic language is not a homogeneous phenomenon but is rather varied (Schmitt 2010: 10), and different names were given to the concept in the related research. Wray (2002) and Wood (2015) listed more than thirty terms that have been used to refer to formulaic language (Wood 2015: 36–37; Wray 2002: 9). Three terms are most common in the literature:

- *formulaic language/sequences* (Corrigan et al. 2009a, b; Coxhead 2015; Ellis et al. 2008; Schmitt 2004; Wood 2010a, b; Wray 2002, 2008, 2013; Wray and Perkins 2000);
- *lexical bundles* (Biber et al. 2004; Byrd and Coxhead 2010; Conklin and Schmitt 2008, 2012; Cortes 2002, 2004; Hyland 2008b);
- *phraseology* (Bestgen and Granger 2014, 2015, Coxhead 2008; Cowie 1998; Granger and Meunier 2008a, b, Howarth 1996).

Other names frequently seen in the studies are: *lexical phrases* (Cai 2016; Li and Schmitt 2009; Nattinger and DeCarrico 1992), *multi-word units* (MWU, Kim and Kim 2012; Wolter and Yamashita 2017), *prefabricated constructions/patterns* (Granger 1998), *collocations* (Boers et al. 2014; Durrant and Schmitt 2009; Gitsaki 1999; Men 2018; Nesselhauf 2005), and *chunks* (Boers and Lindstromberg 2009).

In Wray's definition, formulaic language refers to:

> a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated, that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar.
>
> (Wray 2002: 9)

Wray (2008: 12) later modified this definition by positing a new term Morpheme Equivalent Unit (MEU). This refers to strings that are incomplete and includes gaps for inserted variable items.

Whether a sequence is a formula or not is oftentimes up for debate. Some scholars claim that native speakers' intuition is the best way to determine what qualifies as a sequence. Native speakers share knowledge of collocations in such a way that individual differences do not significantly affect judgments of what words go together (Dąbrowska 2014). Additionally, corpus analysis has been widely applied to detecting the frequency and the patterns of usages, but researchers found that corpora fail to decide where the boundaries fall (Wray 2002: 25–28). By far there is no agreement on what is the most effective way to identify formulaic sequences.

Table 5.1 Characteristics of four types of formulaic language (Nattinger and DeCarrico 1992: 45)

	Grammatical level	Canonical/ non-canonical	Variable/ fixed	Continuous/ discontinuous
Poly-words	Word level	Both	Fixed	Continuous
Institutionalized expressions	Sentence level	Canonical	Fixed	Continuous
Phrasal constraints	Word level	Both	Somewhat variable	Mostly continuous
Sentence builders	Sentence level	Canonical	Highly variable	Often discontinuous

Nattinger and DeCarrico (1992: 38–45) identified four types of formulaic language: *poly-words* (strings that operate as single words, e.g., "*for the most part*"); *institutionalized expressions* (sentence-length strings that carry specific pragmatic functions, e.g., "*long time no see*"); *phrasal constraints* (phrases which allow variations or lexical insertions, e.g., "*the ___er the ___er*"); and *sentence builders* (phrases which allow construction of full sentences, e.g., "*think that X*"). These four types of language formulas cover both strings of specific lexical items that are not allowed paradigmatic or syntagmatic substitution and generalized frames that are assigned a pragmatic function. Table 5.1 compares the characteristics of each type over four aspects: grammatical level, canonicity, fixedness, and continuousness.

Whether single-word form can be viewed as the formulaic language seems to be controversial. From Nattinger and DeCarrico's description and examples above, formulaic language should include at least two words. However, in Wood's list (2015: 46–48), single words including compounds of closed forms (e.g., "secondhand"), hyphenated forms ("mother-in-law"), and open forms (post office) are also regarded as formulaic language, which might extend the range of formulaic language into an overwhelming level for language teaching and learning. In order to make the list of formulaic sequences manageable to learners from a practical perspective, we argue that single-word form should be excluded from the list.

In the case of Chinese formulaic language, Wang et al. (2017) identified five major types of formulaic sequences in Chinese based on corpus analysis, as shown in Table 5.2. While traditional Chinese instruction mainly focuses on idioms, these researchers argued that collocations, especially cross-level collocations, should be given more attention in classroom teaching.

Formulaic language carries three main pragmatic functions in communication (Nattinger and DeCarrico 1992: 60–65):

- Social interactions (e.g., summoning, clarifying, questioning, responding, etc., e.g., "*how are you*");
- Necessary topics (e.g., autobiography, language, time, etc., e.g., "*my name is* ______");

Table 5.2 Five types of formulaic sequences in Chinese (adaptive from Wang et al. 2017)

Dimensions	Categories	Formulas		Examples
Semantically connected	Idioms	惯用语, 成语, 固定短语, 俗语, 歇后语		衣食住行 (food, clothing, housing, and transportation)
Syntactically connected	Collocations	Same level collocations	Noun phrases, verbal phrases, subject–predicate phrases, "X上," "X于," "X着"	发展方向 (direction of development), 互相帮助 (mutual help), 交通便利 (convenient transportation), 实际上 (in fact), 有助于 (beneficial to), 意味着 (it means)
		Cross-level collocations	Two-word combinations with similar meaning, Two-word combinations with different meanings, "X是," "X就"	必须得 (have to), 决不能 (definitely not), 尤其是 (especially), 本来就 (originally)
	Framed structures			与其A不如B (prefer B rather than A), 拿A来说 (take A for example)
Pragmatically connected	Metadiscourse			在我看来 (in my opinion), 总的来说 (in general)
	Communicative phrases			请留步 (please stay), 旅途愉快 (have a nice trip)

- Discourse devices (e.g., macro-organizing function: marking topics, shifts in topic, summary of topic, exemplification, relationships between topics, evaluations, qualifications, and asides, e.g., "*by the way*;" micro-organizing function: signaling relations between clauses or between adjacent sentences, e.g., "I *think*").

5.3.2 Teaching Formulaic Language and L2 Performance

Previous research has reported that formulaic language is associated with the development of speaking fluency (Boers et al. 2006; Guz 2014; Serrano et al. 2015; Stengers et al. 2011; Wood 2005, 2006, 2009), lexical accuracy and richness in writing (AlHassan and Wood 2015; Bestgen 2017; Jones and Haywood 2004; Li and Schmitt 2009; Staples et al. 2013), and vocabulary acquisition (Kim 2008). Formulaic language not only serves critical functions in the L2 learning process and can be a basis for communicative, production, and learning strategies (Weinert 1995) but also improves the impression of L2 learners' performance and production (Boers et al. 2006; Lewis 2008). Moreover, it can help learners to process the language faster (Schmitt 2010) and acquire linguistic knowledge (Wray 2002).

However, L2 learners face many difficulties in using formulaic language. First, they underuse formulaic language (De Cock 1998; Foster 2001). Second, they fail to recognize form restrictions that sometimes exist within formulaic language, which causes incorrect lexical choices and non-native-like usage (Yorio 1989; Granger 1998; Howarth 1998). De Cock (1998) reported that non-native-like usage stems from L2 speakers using sequences that sometimes have different syntactic uses or achieve different pragmatic functions when compared with native speakers. Third, it is challenging for L2 learners to find a balance between formulaicity and creativity at different stages of language learning. Dörnyei et al. (2004) also noted three factors that appeared to affect the acquisition of formulaic language from the perspective of individual differences: language aptitude, motivation, and sociocultural adaptation. They found in their data that high levels of sociocultural adaptation could help less proficient learners be successful in acquiring formulaic sequences.

Increasing L2 learners' awareness of formulaic languages is an important first step in effective formulaic language instruction. According to Nation (2001: 75), three psychological conditions of learning are found to be significant in the process of vocabulary acquisition: noticing the word, retrieving either the form or meaning of the word from memory, and generating different ways to use the word. In Lewis' lexical approach (2000), instructors are suggested to help students notice the formulaic sequences and then sort the input on the basis of significant similarities and differences without explicit description. Instructors additionally need to provide examples of how to use the sequences on the basis of students' current interlanguage. Boers and Lindstromberg (2012) summarized three pedagogical treatments to help improve the acquisition of formulaic language: (1) drawing learners' attention to formulaic language as it is encountered, (2) encouraging the use of dictionaries and corpus tools, and (3) helping learners commit particular formulaic languages to memory.

While emphasizing awareness is helpful to L2 learners, various other pedagogical strategies have been proposed to further enhance formulaic language learning in the classroom. Such proposals include: encouraging learners to highlight formulaic languages, assigning prewriting brainstorming tasks, conducting in-class discussions, enhancing input, raising students' awareness of phonological or etymological features, and engaging in communicative tasks (see Nguyen and Larsen-Freeman 2018 for review). Wood (2015: 148–156) includes more suggestions for integrating formulaic language in lesson plans and classroom activities:

- Using macro-strategies (e.g., watching for the use of formulaic language in daily life encounters, making a list or notebook of formulaic sequences heard, etc.)
- Using specific activities (e.g., listening to spoken texts and marking sequences on a transcript, replacing single words with sequences, 4/3/2, etc.)
- Using discourse analysis activities (predicting, planning, collecting data, analyzing, generating, and reviewing)
- Using a fluency program consisting of four stages of treatments (input stage, automatization stage, practice and production stage, and free talk stage).

With regard to Chinese as a second language (CSL) in particular, formulaic language instruction has also received considerable attention in the past decade (Jin 2004, 2016; Qi 2008; Qian 2009; Wang 2013; Wang et al. 2017; Xu 2015; Zhou 2007). Lin (2012) called attention to the role of prosody in facilitating the acquisition of formulaic language in learners' speech. Qian (2009) recommended different strategies to teach three types of collocations based on the fixedness of words. In terms of flexible collocations or weak collocations (e.g., 打球 play ball, 打比赛 play the game, 打北京队 play against Team Beijing), Qian suggested that teachers simply explain the usage rules for each phrase. For semi-fixed collocations or strong collocations (e.g., 耸肩膀 shrug shoulders, 耸鼻子 sniff your nose), teachers should list limited words that can be used as bundles and then explain the limitations of each usage. Since the meaning of fixed collocations or unique collocations (e.g., 目中无人 no one else in view, 小菜一碟 a piece of cake) is not as transparent as the other two groups, teachers should focus on explaining the meaning of the bundles and the usage limitations.

A remarkable discussion of Chinese formulaic language instruction is Jin's "Teaching in Chunks Approach (语言定式教学法)" (2004, 2010). She categorized formulaic language into four types from the perspective of second language teaching: formulas (固定表达), sentence patterns (句式), routines (程式), and construction (构式). Each category further breaks down into sentence level, paragraph level, and discourse level. Jin proposed a formulaic language selection system in CSL teaching that the length and presentation level of chunks should be changed to be aligned with learners' language proficiency level and their needs in communication (see Table 5.3). Under this model, academic sequences including highly complex lexical bundles, sentence patterns, and constructions, such as the opening and ending remark in a formal speech/presentation, should be introduced to advanced-level students. In order to encourage the effectiveness of formulaic language instruction, Jin emphasized the importance of the order in teaching formulaic language. She proposed that sentence patterns should be taught before routines and constructions. In this approach, three pedagogical principles were suggested: (1) highlight the salient part in sequences; (2) use a regular pattern in practicing sequences (e.g., use three substituted words to help learners practice a sequence); and (3) prevent errors through explicit explanation when presenting sequences.

Table 5.3 Formulaic language distribution based on different language levels (Jin 2016)

	Formulas	Sentence patterns	Routines	Construction
Novice	Simple lexical bundles	Simple sentence (single clause, one to three substituted words)	Basic life or communication routines	Simple construction (sentence level)
Intermediate	Complex lexical bundles and idioms	Complex sentence (more than two clauses, three to five substituted words)	Complex communication or work routines	Complex construction (paragraph level)
Advanced	Highly complex lexical bundles and idioms	Highly complex sentence and paragraph (two or more logically cohesive clauses)	Highly complex work and academic routines	Highly complex and abstract construction (discourse level)

5.3.3 Formulaic Language in Academic Contexts

Teaching academic language to second language learners is more challenging for second language instructors compared to regular language class because of the unique feature of academic discourse. Hyland (2009) argued that academic discourse is used to facilitate efficient communication among insiders so that it causes speakers to change their normal ways of speaking in order to fit in. In academic discourse, different lexical items, more complex and formal sentences and rhetorical resources are often used to create linguistic technicality and abstraction. In order to increase the efficiency of teaching academic lexical items and language style, researchers in the field of English for Academic Purposes (EAP) have been devoted to develop useful lists of academic word and bundles (Ackermann and Chen 2013; Durrant 2009; Liu 2012; Simpson-Vlach and Ellis 2010). Coxhead (2003) summarized four approaches that can be used to identify academic formulaic sequences: (1) expanding the academic word list by identifying common collocations and recurrent phrases in academic writing and speaking, (2) using frequency-based analysis (e.g., Biber et al. 2004), (3) relying on teacher intuition (e.g., Jones and Haywood 2004), and (4) using corpus-based analysis to identify which formulaic sequences are found in academic corpora versus general corpora (Ellis and Simpson-Vlach 2005). According to Biber et al.'s calculation (1999), in English academic discourse, three-word bundles occurred over 60,000 times, and four-word bundles occurred over 5000 times per million words in English academic writing.

A number of research studies have explored the use of these lists and other effective pedagogical strategies of formulaic language instruction in EAP curriculum (see Table 5.4). Outcomes from these studies include:

Table 5.4 Empirical studies of formulaic language instruction and L2 performance in academic contexts

Authors	Participants (number, L1, L2)	Pedagogical strategies	L2 output/measurement	Effect of FL instruction on L2 performance
Jones and Haywood (2004)	21 English L2 learners, various L1	1. Explaining academic style; 2. Using traditional language teaching activities to encourage students to study the sequences	1. Underling formulaic sequences (FS); 2. Administering two C-tests to measure the students' ability to produce FS; and 3. Writing four essays	1. Student awareness of FS was increased; 2. The treatment group had better performance in a post-C-test; and 3. No apparent improvement of using FS was found in students' writing
Schmitt et al. (2004)	94 English L2 learners, various L1	1. Presenting FS at least once in course materials; 2. Drawing students' attention to each of the FS in the classroom instruction	1. Measuring students' productive knowledge of FS through a blended cloze and C-test; 2. Measuring students' receptive knowledge of FS through a multiple-choice test; 3. Administering a Vocabulary Levels Test; and 4. Having students fill out a learning behavior and effort self-report	1. Students increased in receptive vocabulary size; 2. Both receptive and productive FS knowledge improved; and 3. Aptitude/attitude/motivation factors did not affect the acquisition of FS
Cortes (2006)	8 English L1	1. Introducing FS; 2. Having students analyze functions and possible uses of FS in pairs; and 3. Assigning application exercises such as fill-in-the-blank, multiple-choice, or correcting inappropriate use	Collecting three sets of response papers: one before the training period, one in the middle of the training period, and one at the end of the training period	1. Students rarely produced frequently used FS; 2. Students favored structurally simple expressions or single words; and 3. Systematic exposure to target FS resulted in a limited gain in raising students' awareness of FS, but not enough to trigger FS production

(continued)

Table 5.4 (continued)

Authors	Participants (number, L1, L2)	Pedagogical strategies	L2 output/measurement	Effect of FL instruction on L2 performance
AlHassan and Wood (2015)	12 English L2 learners, various L1	1. Introducing FS with contextualized exercises and decontextualized worksheets; 2. Using face-to-face explicit instruction to raise students' awareness of FS; and 3. Overseeing uncontrolled practice of using FS	Writing a summary in response to a graphic prompt within 20 min at the beginning of the study before any instruction (a pretest), at the end of the study (a posttest), and fifteen to twenty days after the end of the training period (a delayed posttest)	1. The frequency of the target FS significantly increased in the posttest compared to the pretest; and 2. Various types were successfully internalized into the participants' linguistic repertoire
Peters and Pauwels (2015)	29 English L2 learners, Dutch L1	1. Raising learners' awareness of FS through recognition activities; and 2. Using cued output activities including fill-in-the-blank, rephrasing and use-in-a-sentence activities	1. Testing recognition (underlining FS); 2. Using a cued output test (C-test with Dutch translation provided); and 3. Conducting a writing test (reading an interview of research methodology and then summarizing it in a written, academic style)	1. Significant learning gains at the level of recognition, cued output and spontaneous use of FS were found; 2. Students transferred awareness of FS into production; and 3. Cued output exercises were found to be beneficial to both recognition and production
Cai (2016)	66 English L2 learners, Chinese L1	1. Presenting a list of academic phrases; 2. Incorporating detailed reading	1. Measuring FS receptive knowledge through a multiple-choice test; 2. Identifying FS; 3. Marking a FS knowledge scale; and 4. Conducting a rewriting task	1. FS receptive knowledge and genre knowledge increased significantly; 2. There was a gap between what students perceived they knew and what they actually used; and 3. Teaching FS in context engaged students in meaningful output
Lindstromberg et al. (2016)	58 English L2 learners, Dutch L1	Introducing FS by using a 120-word journal abstract	1. Participating in a reconstruction task using a blank sheet (standard dictogloss group) or a worksheet highlighting FS (modified dictogloss group) both immediately after instructor feedback and a week after the initial test	1. Students in the modified dictogloss group used more targeted FSs than the standard dictogloss group; and 2. The texts produced by the modified dictogloss group were longer

1. Raising learners' awareness of formulaic sequences by designing recognition activities, e.g., underlining formulaic sequences and analyzing functions and possible uses of formulaic sequences in pairs (Cai 2016; Cortes 2006; Jones and Haywood 2004; Peters and Pauwels 2015).
2. Teaching formulaic sequences in context, e.g., by using a journal abstract or with contextualized exercises (AlHassan and Wood 2015; Lindstromberg et al. 2016).
3. Encouraging learners to produce as much as formulaic sequences by using cued output activities, e.g., C-test,[1] fill-in-the-gap, rephrasing, etc. (Peters & Pauwels 2015; Schmitt et al. 2004).

Studies in EAP have demonstrated the effectiveness of formulaic language instruction in the acquisition of second language academic discourse, whereas there are only a limited number of studies that extended the discussion to the field of teaching Chinese for academic purposes. Li (2006) in a chapter of his doctorate dissertation investigated metadiscourse in a Chinese academic corpus consisting of eight journal articles. The results showed that metadiscourse items were used more frequently in the field of humanities than in science. The gap between the two disciplines was more significant in terms of the use of attitude markers. Liu et al. (2016, 2017) developed a Chinese academic wordlist comprised of 2405 words frequently occurring in a 9-million-word Chinese academic corpus focusing on the Humanities and the Social Science. They later extended their study to academic lexical bundles (Liu et al. 2017). A total of 195 three-word bundles and 105 four-word bundles were found frequently used in the same corpus. The bundles were presented under 17 categories of three major functions: research-oriented, text-oriented, and participant-oriented. This study established a model of corpus study of Chinese academic formulaic sequences. It also called for attention to further the discussion by creating a Chinese academic corpus with richer sources and by developing a detailed categorization of the lexical bundles.

Along with the growing interest in learning Chinese globally, there has been an increase in Chinese programs such as college business Chinese courses and the Chinese Flagship Program in the USA. In such curriculums, giving oral presentations in Chinese is a common classroom activity and assessment tool. Studying academic oral presentations is therefore an important part of the linguistic foundation for a Chinese L2 learner and a necessary step for curriculum design. In light of this, this chapter seeks to explore the disfluency issues in Chinese L2 learners' oral presentations in academic contexts. A summary of formulaic sequences in Chinese oral presentations will follow.

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[1]C-test: The first letter of each word of the FS was provided in a fill-in-the-blank exercise. Translation of the word in learners' first language might be provided. See Peters and Pauwels (2015)'s example: "D__________ for the study was c______________ during 2003–2004 academic years from students enrolled in Intermediate Accounting at a state university. (Data… collected)."

5.4 Disfluency in L2 Chinese Academic Oral Presentations

5.4.1 Method

The data used in this study were thirty-nine video recordings of Chinese L2 learners' oral presentations. The participants' native language was English, and the mean age was 22 ages old. They were undergraduate students (34 males, 5 females) enrolled in an advanced Chinese course at a university in the USA in different semesters from 2003 to 2012. This course is an important component of the Chinese Flagship Program curriculum. As claimed in the program's mission statement, this nation-wide government-funded program provides undergraduate students with pathways to professional-level proficiency in Chinese in the academic major of their choice. The participants had an oral interview with two instructors before they were accepted into the program. The instructors evaluated their language proficiency level based on the clarity and effectiveness of their communication, severity of linguistic errors, organization of ideas, appropriateness, and cultural literacy. All program participants were rated at least an intermediate–high level based on the ACTFL Proficiency Guidelines.

At the end of the semester in this advanced Chinese course, the participants were required to give academic presentations in lieu of a final exam on topics that they had selected according to their majors or research interests. In this study, the topics of the thirty-nine presentations covered different areas including politics, economics, military operations, medical science, education, social issues, history, legal issues, agriculture, business, scientific theory and application, neuroscience and entertainment. The participants had studied the topic throughout the whole semester by reading materials from different sources and then discussing them with a native Chinese instructor one-on-one. The presentations were about 20–25 min long followed by a 5-min Q&A session. These presentations were a prepared speech, and the participants were able to prepare their presentations with all kinds of assistance, such as memorizing sentences from their readings, seeking help from native speakers, and rehearsing. However, on the day when they actually presented, they were not allowed to read notes, but were only allowed to present with accompanying PowerPoint slides. The presentations were video recorded by a member of the Chinese Flagship Program staff.

A qualitative study was conducted to explore the disfluency phenomena in participants' oral presentations. All presentations were transcribed and were encoded in terms of disfluency features by the researcher. Eight types of speech disfluency emerged in the data: silent pauses, filled pauses (or fillers), repairs, repetitions, false starts, hesitation with sound extension, slip of the tongue, and incomplete sentences. We also used Praat to identify silent pauses. Silences of 0.5 s or greater are usually regarded as disfluent pauses (Riggenbach 1991). In the transcripts, an AS-unit boundary was marked by a double slash (//), and a clause boundary was marked by a double colon (::). A silent pause less than 0.5 s was marked by an ellipsis (…). A long silent pause of 0.5 s or greater was marked by an ellipsis with N (… (N), Tao 1996). A hesitation with sound extension was marked by a tilde (~). Varied forms of filled pauses "uh" such as "en (嗯)" and "e (呃)" were all marked by "呃." For example:

Chinese: 但是随着科技…的~进化…呃…对不起/随着科技的~增长:: 农业会变得越来越不重要//
English: But with technology/~evolution/uh/sorry/with technology~growth:: Agriculture will become less and less important//.

5.4.2 *Results*

The learners in their presentations produced 1287 AS-units with noticeable disfluent features. Table 5.5 lists eight types of disfluencies which can be broken down into seventeen subcategories. In this section, all the disfluent sentences are analyzed qualitatively.

5.4.2.1 Silent Pauses

The frequency, length, and location of silent pauses in a sentence determine whether or not the sentence sounds fluent. In the disfluent usages, we found examples that learners frequently paused in a sentence (see Example 5.1) and examples that learners paused within a word (see Examples 5.2 and 5.3) or at an incorrect prosodic location in a sentence (see Examples 5.4 and 5.5). Silent pauses within a word or at an incorrect prosodic location reflect learners' deficiency in language production on the lexical level. In communication, they interrupt listeners' comprehension of the word or words in a phrase that is closely connected. Such disfluencies on the lexical level are not common in native speakers' speech. The following are examples of three different subcategories of silent pauses:

Frequent silent pauses at word boundary. In Example 5.1, the learners paused four times in one short sentence.

Example 1

Chinese: 美国…曾经…有一位…在中国的线人… (N) 呃告诉美国
English: In the United States … there was … an … informant in China … uh … (N) told the US

Silent pauses within a word. In Examples 5.2 and 5.3, "适合 (suitable)" and "丧失 (to lose)" were interrupted by a silent pause in the middle.

Table 5.5 Types of disfluency in Chinese L2 learners' oral presentations

Main types of disfluency	Subcategories
(1) Silent pauses	Frequent silent pauses at word boundary
	Silent pauses within a word
	Silent pauses at an incorrect prosodic location
(2) Filled pauses	Frequent fillers at word boundary
	Fillers within a word
	Fillers at an incorrect prosodic location
(3) Hesitation	Hesitation with sound extension within a word
	Hesitation with sound extension at an incorrect prosodic location
(4) Repetition	Frequent repetitions
	Repeating the first morpheme of a word
	Repeating the whole word
	Repeating a fragment
	Repeating with silent pauses, filled pauses or sound extension
(5) Repairs	Correcting pronunciation
	Correcting because of mis-selected words Correcting because of mis-produced words
	Correcting grammatical errors
	Correcting to express more precisely
(6) False starts/content reduction	
(7) Slip of the tongue	

Example 2

Chinese: 但是兰州的地理位置…(N) 不适…合…这些工业的发展
English: But the location of Lanzhou …(N) was not suit … able for … the development of these industries.

Example 3

Chinese: 一个小小的病毒…让一个国家的空军…丧…失…保护国家的能力
English: A tinny virus … caused a country's airforce …lo…st the power to protect the country.

Silent pauses at an incorrect prosodic location. In Examples 5.4 and 5.5, according to the prosody in the collocation "今年初" and "发达国家," silent pauses should be placed after the collocations rather than in the middle.

Example 4

Chinese: 今年…初…谷歌称中国…呃…入侵了他们的系统
English: In the beginning … of this year … Google claimed that China … uh … invaded their system.

Example 5

Chinese: 这个10%的增长率受到发达…国家的瞩目
English: This 10% growth rate received attention from the developed … countries.

5.4.2.2 Filled Pauses

Different words were used as filled pauses in learners' presentations, such as "呃 (uh), 嗯 (en), 那个 (that), 还有 (and), 就是 (that is), 就 (so) and 然后 (then)." "呃 (uh)" was the most frequently seen in their speech accounting for over 95% of filled pauses usages. We found examples that learners frequently used fillers in a sentence (see Examples 5.6 and 5.7) and examples that learners inserted fillers within a word (see Example 5.8) or used them at an incorrect prosodic location in a sentence (see Example 5.9). Using fillers is a communication strategy that learners employed to fill the gap when they have difficulty in producing the sentence. But similar with silent pauses, using filled pauses within a word or at an incorrect prosodic location reflects learners' deficiency in language production on the lexical level. These disfluencies are not common in native speakers' speech. The following are examples of three subcategories of filled pauses:

Frequent fillers at word boundary. In Examples 5.6 and 5.7, "呃 (uh)" was used three times in a sentence. Learners struggled when they tried to recall difficult words.

Example 6

Chinese: 他们使用上述的…呃…公关…呃…公关措施…呃…来保持他们的名声
English: They used the above … uh … PR … uh … PR solutions … uh … to maintain their reputation.

Example 7

Chinese: 各位可以看这个…呃…这幅…侧视图…呃…显示…呃…这个颈部动脉
English: You can look at this…uh…this…side-view … uh … showing … uh … this cervical artery.

Fillers within a word. As can be seen in Example 5.8, "呃 (uh)" was inserted within the word "国家 (country)."

Example 8

Chinese: 在加拿大…(N) 一些研究…研究员发现到在…一百四十…个不同国…呃家有不同一千…多…的电脑…受到攻击

English: In Canada …(N) some research … researcher found that in … one hundred and forty … different coun…uh…tries … there were more than a thousand … computers … were attacked.

Fillers at an incorrect prosodic location. "某人说 (Somebody said that)" is a common phrase in Chinese. But in Example 5.9, "呃 (uh)" was used in front of "说" that made the expression sound not fluent.

Example 9

Chinese: 去年兰州市长…呃说
English: Last year the Lanzhou mayor … uh said.

5.4.2.3 Hesitation

Hesitation usually appears as the sound extension of a specific morpheme. It indicates that the speaker is in search of the next morpheme or word. In our date, we found examples of the sound extension of a morpheme within a word (see Examples 5.10 and 5.11) and examples of the sound extension of the last morpheme of a word or a monosyllabic word (see Examples 5.12 and 5.13). Examples 5.10 and 5.11 reflect the learners' deficiency in mastering the word, or the process of selecting the proper word in a group of synonyms, whereas Examples 5.12 and 5.13 show that the learners struggle in searching the following word for the collocation or the content.

Sound extension of a morpheme within a word. In Example 5.10, the learner extended the sound of "协" in the word "同心协力 (teamwork)," showing his uncertainty of the last morpheme "力" in this idiom. In Example 5.11, the learner extended the sound of "选" in the word "选择." He might have hesitated because he was trying to decide whether to use the monosyllabic word "选 (to choose)" or its bisyllabic counterpart "选择 (to choose)."

Example 10

Chinese: 同心协～力为环保努力
English: work hard as a te～am for environmental protection.

Example 11

Chinese: 所以就选～择北京作为起点
English: they therefore cho～se Beijing as the starting point.

Sound extension of a morpheme of the last morpheme of a word or a monosyllabic word. In Example 5.12, the learner extended the sound of the second morpheme "些" in the word "这些 (these)" while working on searching the next suitable noun. In Example 5.13, the learner extended the sound of “其” while in search of words for the next part of the message.

Example 12

Chinese: 这些～人…呃…教育水平…呃较低
English: These～people…uh…their education level … uh are pretty low.

Example 13

Chinese: 中国政府加强其～…呃…军队的力度
English: Chinese government strengthened the power of their～…army.

5.4.2.4 Repetitions

In our data, repetitions usually occurred on the lexical or phrasal level. For advanced-level learners in this study, very few syntactic repetitions were found in the presentations. They usually occurred with minor adjustment of the sentence, which can be regarded as examples of repairs, such as Example 5.33 in the following discussion of repairs. We found examples of frequent repetitions (see Examples 5.14 and 5.15), examples of repeating the first part of a word (see Example 5.16), examples of repeating the whole word (see Examples 5.17 and 5.18), examples of repeating a fragment (see Examples 5.19 and 5.20), and examples of repetitions with silent pauses, filled pauses or sound extension (see Examples 5.21–5.23).

Frequent repetitions. In Example 5.14 and 5.15, the learners repeated the word “看 (to see)” and “肯德基 (KFC)” three times in the sentence. The learners were planning the following content when they repeated these words.

Example 14

Chinese: 中国人去看…呃…看…看医生的时候
English: When Chinese went to see … uh … see … see the doctor.

Example 15

Chinese: 肯德基…肯德基的…呃…(N) 肯德基明智地实施一些措施来解决这个问题
English: KFC…KFC’s … uh …(N) KFC implemented some measures wisely to solve this issue.

Repeating the first part of a word. In Example 5.16, the learner repeated the first morpheme “经” of the word “经验 (experience)” twice before she could finally say the word, which showed that the learner had difficulty in recalling the word or selecting the correct word.

Example 16

Chinese: 没有涉及到个人经……呃……经…经验
English: No personal ex…uh…ex…experience was involved.

Repeating the whole word. In Example 5.17, the learner repeated the word “这些 (these)” of the phrase “这些人 (these people).” And the learner in Example 5.18 repeated “容易 (easy).” They might have struggled with selecting a proper word or planning the following message while repeating the word.

Example 17

Chinese: 因为这些…这些人了解中国文化…和市场::也了解美国的…呃…餐…饮企业
English: Because these … these people understood Chinese culture … and market:: and also understood American … uh … fo…od industry.

Example 18

Chinese:其他…呃…(N) 容易…呃容易导致卒中病史的人
English: Other people who have a history of … uh …(N) easily … uh easily lead to stroke.

Repeating a fragment. In Example 5.19, the learners repeated “如果一个” in the sentence. The learner in Example 5.20 first used “跟他爸爸 (with his father)” and then repeated the same phrase with a different word for father “跟他父亲 (with his father)” twice. Similar to repeating a word, learners might have struggled with selecting a proper word when planning the following message.

Example 19

Chinese: 如果一个…呃如果一个血管阻塞的话
English: If there was a … uh if a blood vessel obstruction.

Example 20

Chinese: 他已经知道他要跟他爸爸…呃…跟他父亲…跟他父亲一起工作…在那修车店
English: He already knew that he wanted to with his father … uh … with his father … uh … work with his father … in that car repair shop.

Repeating with silent pauses, filled pauses, or sound extension. In many cases, disfluency occurred with different disfluent forms mixed together. In Example 5.21, the learner paused and repeated “就” before saying the word “就业 (to land a job).” In Example 5.22, the learner inserted a filler “呃 (uh)” before he repeated the phrase

"中国的 (Chinese)." In Example 5.23, the learner extended the sound of the first morpheme "也" before she said the word "也是 (too)."

Example 21

Chinese: 我们下面来看政府如何解决这些就…就业困难
English: Next we will see how the government solved these employ…ment difficulties.

Example 22

Chinese: 他们需要先了解中国的文化…(N) 还有中国的…呃…中国的市场环境
English: They need to know Chinese culture first …(n) and China's … uh … China's business environment.

Example 23

Chinese: 其他的问题也～也是…呃性别歧视
English: Other issues are～are … uh … gender discrimination.

5.4.2.5 Repairs

L2 learners monitor their speech for different kinds of errors. The self-monitoring system helps increase the correctness of language production. However, it interrupts speech as it brings attention command when learners repaired their language. We found examples of repairing on different levels: correcting pronunciation (see Example 5.24), correcting mis-selected words (see Examples 5.25 and 5.26), correcting mis-produced words (see Examples 5.27 and 5.28), correcting grammatical errors (see Examples 5.29–5.31), and rephrasing to express more precisely (see Examples 5.32–5.34).

Correcting pronunciation. The learner in Example 5.24 noticed that he mispronounced the word "饮食 (diet)" as "yín shí." He then corrected it into "yǐnshí" immediately.

Example 24 Chinese: 我们来了解他们的饮食(yín shí)饮食观念
English: Let us understand their dietary views.

Correcting because of mis-selected words. In Examples 5.25 and 5.26, the learners realized that they mis-selected the word or were uncertain which of the synonyms should be used. They replaced the word with another one similar in meaning. The learner in Example 5.25 replaced "产生 (to produce)" with "形成 (to form)." The learner in Example 5.26 corrected "不可避免 (unavoidable)" with "不可抗拒 (irresistible)."

Example 25

Chinese: 因为它不需要先产生…or形成血块
English: Because it doesn't need to first produce … or form blood clots.

Example 26

Chinese: 这是不可避免…呃不可抗拒的自然灾害
English: It is an unavoidable … uh irresistible natural disaster.

Correcting mis-produced words. In Example 5.27, the learner found he mispronounced the word "雨水 (rainwater)" by reversing the order of the two morphemes of the word as "水雨." We found four similar examples in the data. Reversing the order of two morphemes in a word is a unique disfluent phenomenon in Chinese due to the structure of Chinese words. However, it is not common in native speakers' speech.

Example 27

Chinese: 所排放的污染物跟水雨…跟雨水结合起来
English: The emitted pollutant combined with water rain … rain water.

Example 28

Chinese: 在加拿大…(N) 一些研究…研究员发现到
English: In Canada …(N) some research … researcher found out that.

Correcting grammatical errors. In Example 5.29, the learner corrected the incorrect form "维基百科说" into "维基百科上说 (On Wikipedia, it is said that)." In Example 5.30, the learner repeated the phrase "最有人流量" and thought it was not correct. He then corrected it as "人流量最高 (with the highest visitor flow)." The learner in Example 5.31 corrected "好多" as "好得多 (a lot better)" to make the comparison sentence sound right.

Example 29

Chinese: 维基百科说…呃…上说…没有被商业化的音乐…通常不会在主流…媒体出现
English: Wikipedia says … uh … On (Wikipedia) it says that … music without being commercialized … are usually no on the mainstream … media.

Example 30

Chinese: 他们会选择…(N) 呃…最有人流量和聚客点…呃最有人流量…呃…他们会选择人流量最高和聚客点最多的地区
English: They will choose…(N) uh … the most visitor flow and accumulation point … uh … they will choose a place where has the highest visitor flow and most people gather.

Example 31

Chinese: 这是因为它的商业策略比麦当劳好多…好得多
English: It is because its business strategy is a lot good … a lot better than McDonald's.

Correcting to express more precisely. In Example 5.32, the learner changed "了解 (to understand)" into "更了解 (to better understand)" to adjust the expression. In Example 5.33, the learner repeated the whole clause "中国是一个计划经济为主的国家 (China is a country based on planned economy)" with a minor change adding "当时 (at that time)" before the verb "是 (to be)," in order to describe the fact with a more precise time point.

Example 32

Chinese: 下面我们看三个例子来了解…更了解中国的污染问题
English: Next we will take at look at three examples to understand China's pollution problem … to understand (it) better.

Example 33

Chinese: 由于社会主义背景::中国是一个计划经济为主的国家…中国当时是一个计划经济为主的国家
English: Because of the socialism background::China is a country based on planned economy … China used to be a country based on planned economy.

5.4.2.6 False Starts/Content Reduction

False starts and content reduction are a similar disfluent phenomenon. Learners failed to finish the sentence after they started it, and then, they either decided to use another way to express their thought or abandoned the message and started a new one. In Example 5.34, the learner started with "也希望我们可以 (we also hope that we could…)." And then he paused with a filler, indicating he struggled with completing the sentence. He then gave up and started over with a similar expression "我相信了解两方的优劣势就能 (we believe that knowing the pros and cons of two sides, we could…)." In Example 5.35, the learner started the clause with "政府开办了 (the government set up…)" and repeated it, struggling to finish the sentence. But at last he gave up the sentence and replaced it with "提供了一些实习机会 (provided some internship opportunities)."

Example 34

Chinese: 也希望…(N) 呃我们…可以…呃…(N) 我相信了解两方的～概念…两方的优劣势::就能帮助我们预测…医学未来的趋势

English: It is hoped that…(N) uh we can … uh … (N) I believe that by understanding two sides'～concepts … the pros and cons of two sides::it can help us to predict … the future of medicine.

Example 35

Chinese: 为了帮助毕业生…呃就业::政府开…开办了…呃…鼓励他们实习开办了一些…呃…提供了一些实习机会
English: In order to help graduates … uh to find a job::the government set … set up … uh … encouraged them to do internship … set up some … uh … provided some opportunities for internship.

5.4.2.7 Slip of the Tongue

Slip-of-the-tongue errors are common in both native and non-native speech. In Example 5.36, the original plan was to say "肯德基进入中国 (KFC entered China)." The learner said "中国进入 (China entered)" instead. He immediately corrected it after he heard the error.

Example 36

Chinese: 1987年中国进入…呃肯德基就进入中国
English: In 1987 China entered … uh KFC entered China.

Several factors that caused disfluency can be inferred from the examples of the data. Learners in many cases were disfluent because they were thinking about content, e.g., "我想跟大家分享中国…呃的一些网络战行为 (I want to share something about uh… cyber war in China)." In terms of linguistic incompetence on the lexical level, learners' speech are disfluent because that they struggled with (1) recalling words, e.g., "三个就业困难的…呃…族群 (three …uh… groups of people who have difficulty in finding a job)," "保护其海岸线和航…海…权 (to protect its coastline and navigation…rights);" (2) selecting words, e.g., "这个问题有点儿…呃…极端…有点…呃…呃…算是严重 (this issue is a little…uh…extreme…uh…uh…serious)," "这个人去救…呃…去接…呃…接近他 (this person went to save…uh…to approach…uh…to approach him);" and (3) translating words, e.g., "他们的F…15…号战斗机 (their F…15…fighter jet)." On the syntactic level, when the learners struggled with searching for the right grammatical form, their speech was easily disrupted, e.g., "世界上最讲究饮食文化的就是…莫过于中国文化 (the culture which is most particular in food culture is…is no one else but Chinese culture)," "为…安全…呃…以安全为基础而设计 (design for safety…based on safety)." It also happened in a few cases that because the speed of language processing was slower than the speed of message planning, the learner expressed the ending thought when they had not yet finished the previous thought, e.g., "他们有些挫…挫…挫…呃…失败的经验::所以他们都有挫败感 (They had frustrate…frustrate…frustrate… uh…experience of failure, so that they had the feeling of frustration).”

But what stood out in the speech of learners’ presentations was the frequent disfluencies in transition statements, such as disfluent expressions previewing the report or a section (e.g., Examples 5.37 and 5.38), introducing an aspect of the report (e.g., Example 5.39), moving from one section to the next (e.g., Example 5.40), and summarizing (e.g., Example 5.41).

Example 37

Chinese: 那么我今天要…(N) 呃…专注于六个…六个部分
English: So today I will …(N) uh … focus on six … six parts.

Example 38

Chinese: 那…我来…呃～说明一下…食物问题这方面
English: So … I will … uh～explain … the food issue.

Example 39

Chinese: 我先要讲一下…我先要讲一下中国的军事发展
English: I will first talk about … I will first talk about the military development in China.

Example 40

Chinese: 那了解西医的概念…(N) 呃…现在就…呃讨论西医
English: After we understand the concept of western medicine …(N) uh … now then … uh will discuss western medicine.

Example 41

Chinese: 呃…以上就是我…呃…我的研究内容//请…大家…可以…提问…共同探讨
English: uh … the above is my … uh … my research // Please … everyone … can … ask questions.

The most prominent types of disfluency are silent pauses and filled pauses. It is common to pause and use filler when communicating because the speakers can buy time to process the language. But several features of disfluency were observed in learners’ speech of our data that are not commonly seen in native speakers’ speech. The following features significantly distinguish second language speech from normal native speech:

- Silent pauses, filled pauses, and hesitation with sound extension within a word, e.g., “抵…挡 (withstand),” “国…呃…家 (country),” “密～不可分 (inseparable).”
- Repeating the first morpheme of a word with/without sound extension, e.g., “数…呃…数字 (number),” “选～选择 (to choose),”

- Silent pauses, filled pauses, and hesitation with sound extension at an incorrect prosodic location, e.g., "中日两国…呃…之间 (between China and Japan)," "可…测量的 (measurable)," "公元前一千～年 (1000 BC)."
- Content reduction, e.g., "中国人能消费的东西…呃…越多:: 然后他们能…呃 ～// 这个能提高国内的需求// (The more things the Chinese can consume:: then they can …uh ～// It can increase domestic demands//)."

Compared to native speakers' speech, disfluency in L2 learners' speech usually lies in the linguistic incompetence of their L2. When preparing for an academic presentation, L2 learners not only need to work on the content and special terms for their specific fields but also need to pay attention to the assemblage of sentences using correct lexical items and structures. Giving training in common formulaic sequences in Chinese presentation can provide learners with useful framing structures throughout the presentation. It can help them conserve mental effort in areas such as transitions and sentence building, thus allowing them to focus their attention on the content and more challenging vocabulary related the subject. Being aware of the importance of formulaic language in oral presentations, we propose that formulaic language instruction be introduced into the language teaching process in order to help L2 learners improve their fluency and correctness of their speech.

5.5 Formulaic Language Instruction and the CAFP List

In the formulaic language instruction approach for Chinese academic presentations, the role of formulaic units of word combination would be stressed in language teaching and language acquisition. Lexical items in a presentation would be taught in the form of three types of formulaic sequences instead of focusing on individual words: poly-words and collocations (multi-word combinations with fixed meanings), institutionalized expressions (sentences with pragmatic functions), and phrasal and sentence builders (multi-word combinations with various inserted lexical items). Activities used to develop learners' knowledge of formulaic language in presentation include:

- Introducing a list of formulaic sequences that are commonly used in Chinese academic presentations;
- Encouraging learners to notice language patterns and collocations by highlighting the items from the written transcripts of presentations;
- Providing context information to help learners produce formulaic sequences by using cued output activities such as fill-in-the-blank, rephrasing in context, and/or rewriting passages;
- Guiding learners to practice correct use of formulaic sequences by using activities such as multiple-choice, correcting incorrect usages, or 4/3/2 oral

practices (Nation 1989) with a four-minute time limit for the first practice, then three-minute time limit practice, and last two-minute time limit practice;
- Motivating learners to apply language knowledge into practice by using uncontrolled activity such as reading portions of a report and then transferring it into a written script of a presentation in formal, academic style;
- Inviting learners' to work with corpus of native speakers' presentations created by the instructors to have extensive listening and reading of the formulaic sequences.

There are a number of studies devoted to constructing lists of general formulaic sequences for Chinese L2 learners based on the vocabulary guideline of the HSK exam or textbooks (He 2011; Wang 2013; Zhou 2009). However, little attention has been paid to creating a list of formulaic sequences of Chinese for academic purposes. In this study, we attempt to develop a short list of frequent formulaic sequences commonly used in Chinese oral presentations for second language learners. Table 5.6 is the Chinese Academic Formulas for Presentations (CAFP) list, which was compiled using a mix-method approach, both data-driven and hand-selected.

Table 5.6 List of Chinese Academic Formulas for Presentation (the CAFP list)

Functions	**Examples**
Introducing the main topic	• 非常/很高兴(有机会)跟大家分享…… • 我今天要跟大家分享/汇报/报告/介绍…… • 我今天要报告的题目是……
Introducing the background	• 基本情况, 主要特点, 发展方向, 重要/热点/关键问题, 热点话题, 讨论/研究的热点, 需要解决的问题, 所面临的问题 • ……受到人们的关注 • 人们对此十分关注 • ……成为了人们十分关注/关心的话题/问题 • ……将成为未来的发展方向 • ……日益受到重视
Describing methods	• 对……进行分析/讨论/考察/探讨/实验 • 为了(进一步/深入)了解…… • 从……的角度出发 • 针对……的问题 • 在……的基础上 • 采用/运用/使用……的方法 • 基于/选取/根据/对……的案例进行分析 • 通过分析/了解/讨论/探讨/考察…… • 通过与……的对比
Introducing the outline of the presentation	• 首先……其次/再者……再次……另外……最后 • 首先……接下来……然后……另外……最后 • 第一(部分点/个)……第二(部分点/个)……第三(部分点/个)……

(continued)

Table 5.6 (continued)

Functions	**Examples**
Signaling transitions	• 首先来看…… • 先来了解/看一下…… • 接下来我们也看一下…… • 接下来的部分我会讨论/谈/介绍一下…… • 前面提到…… • 基于/针对/通过/根据/由上述……可以看到/得到/发现 • 具体来看…… • ……具体如下 • 到此/到此为止
Referring to literature and citation	• (有)资料显示 • (大量/这些/已有)研究表明 • 一般认为 • ……认为/指出/发现/提出/称/概括了/总结了 • 根据……的研究/报告 • 据统计 • ……研究/分析了…… • 认为/指出/提出…… • ……明确表示 • 对……做出如下解释 • ……提到/解释道/说道/曾说过 • 中国有句俗话 • 俗话说 • 人们常说 • 正如……所说
Defining terms	• (所谓的)……(通常)是指…… • (所谓的)……指的是…… • ……也就是…… • ……是指这样一种现象/情况
Describing quantities and trend	• 相当一部分, 绝大部分, 极少数, 半数以上, 不到一半, 所占比例, 大幅增长/提高/上涨/增加/下降/降低/减少/减低, 略有增长/提高/上涨/增加/下降/降低/减少/减低, 有所增长/提高/上涨/增加/下降/降低/减少/减低多达, 仅为 • 占……的X分之X • 超过/不到X分之X • 占……的X个百分点 • 所占比例/比重为 • 出现/呈现……的趋势
Giving examples	• 举例来说, 打个比方, 比方说 • 以……为例
Analyzing causality	• ……是导致/造成/引起……主要原因/因素 • 这是/这主要因为…… • 之所以……是因为…… • 其/一部分原因是…… • 出现这种情况的原因是/在于……

(continued)

Table 5.6 (continued)

Functions	**Examples**
Expressing opinions and attitude	• 众所周知, 一般认为, 个人认为 • 在……看来 • 对……而言 • ……,而我们/我/本人认为…… • 令人……的是 • ……的是
Listing and classifying	• 包括/包含X种…… • 包括以下X点…… • 体现在X个方面…… • 分为X部分/阶段/大类…… • 由以下X个部分组成…… • 主要表现在X个方面,分别是…… • ……可以概括为X个主要类型 • 把……归纳为X个方面 • 主要由以下几种类型:…… • 主要有以下的表现:…… • 具有以下特点:…… • ……经历了X个阶段 • 根据……的不同,将……分为 • 根据……可分为……
Comparing and contrasting	• 类似的/类似地, 相对而言/相对来说, 相比之下, 相反的/相反地, 反之亦然 • 与……相一致/相吻合 • 与……相同/类似 • 与……完全一致 • ……与之类似 • 相较于/相对于/区别于…… • 对比……可发现…… • 与……相比 • 与……正好相反/截然不同 • ……存在很大的/较大的/显著的差异 • ……最大的区别就是…… • ……的共同特点是……
Referring to visuals	• 图/表X为/表示…… • 图/表X显示了…… • 图/表X给出了…… • 从图/表X可以看到…… • 由图/表X可知……
Referring to discussion objects	• 在这种情况下, 通常情况下, 在这个问题上, 在此基础上, 在理论上, 实际上, 就此而言, 具体而言, 进一步来看 • 从……来/上看 • 从……看 • 从……的角度考虑 • 在……的问题上 • 在……方面 • 就……而言 • 对……来说 • 在……的分析里

(continued)

Table 5.6 (continued)

Functions	**Examples**
	• 以……的视角 • 基于……的问题/原则/假设 • 针对……的问题/特点/特征
Explaining	• 换句话说, 换言之, 也就是说, 具体而言, 具体来说, 实际上, 简而言之, 简单地说, 一句话, 一言以蔽之 • 这意味着…… • 这说明/表明/代表(了)…… • 意思是……
Emphasizing important information	• 特别地 • 特别是…… • 尤其是…… • 值得注意的是…… • 需要说明的是…… • 需要着重指出的是…… • 有趣的是……
Reporting findings	• 可以看出/看到, 不难看出 • 结果显示/表明/说明/发现 • 这显示/表明/说明/发现/反映 • 我们发现/看到…… • 可以发现/看到…… • 通过对比/案例可以看到 • 由……可知…… • ……告诉我们
Summarizing	• 总体上, 总的来说, 总体而言, 综上所述, 综上可知, 基于此, 鉴于此, 有鉴于此, 由此可见 • 最后小结/总结一下
Expressing the contribution of the research	• 为……提供理论基础/参考 • 弥补……的不足 • 加深对……的认识/理解/了解
Ending the presentation	• 以上是我的报告 • 我的报告就到这里,谢谢大家 • 我的报告到此为止,谢谢大家 • 不足之处请大家批评指正

The CAFP list was derived from three different sources: (1) 90 published research articles. Among these articles, 35 in natural science published on *Acta Scientiarum Naturalium Universitatis Pekinensis* 《北京大学学报 (自然科学版)》; and 30 in medical science published on the *Journal of Shanghai Jiaotong University (Medical Science)* 《上海交通大学学报 (医学版)》; 35 in Humanities and Social Science published on the *Journal of Zhejiang University (Humanities and Social Sciences)* 《浙江大学学报 (人文社会科学版)》; (2) 29 oral presentation recordings of two academic conferences held in China, 13 of which are in humanities and 16 are in medical science; and (3) a list of Chinese parenthesis (Si 2009).

Formulaic sequences in this list were collocations of more than two words, including four subcategories based on Nattinger and DeCarrico's (1992) classification: *poly-words* (which are strings that operate as single words, e.g., "换句话说 *(in other words)*"); *institutionalized expressions* (which are sentence-length strings carried specific pragmatic functions, e.g., "以上是我的报告。 *(That's the end of my report.)*"); *phrasal builders* (which allow variations or lexical insertions, e.g., "在*X*看来 *(In X's opinion)*"); and *sentence builders* (which allow construction of full sentences, e.g., "上述例子表明 *(The above examples indicate that)*"). For the convenience of learners to use the list, sequences are presented according to their pragmatic functions in discourse.

5.6 Conclusion

In this study, we looked at the different evidence of disfluency in Chinese L2 learners' academic oral presentations. It showed that learners struggled to deal with an overload of information mixing special terms and expressions related to the subject with academic language in Chinese presentation. Disfluency often appeared when learners tried to use terms or expressions related to the subject as well as in transitions. As mentioned above, academic discourse is used to facilitate efficient communication among insiders. A different language style that is apart from normal language use is formed to create linguistic technicality and abstraction. Because the storage of such information is lacking in the learners' language system, much of the learners' attention was taken to adjust the language style when they give presentations, which affects the fluency of the speech. In view of this, it is suggested that a list of Chinese Academic Formulas for Presentation (CAFP) can be introduced to L2 learners, accompanied by effective formulaic language instruction in the classroom. Four types of formulas including poly-words, institutionalized expressions, phrasal builders, and sentence builders are presented in this CAFP list, which covers twenty-two pragmatic functions in a presentation. After the formulaic knowledge is learnt, it will first be integrated within the memory system as the declarative knowledge. Along with consistent practices to reinforce the correct use, it will ultimately become proceduralized and autonomous, which is a critical stage of producing fluent speech. Teaching activities of three main purposes are suggested in this study, including raising learners' awareness of formulaic sequences; teaching formulaic sequences in context; and encouraging learners to produce as many formulaic sequences in the correct form as possible.

However, it should be noted that so far there is no corpus of academic presentation discourse in either L1 or L2 Chinese. This study is based on limited data that could be found in L2 Chinese students' presentations and Chinese scholars' presentations, as well as published journal articles. In order to create a more detailed list of academic formulas in Chinese presentations, it is important to build up a corpus of Chinese academic presentations with a large scale of sources covering different disciplines to serve as the basis of analysis. In addition, it is necessary to compare written style and oral style in academic discourse since presentations are relatively less formal and contains more elements of interactive communication. As formulaic language instruction has gained more and more attention in second language teaching and acquisition research, more evidence of effective teaching activities can be used in the classroom to promote the training of academic formulas for Chinese presentations. Furthermore, research in formulaic language instruction in academic discourse will provide additional data and examples to further the discussion in the field of formulaic language instruction.

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Part II
Business Chinese

Chapter 6
Developments in Business Chinese Teaching and Research: An Overview and Perspectives

Zhongqi Shi, Qiaosi Yuan and Mengsu Kong

Abstract The goal of this review is to gain a comprehensive understanding of the research on business Chinese from 1997 to 2017. In all, 50 articles published in 16 top-tier academic journals in Mainland China, Taiwan, as well as the USA were reviewed. These papers can be divided into several categories, such as curriculum design, textbooks and materials development, instruction and pedagogy, and assessment and evaluation. Through a detailed description of the past work, we attempt to present an overview of the research effort, summarize past findings, and identify the under-investigated areas. The hope is that this will ultimately point out future directions for business Chinese research.

6.1 Introduction

With the rapid rise of China's economy and ever-increasing trade between China and the rest of the world, Chinese language and culture have gradually gained popularity in post-secondary institutions and large multinational firms for non-native Chinese speakers. As a result, business Chinese (BC) which started since the 1980s has continued to develop, not only in mainland China, but also in countries and regions such as the USA and Taiwan. In recent years, an increasing

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number of colleges and universities around the world have started to offer BC courses and have even developed a standardized exam, the Business Chinese Test (BCT).

A review study is necessary for three reasons. First, a substantial amount of research has been conducted over the past decades, especially in the last 20 years; however, a comprehensive review of that research is still lacking. Second, business Chinese teachers and educators would benefit greatly from knowing which practices work and which do not. This way they would be able to apply the proven methods and approaches to their own courses. Third, understanding past research results and trends can shed light on the evolution of business Chinese, which may point out a direction for future research.

Thus, a carefully conducted literature review can help us build a comprehensive map of past and present work in the field. Ideally, this map would reveal what we know, what we have done, what works, and what does not. The study contained in this paper offers such a review.

6.2 Method

Most of the previous business Chinese review studies focused on academic papers published in only one country or region, for example, Mainland China (Cao 2016), or the USA (Li et al. 2013). Our review attempts to look beyond borders to construct a fuller picture of BC research. We chose to gather studies published in regions that are most active in BC research: Mainland China, Taiwan, and the USA. Through preliminary web searches, we realized that there is no single database that collects publications across all three regions. Thus, we decided to use three separate databases to gather BC research published in each region. Specifically, we used the China Academic Journals full-text database (also known as CNKI, 中国知网) for research in Mainland China, Airiti Library (華藝線上圖書) for that in Taiwan, and Jstor for that in the USA. Google Scholar was also used to cross-search BC papers published in these three regions.

6.2.1 Search Criteria

A number of criteria were considered prior to each search.

Keywords. For the Chinese database and Google Scholar, keywords in Chinese (both in simplified and traditional version) were used, such as 商务中文, 商业中文, 商务汉语, 商务华语, 商务汉语教学, 商务汉语研究. For the English database, keywords used included business Chinese, business Chinese instruction, business Chinese teaching, Chinese for business purposes, and Chinese for business professionals.

Language. Articles collected in our study are written in either Chinese or English.

Publication type. Only articles published in academic journals were considered for this study. Book reviews, dissertations, and conference proceedings were excluded.

Publication year. The review in this paper is based on research published in academic journals between 1997 and 2017. Two reasons inform the decision to limit the review to this period. First, formal business Chinese education began in 1996 (Cao 2016); therefore '97 is the first full observable year. Second, published research on business Chinese was understandably scarce before 1997. However, reviewing 20 full years of research publications should give us sufficient insights into the overall development of business Chinese research.

Representative journals. A substantial number of journals publish papers on BC teaching and research. Because journals vary greatly in terms of their review process and selection criteria, we decided to use widely recognized standards as a filter to ensure that quality is consistent. For journals from Mainland China, we used Chinese Social Science Citation Index (CSSCI) as the selection criteria. Non-CSSCI journals were excluded from this study. For Taiwan journals, we used Taiwan Humanities Citation Index (THCI) as the selection criteria. Non-THCI journals were excluded from this study. Because there are only a handful of US journals publishing papers on BC teaching and research and there is no equivalent index to CCSCI and THCI, we decided to include them all into our study.

6.2.2 Distribution of Journals and Articles

We found a total of 50 articles that met the above criteria for inclusion in the later analyses. The 50 articles were published in 16 journals (Table 6.1).

Figure 6.1 shows the distribution of journals by region. As we can see, there are more journals publishing BC research in Mainland China than in Taiwan and the US combined. Mainland journals, as Fig. 6.2 show, also published more BC research than those from the other regions.

Figure 6.3 illustrates the distribution of articles by journal. As we can see, half of the journals have published one or two articles. About 1/4 journals have published three or four articles. Only four journals have published more than four articles.

In terms of language used, most of the articles were written in Chinese (82%) while the remaining articles were written in English (18%).

Table 6.1 Journals that have published BC research

Journal index	Journal name	Number of published articles
J1	Computer Assisted Language Instruction Consortium Journal (CALICO)	1
J2	Global Business Languages	4
J3	Journal of the Chinese Language Teachers Association (JCLTA)	5
J4	Journal of Teaching in International Business	1
J5	出版发行研究 (*Chuban Faxing Yanjiu*)	1
J6	当代修辞学 (*Dangdai Xiuci Xue*)	1
J7	福建师范大学学报 (*Fujian Shifan Dauxe Xuebao*)	1
J8	汉语学习 (*Hanyu Xuexi*)	2
J9	华文教学与研究 (*Huawen Jiaoxue yu Yanjiu*)	3
J10	華語文教學研究 (*Huayuwen Jiaoxue Yanjiu*)	7
J11	教育评论 (*Jiaoyu Pinglun*)	1
J12	世界汉语教学 (*Shijie Hanyu Jiaoxue*)	2
J13	臺灣華語教學研究 (*Taiwan Huayu Jiaoxue Yanjiu*)	3
J14	语言教学与研究 (*Yuyan Jiaoxue yu Yanjiu*)	5
J15	语言文字应用 (*Yuyan Wenzi Yingyong*)	3
J16	云南师范大学学报 (*Yunnan Shifan Daxue Xuebao*)	10

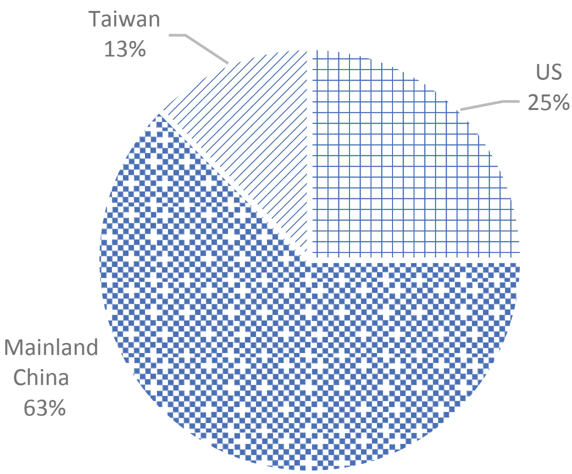


Fig. 6.1 Distribution of journals by region

Fig. 6.2 Distribution of articles by region

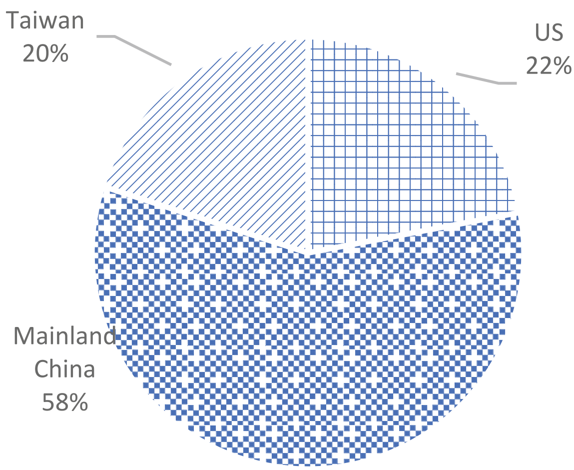
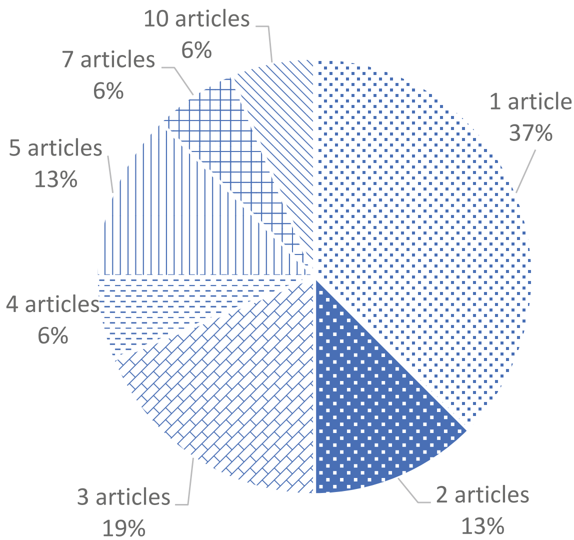


Fig. 6.3 Distribution of articles by journal



6.3 Results

This section is divided into two parts. Part one presents an overview of the journal publications on business Chinese from 1997 to 2017. Part two summarizes what key topics have been addressed by researchers and their findings.

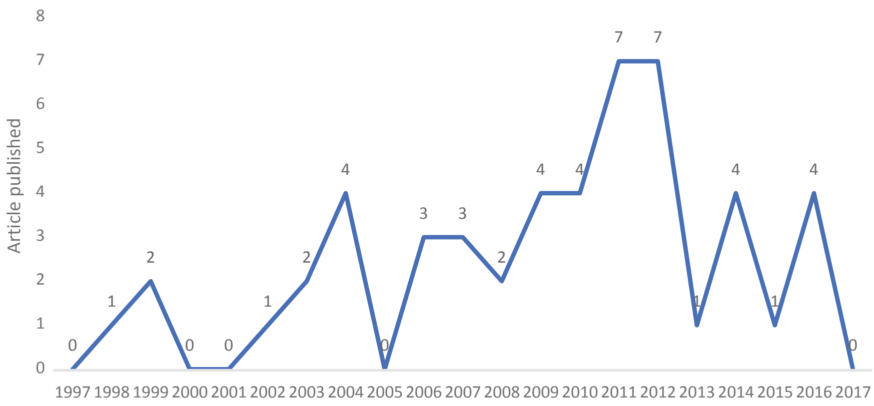


Fig. 6.4 BC articles published by year

6.3.1 Overview of the Literature

A review of the past 20 years of business Chinese research reveals a number of findings that can inform us on BC's overall development.

First, the total number of BC research projects is very limited. On average, only two or three papers were published each year. There were five years during which no BC research was published at all, and there were seven years during which only one or two articles were published. This finding is consistent with the findings of a previous review study (Cao 2016).

Second, the number of journals that published business Chinese research is also limited (Table 6.1). In the USA, there are only four journals that have published BC research, two of which only published one article. In Taiwan, there are two journals that have published BC research. In Mainland China, there are ten CSSCI journals that have published BC research, and four of these published only one article.

Third, most of the BC research (>92%) was published after 2003, with a substantial peak occurring in 2011 and 2012 (Fig. 6.4). It appears that BC research has become a more popular research topic only in the past ten years although BC course offering started in 1988 (Zhang 2006). It should be noted that BC research has not shown a steady growth in recent years, which is evident by the low number of journal publications in 2015 and 2017.

6.3.2 Key Research Topics

The following paragraphs describe and discuss the research that has been published from 1997 to 2017. Drawing on Lu's framework (1992), the research topics are categorized into four groups: Curriculum Design, Textbook and Materials Development, Instruction, Pedagogy, Assessment, and Evaluation.

6.3.2.1 Curriculum Design

A clearly defined planning stage should be a precursor to any curriculum and/or course. At this stage, the instructors need to make decisions as to what and how students ought to be taught while taking into consideration the available resources. This is a fundamental component of BC research and teaching because many important issues arise.

The research of BC curriculum design consists of two major topics: need analysis and instructional goals. The needs of learners determine what the instructional goals ought to be, which subsequently affects what is to be taught and how.

Need Analysis. Need analysis refers to the "systematic collection and analysis of all relevant information necessary to satisfy the language learning requirements of the students within the context of the particular institution involved in the learning situation" (Brown 1995). Need analyses have been considered as the "pre-condition and foundation" for language teaching for special purposes (Zhang 2006). There are five articles specifically addressing the needs of BC learners.

In Zhang (2006), the author suggests two aspects of need analyses based on a survey of 22 graduates majoring in economics and trade: target situation analysis (TSA) and learner intention analysis (LIA). TSA aims to understand what learners need by analyzing their working and social communicative acts in target situations. TSA consists of work-related communication situations such as attending meetings and conferences, and life-related communication situations such as shopping or speaking to an in-house nanny. To meet the needs of target situations, Zhang proposed a tri-dimensional communication competence set of skills that business Chinese learners should develop—skills to communicate in Chinese, subject knowledge in business, and cross-cultural awareness and competence. LIA considers learners' educational backgrounds, goals, as well as the amount of time and money they are able to invest. Zhang categorized the respondents using various criteria, such as degree pursuers versus non-degree pursuers, full-time versus part-time learners, in-house versus in-class learners. Zhang made several interesting observations. For example, he noted that the elementary level BC learners had not been given enough attention and that speaking was the skill most in need of improvement. Zhang (2006) deserves our recognition because of his endeavor to raise BC instructors' understanding of learners' needs. This type of awareness can facilitate course planning and instruction.

Akin to Zhang (2006), Xin (2009) and Zhang (2012) exemplify how to collect and analyze students' needs through surveys. Xin (2009) sought to develop a course (called Biz Chinese) specifically for 18 MBA students enrolled at Kaist Business School. The survey consisted of a series of questionnaires and interviews, covering learners' learning styles, preferred topics, motivation, goals, and future plans. It should be pointed out that Xin (2009) emphasized understanding what factors could predict learners' motivation strength and potential success in taking business classes. The findings extended the scope of need analyses from teachers' perspectives, as proposed by Zhang (2006), to learners' perspectives.

In 2011, two articles on BC need analysis were published. They not only aimed to better explain BC students' needs but also attempted to find the gap between learner needs and existing BC textbooks. For clarity reasons, we will focus on the need analysis portions for now and save the textbook discussion for the following section.

Wang (2011) is the first article that looked at Chinese use in business and at the workplace. To get a holistic picture of BC use, the author distinctively used "triangulation" approaches to collect data, for example, methodological triangulation (survey questionnaire, video recording, face-to-face interviews, and telephone interviews); interdisciplinary triangulation (respondents from diversified disciplines); and location triangulation (using three cities in Shanghai, Beijing, Tianjin, and Honolulu, Hawaii). A total of 20 employees from diverse industries and over 50 students enrolled in a MBA program participated in the study. The employees were interviewed, and the MBA students answered questionnaires. By comparing the results from interviews and questionnaires, the author found out that MBA students seemed to be much more concerned about their general social and personal language skills than the currently employed staff did. This suggests that participants' current employment conditions might affect how they perceive the need for business Chinese study.

Unlike Wang (2011) targeting BC learners' work experiences, Li (2011) gave attention to "pre-experience learners". Li surveyed 77 Chinese learners whose proficiency ranged from intermediate to advanced (indicated by their scores on TOP 4, equivalent to HSK 7). The participants responded by choosing from the given options on questions such as what motivated them to learn BC, what content should be included in BC classes, and what differentiated BC classes from regular Chinese classes. By analyzing their answers, Li found the gap between the published BC textbooks and students' needs and generated specific suggestions for future BC textbooks (which will be further discussed in the later section).

It should be noted that both studies found that job-interview-related skills were deemed important by participants, but this topic seems to have been neglected in most BC textbooks.

Comparatively speaking, Li's study produced more specific topics that could be translated into book chapters, whereas Wang's study allowed us to gain a fuller picture of what could potentially be incorporated into BC instruction.

Also based on surveys, research conducted by L. Zhang (2012) presented by far the largest need analyses of business Chinese use. A total of 232 participants from 26 countries and regions responded to the survey designed by the author. All participants were employed, non-native speakers of Chinese, and had taken Chinese classes. Unlike Xin (2009), Zhang aimed at gaining a clearer picture of how Chinese was used in business settings across industry, profession, position, situation, etc. The findings might not apply to any specific course or learner group, but there were many insightful results that could be of great help to BC instructors. For example, respondents rated colleagues, rather than customers as the most communicated target, but the current BC textbooks placed an excessive emphasis on customer-related topics and content. Another finding concerns what language skills were most used at work. It turned out that listening and speaking were considered much more important than reading and writing, but this need clearly was not met by most textbooks which demand more reading than speaking or listening. As a conclusion, Zhang proposed that business Chinese instruction should be "individualized" and "precisely segmented", instead of being comprehensive and universal.

Instructional goals & BC course definition. What is business Chinese? How is it different from Chinese courses for the general purpose? Questions like these are important because the answers solidify BC's "legitimate status" (Chen 1998) in academia. Many researchers discussed the necessity of BC courses in the context of China's fast-growing economy and increasingly important role as a trade partner with the rest of the world (Chen 1998; Wang 2011; Zhu 2003; Yuan 2004). While it is true that the economic reason provides an indispensable impetus for BC courses, researchers have looked for other inherent features to set BC apart from regular Chinese courses.

For example, some scholars (Zhou and Gan 2008; Zhu 2003) attributed BC's uniqueness to the specialized terminology which is more often than not most applicable in business settings. Some (Yuan 2004) argued that business-related knowledge, such as trading, commerce, investment, merger and acquisition, and corporate management should all be integrated to BC curriculum as they are often not taught in regular Chinese classes. Some other scholars proposed that BC classes should be more "communicative" (Zhu 2003) and have more "meaning-oriented tasks and activities" (Wan 2004) than regular Chinese classes. In addition, BC culture and etiquette has also been mentioned as one of BC course features (Wan 2004; Zhu 2003).

These early discussions of BC features present a diverse understanding of what BC should include, which consequently leads to different opinions being formed about BC's status in relation to other academic subjects.

Most researchers (Wan 2004; Zhang 2006; Yuan 2004; Chen 2012) agree that BC is a Chinese language course with a special purpose (CSP, 专用汉语 or 专业汉语). While this common-sense description can be agreed on, researchers' overall understanding does not align. For example, Chen (2012) argued that BC should not be viewed as a "variation" of Chinese because BC does not have any special grammar rules, linguistic features, or pedagogy that are beyond those of standard Chinese. L. Zhang (2012) argued that BC has traditionally been thought of simply as a collection of specialized Chinese terminology for special purposes when in reality it should be considered as something broader and more comprehensive.

Other scholars seemed to believe that BC should be elevated to an academic discipline (学科). Cited in (Chen 2012), BC was thought to be "a rising discipline" (Liu 2009), "a discipline consisting of multiple curriculums" (Guan 2006), or "an interdisciplinary subject grounded in business and linguistics" (Li 2005).

When it comes to BC instructional goals, the opinions seem even more divergent. Yuan (2004) proposed that BC classes should enable learners to master the four skills of using Chinese (listening, speaking, reading, and writing), adapt to China's business environment, understand China's law and regulations, and finally conduct business in China. Zhu's (2003) instructional goals emphasized teaching students Chinese culture and developing their cross-cultural competence. The author said, it was not enough to help students understand "Why Chinese say so?", but should make them comprehend "What was between the lines". Chen (2012), based on his 20 years of BC teaching, argues that the fundamental goal of BC classes is to improve students' Chinese, not to impart business knowledge. He added that one long neglected goal was to improve students' ability to learn Chinese autonomously. In his earlier work (1998), Chen stated that the effort to explore BC instructional goals would likely lead to frustration because BC course offerings were very diverse. Therefore, it would make more sense to set up "realistic" instructional goals under the premise of available resources.

In sum, researchers have, since its inception, taken prescriptive stances (some based on their teaching experiences) as to what the components and features of BC should be. While it has not reached an agreement on questions such as what BC is about and how it is different from other Chinese courses, our understanding about this special area of Chinese instruction has improved. The above need analyses help us gain a better understanding of what should be taught in BC classes; more importantly, it potentially helps us better plan and design BC courses in the future. One interesting phenomena is that articles on instructional goals and BC course definitions were published well before those on need analysis, meaning that need analysis was not considered in goals and definitions. If need analysis were to be taken into account while discussing BC, resulting instructional goals and course definition would probably be more accurate.

6.3.2.2 Textbook and Materials Development

Textbooks essentially guide teaching and learning; they directly influence and guide an instructor's teaching practice and students' learning outcome. Thus, there have been a lot of articles addressing the issues surrounding BC textbooks, which can be organized into four categories.

The first category contains guiding principles for BC textbook authors. For example, Yuan (2004) provided four principles to be considered when creating BC textbooks: scientificity (科学性), practicality (实用性), pertinency (针对性), and interestingness (趣味性). Liu and Liu (2007) introduced Lao-Qi-Da, one of the earliest TCFL textbooks for Korean speakers, from which they generated several suggestions for current textbook writers. The suggestions included: gearing toward the learners, providing practical language, incorporating business culture to language presentation, etc. Li (1999) discussed how to create a multimedia BC textbook comprised of scripts, audios, and videos.

The second category concerns reviews of the published BC textbooks. Lu (2006) collected and analyzed about 30 BC textbooks and concluded that BC textbooks were still at the "exploring stage (探索阶段)". Lu's conclusion was based on the comparison of BC textbooks with non-BC textbooks. First, the quantity and variety of BC textbooks were not keeping pace with the fast-growing demands of learners.

Second, the integration of teaching grammar and business-related content was not well realized. Third, the target audience was not clearly defined, and the books were not being developed in a systemic manner.

Du (2011) collected 12 BC textbooks for intermediate learners, and also pointed out some problems or weaknesses with them. First, trading-related content was overemphasized, and this finding was consistent with Wang (2011) and Zhang (2006). Second, an excessive amount of non-business topics and language were used, which could negatively impact students' attention. Third, cultural differences were unnecessarily emphasized.

When discussing the reasons as to why BC textbooks proved unsatisfying, both Lu and Du attributed it to the textbook authors' insufficient knowledge in relevant business industries and workplace settings. Most BC textbooks were written by Chinese language teachers, who rarely had opportunities to gain first-hand knowledge in business settings. Therefore, they had to rely on their "instinct" (Du 2011) to choose content and exercises. Consequently, some textbooks turned out to be simple compilations of business knowledge and Chinese language (Lu 2006). To address this inherent problem with textbook writing, many researchers resorted to more learner-oriented need analyses. Another common suggestion was to develop BC teaching manuals, specifying key topics such as what BC grammar and vocabulary should be taught. In the next paragraphs, we will review the research on BC vocabulary specifically.

This third research category of BC textbooks zooms in on vocabulary. BC vocabulary has been one of the most active research areas because it has been deemed the component that sets BC textbooks apart from non-BC textbooks (Zhou and Gan 2008). The articles falling into this category aimed to answer these questions: How many and what BC words should be taught? How are the BC words distributed throughout different levels of textbooks?

Most of the research on this topic began with analyzing the words included in some of the published textbooks and used linguistic corpus as the method to map out BC word usage. For example, Xin (2007) chose eight textbooks published between 2004 and 2006, covering four levels: Introductory, Beginner, Intermediate, and Advanced. Zhou and Gan (2008) chose ten textbook published from 1999 to 2005, covering Beginner, Intermediate, and Advanced. An and Shi (2012) chose seven textbooks widely used in the USA, covering Beginner, Intermediate, and Advanced. Du (2012) chose 11 Intermediate BC textbooks published in Mainland China, Taiwan, Japan, and the USA. It should be noted that no textbook was chosen by all the researchers, and the same textbook could be placed into different levels by different researchers. For example, A Practical Business Chinese Reader (《基础实用商务汉语》) was placed in the Beginner level by Zhou and Gan (2008), and was categorized as Intermediate by An and Shi (2012).

All of these research projects first took into account the number of words used in each book and compared them with a standardized vocabulary list by grade, such as the HSK word list (《汉语水平词汇等级大纲》) widely used in Mainland China and TOP eight thousand Chinese vocabularies used in Taiwan. Through the comparisons, the researchers came to several common findings. First, many BC textbooks, even those self-professed beginner textbooks (Zhou and Gan 2008), included words that were beyond either the HSK or TOP word list. Second, textbooks of the same level chose words very differently, which would make the learning process even more difficult than it would inherently be. Therefore, all these researchers ultimately call for more of an effort to create a graded BC vocabulary list to guide future textbook development. Xin (2007) made the first endeavor in this direction. Based on a large-scale newspaper database, the author's research team identified a BC word list that included 2457 words. These words were approved by BC experts and became a part of Business Chinese Test guidelines, also known as the BCT word list. While the BCT word list is thought to provide better guidance than the HSK word list, it does suffer from some shortcomings as pointed out by several researchers. For example, the BCT word list does not provide words' grading, which makes it less useful to textbook writers. Second, a large gap still exists between the BCT word list and the words included in published BC textbooks.

While it is meaningful to explore the scope of BC vocabulary, some researchers shifted their attention to the most used BC words. As An and Shi (2012) pointed out, teaching students the most used BC words, or core BC word list as they named, would allow students to build up a vocabulary foundation quickly and thus reduce anxiety caused by the seemingly infinite number of BC words. Based on the BCT word list and seven textbooks, the authors generated a core word list containing 121 most used BC words. They also suggested that the way to generate the core word list might be applied to rank the BCT word list.

In addition to which and how many BC words should be taught to students, some researchers were interested in how to teach them. Du (2012) proposed drawing learners' attention to word collocation—the habitual juxtaposition of a particular word with another word. Some suggested that BC vocabulary could be taught more efficiently if the core words were introduced first (An and Shi 2012) or studied more intensively within a period (Chen and Li 2012a).

The fourth category concerns other BC learning materials. Ji (2007) shared some thoughts on creating a corpus-based dictionary for BC learners. For example, the author proposed compiling words by frequency and putting together words that share the same morpheme. The selection of typical examples and explanations of the words should also be contained in the database. In the face of a fast-growing need for business Chinese, Ding (2009) proposed establishing a comprehensive BC database, consisting of four sub-databases: BC promotions and policies, BC teaching (including teachers, textbooks, courses, and assessment), BC research, and BC application (such as need analyses, employment info, and trading fairs). Wang et al. (2015) introduced a how to use the "Wed as Corpus" method to build a Web Business Chinese Corpus (WBCC) and showed that such tool could provide more collocation information than other Chinese corpuses. Jiang (2016) looked at the challenges brought about by Cloud computing, mobile Internet, and Internet of things, and offered some suggestions to textbook writers and publishers. For example, future BC textbooks must be learner-centered, individualized, and digitized. The author also mentioned the importance of protecting intellectual property rights in this new era.

In sum, the development of BC textbooks has been fruitful in the past 20 years, if judged by the quantity of yearly publications (Zhang 2006; Lu 2006). Researchers were well aware of the importance of selecting words that are useful and practical, and attempted to use a large-scale database to generate them. The BCT word list has proven itself a better guide to textbook development than other word lists intended for general purposes. However, researchers have not yet reached a consensus on some key questions; for example, how many and which words constitute the BC vocabulary? What criteria should be considered when determining BC words difficulty and arranging acquisition order? Another conspicuously absent aspect of textbook research is user opinion. None of the articles reviewed here included students' opinions and feedback on the books, which seems to be inconsistent with the so-called user-centered principle.

6.3.2.3 Instruction and Pedagogy

Along with what to teach, how to teach is regarded as another pillar of foreign language instruction. In this section, we will begin with the research on BC instructional pedagogy, and then discuss approaches geared toward different language skills.

While it is widely accepted that BC teaching follows the same pedagogical principles as teaching Chinese for general purposes (Wan 2004; Chen 2012), some researchers argued that certain approaches might fit BC better. For example, the approaches that have been discussed include task-based language teaching (Yuan 2006; Gu and Fang 2009), case study approach (Yuan 2006), communicative strategy (Zhang 2011), and practice teaching (Shen 2014). No matter how different these terms may sound, the primary feature of these approaches seems to be the same: teach and learn BC through practical language use. In other words, BC has been theorized to be more communication-driven and practical. For instance, Gu and Fang (2009) stated that task-based teaching approaches could allow students to engage in meaningful activities instead of receiving knowledge passively. Zhang (2011) proposed that a model training on communicative strategy could enhance advanced learners' language use competence. Shen (2014) suggested utilizing classrooms, campuses, and the society to create real-life or near-real-life settings for students to learn and practice.

Among various approaches, case study seems to be the favorite among many BC instructors. Yuan (2006) introduced the history of case study and discussed why it would be a good fit in BC classes. As the author summarized, case studies can provide students with an opportunity to think critically about given situations, develop problem-solving and decision-making skills, and enhance communication skills. Yuan also made an important observation about goals to aim for when case study is used for learners of different proficiency levels. For highly proficient language users, the language is just a vehicle for the content and the case is the primary focus, whereas for students actually learning the language, the case is a vehicle to learn how to use the language. Since their primary focus is different, teachers should be well aware of this distinction and select business cases carefully through streamlining and making the material language-centered.

From a pedagogical perspective, the study of business cases can be treated as "language learning tasks" (Yuan 2006). Task-based language teaching (TBLT) started to gain popularity in second language acquisition in the 1980s. Gu and Fang (2009) detailed the theoretical foundation of TBLT, and discussed how and why it could be used as an effective way to maximize the teaching goals of BC. For example, TBLT allows both teachers and students to take on multiple roles. This learner-centered approach enables students to communicate and express themselves in a real-life-like environment. Besides, it also diminishes the distance between classroom and real life. However, task-based teaching also has limitations. As for TBLT's potential limitations, the authors mentioned randomness of tasks and monotony of types of tasks. They also mentioned that it may not be suitable for all learners.

TBLT seems to provide a ready-to-use framework for BC instructors to follow. Yuan (2006) looked at why TBLT should be used for BC. She suggested that form-focused instruction should be incorporated into a meaning-based communicative teaching paradigm. By means of task analysis, she found that tasks vary in levels of difficulty, depending on language factor (syntactic complexity and range and those required to perform a task) and cognitive factors (familiarity with the materials). Besides, the framing of a task also matters—the way of inputting and outputting information. Based on the aforementioned analysis, she proposed three task implementation phases: pre-task, mid-task and post-task. Overall, this article introduces an alternative approach to teaching business Chinese—analyzing methodologies and providing a framework and sample for practical uses.

Communicative strategy for relatively advanced learners is proposed by Zhang (2011). The overall learning objective of BC based on communicative strategy is that learners will be able to use communicative strategies fully, accurately, and appropriately. Its teaching goals are different from other methodologies in that it focuses more on selecting language forms, which means enabling students to master language forms that can be used in similar communication functions and to know under what circumstances each language form ought to be used. Based on discourse analysis, a communicative strategy method has two stages: input and output. Within discourse analysis, teachers need to analyze communication goals, communication roles, speech style, and discourse structure. During the input stage, it is necessary to have the learners know what communicative problems can be solved through the language they are about to learn—it is especially important for business Chinese as many learners may not have business working experience.

While all the aforementioned methods involve practice to some extent, Shen (2014) highlighted the important role of practicalness (实践性) to BC. According to Shen, BC should be practiced not only in the classroom but ought to be extended to campus and social every-day use. In the classroom, students can practice through role-play, full immersion, virtual environment, and content extension. On campus, students can practice by means of setting up model labs, engaging in academic activities, sharing personal experiences, and modeling real-life activities. Students can also practice in non-academic, social settings; for instance, companies and conventions are ideal settings for students to practice. Besides, students should also be guided and encouraged to carry out field investigations, design business plans, and conduct business studies.

Methodologically speaking, the pedagogy researchers included in our study have focused on improving the quality of BC instruction by engaging students in more practice. The methods and approaches reviewed here all have advantages and limitations and may vary with respect to target students and instructional goals. Hence, teachers must learn to design, adapt and tailor the materials and activities to cater to different needs of different student population.

Apart from overall methodologies, some researches zoomed in on aspects of BC learners' language skills.

Speaking. Zhang (2010) analyzed the basic discourse features of oral Chinese used in business settings, in the form of monolog and dialog. The findings, as the author pointed out, can be used to guide BC instructors in designing exercise and activities. Lou (2010) proposed to choose and adapt teaching methods from the pragmatic cognition perspective. The author exemplified how to use turn-topic-inference approach to teach business Chinese. Zhang (2012) investigated the gender and the social status factors within the speech act of refusals by Chinese businessmen. Chen and Zheng (2014) discussed why the Chinese word "shi" (是) does not correspond completely to English "yes" in terms of dialog structure, and pointed out relevant pragmatic problems in language use.

Writing. Ding (2004) conducted an action research on BC writing, experimenting the process-oriented approach in place of product-oriented approach. The results from students' work and feedback seemed positive. Zhu (2010) explored how to teach a particular genre of business writing—sales invitations using a corpus of authentic business letters.

Vocabulary. Luo (2003) argued that the difficulty of teaching BC vocabulary does not lie in the technical terms, but lies in some "linguistic factors" that have the potential of hindering business communication. These factors refer to semantics, pragmatics, style distinction, self-depreciatory and respectful expression, euphemisms, idioms, and newly created words. Huang (2010) explained the importance of cognitive metaphors in helping students understand BC words and exemplified how to draw on concept maps to teach securityrelated vocabulary.

Culture. Lee and Chen (2014) surveyed in-service business professionals' need for learning Chinese business culture, and identified that cultural content regarding intercultural communication, beliefs, values, and subtle matters expressed through language were the most important and useful to students. Wang (2014) introduced how to deepen learners' language and cultural understanding through a hybrid course that blended face-to-face classroom instruction and online communication.

In addition, Lou (2004) discussed the relationship between subjective consciousness and cultural symbols. Zhang (2002) introduced an online BC course developed in the Language Learning Lab at the University of Illinois. Zhou (2008) illustrated the possible application of using Chinese advertisements to teach

Chinese language and culture. It should be noted that these research areas are relatively small-scale, with limited number of articles addressing each topic.

6.3.2.4 Assessment and Evaluation

Assessment is a crucial step in language teaching as it serves as a way to examine whether the students have mastered necessary skills and reached the learning objectives. For business Chinese, the most relevant and authoritative test is the Business Chinese Test (BCT), which is a standardized test that assesses non-native Chinese speakers' abilities to use Chinese in business settings. Research on assessing business Chinese is limited—all three available articles focus on analyzing BCT.

Yang (2009)'s article focuses on the language use skills that need to be tested, including conversational implicature (会话含义) and communication strategies (交际策略). These language use skills are of high importance because business is a complicated setting where understanding conversations and utilizing communication strategies are indispensable skills. After analyzing four major parts of the test, namely, listening, reading, speaking, and writing, he came to the conclusion that the listening part is the most ideal part in which to test such skills. In sample BCT listening part, even the shortest conversations could include such communication strategies as explanation, circuity, speculation, etc. Therefore, the author suggested that we should make full use of listening to test the language skills students have mastered. Instead of giving correct answers directly, they should be presented in a subtle fashion to mimic real-life situations, making the test more challenging and thus capable of assessing the test takers more accurately.

This research points out that there is a heavy emphasis on language use in the sample exam, thus it implies a direction for classroom instruction, for instance, selecting key sentence patterns, practicing communication functions (daily life and business), and increasing the level of difficulty of classroom conversation practice.

Unlike Yang (2009), Lu (2011a, b) centers his research on comparing BCT with the Common European Framework of Reference for Languages (CEFR) and corresponding scales between the two. Based on a manual published by Council of Europe, Lu conducted a comparative research on the reading competence in BCT and CEFR. Through a series of procedures including selecting personnel, familiarization with tasks, consistency test, and material evaluation, he came to a conclusion that "both the 'communicative behavior scale' and the 'communicative competence scale' of CEFR have been fully embodied in the reading task of BCT" (Lu 2011b).

Another important aspect of the comparative study between BCT and CEFR is standardization. In order to investigate the corresponding scale between BCT and CEFR, Lu (2011a) utilizes the standard setting approach, selecting experts in TCSOL, language testing, and BC teaching and having them evaluate listening and reading parts. The results show that BCT and CEFR have reached a satisfactory level of correspondence. Lu's articles seem to offer supporting evidence that BCT

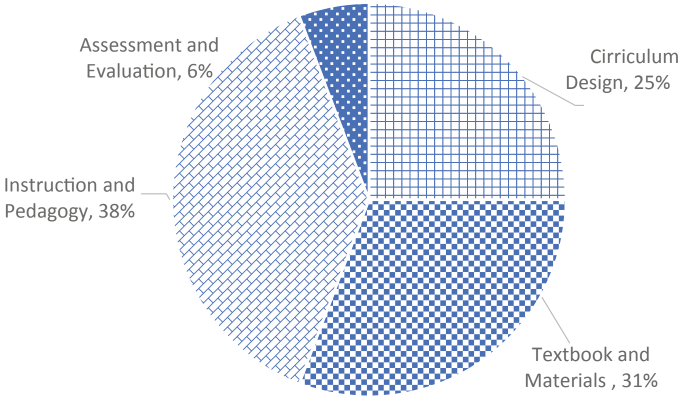


Fig. 6.5 Proportion of the four research categories

can be used as a reliable assessment for BC learners, which will allow Chinese teaching and testing to be promoted internationally.

Assessment is the key to examining whether the instructional objectives have been met. However, research is still lacking in terms of quantity and content. Questions remain to be answered, such as what are the tests really testing—language or content? What other forms of assessment exists for business Chinese? This probably loops back to the definition of business Chinese—what should be tested?

Up to this point, we have reviewed the most important BC research topics. Now we will examine their proportion and distribution over time. According to Fig. 6.5, Instruction and Pedagogy and Textbook and Materials share similar research attention, with 38 and 31% of total articles, respectively. Curriculum Design contributes to a quarter of current research. The remaining small portion belongs to Assessment and Evaluation, which only makes up 6% of the total research.

Chronologically speaking, research on Curriculum Design gained much attention in the beginning (Fig. 6.6), yet it did not hold it for long. It needs to be noted that the recent research on curriculum design focused on need analysis, which is different from the initial research. Textbook and Materials and Instruction and Pedagogy show a general trend of steady growth over the past 20 years. Research on Assessment and Evaluation was very limited, with only three studies published around 2010.

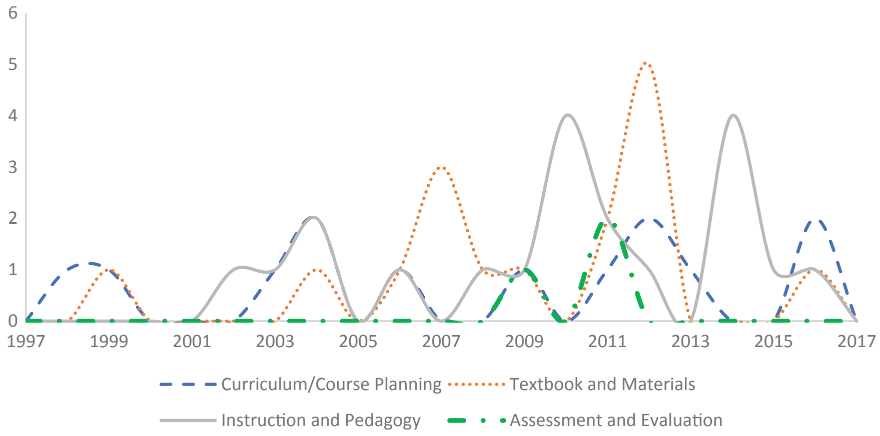


Fig. 6.6 Numbers of articles of the four research categories by year

6.4 Discussion and Conclusions

In this final section, the findings of the review are summarized, and their implications are discussed in relation to future research and development efforts in business Chinese.

The overview of the BC research published between 1997 and 2017 shows that BC research is growing, but it is still at a very early stage. While BC has recently been regarded a "hot" area of teaching Chinese as a foreign language (TCFL) (Zhang 2006), research on BC is limited in quantity. As the previous graphs show, only a handful of journals have published BC research, and some journals have published only one article on BC. The lack of BC research can be interpreted in several ways. First, BC research has not been able to earn a higher level of recognition among academic journals. Although some scholars (Wan 2004; Zhang 2010) attempted to set BC research apart from other TCFL research, academic journals do not seem to be convinced. Second, a significant amount of BC research did not meet the criteria for publication. According to Cao (2016), there were 125 BC papers published in Mainland China's journals between 1996 and 2015, but fewer than 30% of these articles were published by top-tier journals. In order to promote BC teaching and learning, much more evidence-based research is needed. The third possible reason is that there is a lack of a BC community where teachers can collaborate and exchange ideas. BC researchers are mostly BC instructors, who usually have to conduct research in an isolated manner. Thus, there is a need to set up a platform on which more people can be brought together to discuss and debate.

The breakdown of research topics allows us to get a clearer idea as to what research has been done. The published articles generally fall into four categories: curriculum design, textbook and material development, instruction and pedagogy, and assessment and evaluation.

Judged by their relative proportions, research on assessment and evaluation is the most under-developed area. There are only three articles addressing BCT, and two of them focused on whether BCT is equivalent to CEFR. There is no research on BC students' performance over a course, on BC instructors' effectiveness, or on the evaluation of BC courses or programs. The shortage of such research is alarming because without assessment and evaluation, we have no way of knowing how students have learned and how we can teach better, nor do we know whether our goals have been met.

In fact, the lack of research on assessment is partially rooted in the lack of clear instructional goals for BC courses. Although there were several early articles discussing what BC courses should entail, researchers and teachers hold very different viewpoints about what instructional goals should be. While different courses may have different goals, there is a need to have some common ground among them. It should be pointed out that the fundamental questions surrounding BC instructional goals seem to have been discussed less and less in recent years. However, as our review shows, our understanding of those questions is still very limited and superficial. Relatively speaking, the need for analysis research is a more fruitful area. These articles provided concrete evidence on BC language use in different work settings, targeting different student populations. Because they included students, the center player of BC instruction, as a part of the course planning, their findings turned out to be informative with regard to what students need and "real-life" needs are.

BC textbooks are growing very fast during the past 20 years. Due to the development of computing technology and corpuses-based linguistics, researchers found it possible to generate word lists to guide textbook writing. Despite the aforementioned limitation, the BCT wordlist provides textbook writers a good starting point when they need to consider which words should be included. What is needed for now is to know the extent to which these findings have been used in actual textbook development, and whether such books will help students learn better. Similarly, it would be useful to know whether the findings of need analyses have been drawn on by textbook writers. Another area that has been missing in the current research is systematic comparison and critiques of the published textbooks. There is only one article (Chen and Li 2012b) specifically comparing the cultural content of ten beginner level BC textbooks, yet many remaining aspects of textbooks still require comparison, such as grammar patterns, exercises, and functional structures. Because of the lack of comparison, BC instructors find it difficult to understand which book is more suitable for their students, nor do they know the strengths and weaknesses of the available books.

Research on BC instruction and pedagogy appears to be quite diverse but not deep enough. Case study approach is widely used, and task-based teaching has been suggested, but classroom-based evidence is still lacking to inform us in what way(s) these methods work better than other approaches. This issue is closely related to the fundamental questions people have asked since the inception of BC courses: what truly distinguishes BC from other Chinese courses? Should BC classes be taught differently? From the published articles, we find it hard to get a clear answer. Most approaches and techniques suggested by the researchers are equally, if not more, applicable to any Chinese courses. If there existed some approaches that fit BC instruction better, would it also suit Chinese for other special purposes, such as Chinese for law or medicine? To answer these questions, researchers must examine students' learning processes and outcomes more in-depth.

According to Li et al. (2013), business Chinese has steadily settled in as one curricular option in higher educational institutions where the demand is high. Through BC courses, students who are motivated to enter business-related fields can learn valuable skills in both language and cultural understanding. While BC instructors can be quite optimistic about the future of BC courses, it should be noted that BC research is still behind where it needs to be. To remedy the aforementioned problems, we have a few suggestions. First, BC instructors should be given more incentives to conduct classroom-based research. Second, more collaborative efforts between language teachers, business professionals, and well-trained researchers should be encouraged. Third, the importance of BC research for national interest and cross-cultural exchanges should be made clear to relevant policy-makers. As more parties become involved in BC teaching and research, we would become more confident in predicting that BC will ultimately jumpstart a new movement of Chinese learning around the world.

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Chapter 7
Learning Culture in Business Chinese Curriculum: Business Professionals' Perspectives

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Abstract When Taiwanese companies globalize their businesses, they need a framework to facilitate employees' intercultural competence. Such a framework serves to ensure that everyone, no matter which country of origin, is able to work together to achieve high cohesion and efficiency in communication. A series of qualitative research conducted by the researchers shows that although language barriers often cause communication problems regardless of venue, cross-cultural misunderstandings are even more prominent in Taiwan's international offices. This thus leads to foreign business professionals' needs to learning about Taiwanese business culture. Recommendations and suggestions are made for the curriculum design of business Chinese study programs. Through a study of business Chinese and Taiwan business culture in a well-designed program, foreign business professionals will enjoy more support and resources to fit into the local business culture so that they can expect to be successful in the parts of their careers that take place in Taiwan.

7.1 Introduction

When Taiwanese companies participate in the globalization process, they extend their recruitment for talent on a worldwide basis. This means that there are increasing numbers of local offices that have an international atmosphere. Taiwanese white-collar supervisors, colleagues, customers, or suppliers can be anyone from all over the world nowadays. When all these foreign business

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professionals work with Taiwanese business people, many of them are baffled by the cultural differences they encounter and they may even suffer from misunderstandings and bad communications. This study discusses how we can help foreign business professionals to adapt to local working culture to ensure their career success. We propose to do this through a well-designed business Chinese study program. It is thus important to understand their learning needs on business culture and contemplate how to integrate appropriate cultural content into a business Chinese curriculum.

Regarding teaching and learning cultural content in business Chinese curriculum, Lou (2004) indicates that it is critical to guide business Chinese learners to develop positive attitudes toward cultural knowledge. As linguistic symbols are also cultural ones, business Chinese learners should pay attention to not only the language itself but also the cultural values embedded in the language. Through the study of cultural values, Lou believes that the learners will develop better cross-cultural competence and management skills because they have understanding of Chinese business people's worldviews and cultural identities. Tan (2009) suggests that business Chinese learners study the cultural factors and pragmatic rules of the Chinese language. Some crucial pragmatic rules manifest the core values of Chinese culture such as hierarchy, modesty, and euphemism. Similarly, Liu (2010) emphasizes the importance of cross-cultural competence in doing business internationally. He claims that business culture instruction should be included in the business Chinese study program.

The literatures above have indicated the importance of teaching and learning of business culture in a business Chinese curriculum; however, they remain theoretical and without empirical support. The so-called cultural values are not clearly identified and foreign students' opinions were unheard.

In Taiwan, in Li's (2011) survey, 77 foreign students pointed out their learning needs in the field of business Chinese. This may be the first study done that has shed light on foreign students' needs and wants in this area. Although most findings of this research were related to linguistic items, the participants still showed interest in learning basic business knowledge, economic trends, and business etiquette which might be considered as cultural content.

Nevertheless, Li's (2011) study was rather general, not dedicated to learning business culture, and the interviewees were not necessarily business people, either. If learning business culture is crucial for business people to work in greater China, then the potential learners' demands and opinions should be heard. Based on this premise, this article aims to explore these issues.

7.2 Business Professionals' Cultural Learning Needs

7.2.1 Learning Business Language and Culture for Adaptation

In order to determine business professional's perspectives and needs of cultural learning, the authors conducted a series of research studies. First, in a qualitative study, a semi-structural interview method was adopted with 30 foreign business people (white-collar employees) who either had worked in Taiwan before or were working in Taiwan when being interviewed. This small-scale research aimed to find out the interviewees' experiences of working with their local colleagues. They were asked about their successes, frustrations, feelings, and opinions about their cross-cultural communication experiences when working in Taiwan.

The interviewees were selected by convenience sampling (Denscombe 2014) through the researchers' social network so that the qualifications of the interviewees could be properly controlled. The participants in this qualitative research were those who possessed professional skills needed by their Taiwanese employers. Except for one or two respondents who could be identified as "expatriates" who were assigned to work in Taiwan by their employers, the rest came to Taiwan voluntarily on their own initiative and worked as programmers, editors, technical writers, proofreaders, teachers, researchers, engineers, customer service officers, bankers, and so on.

As Cohen et al. (2013) indicate, the interview method allows researchers to uncover the participants' motivations, emotions, and concerns. This method is one of the best approaches to explore an issue in depth. In this study, the foreign interviewees were given semi-structured questionnaires in which they were asked about the difficulties and challenges they had experienced in the cross-cultural workplace. Most of them were followed up on with telephone interviews to validate their written answers or to seek further opinions.

In addition, four Taiwanese executives working in multinational companies based in Taiwan consented to in-depth interviews. These executives' opinions were also important for they on the one hand had contrasting opinions to those of the foreign interviewees; on the other hand, they included suggestions for business Chinese study programs that might help their foreign employees to adapt to the cross-cultural workplace in Taiwan.

The qualitative responses from 30 participants were first typed and examined by the two researchers, while the four in-depth interview results were further verified by the interviewees. The data were then manually reviewed and labeled based on the major question categories: adaptation, difficulties/frustrations in communication, and suggestions.

According to the research results (Lee and Chen 2014a), several important findings are noted here. First, as far as adaptation is concerned, although the command of the offices' common language—English—and professional ability were two essential workplace requirements at work, the results showed that those foreign employees who spoke Mandarin Chinese had fewer difficulties in fitting into the corporate community or developing interpersonal relationships within the company. Even though these non-native speakers might sometimes make semantic mistakes or use non-standard terms in Chinese, they still stood a better chance of being befriended by their Taiwanese counterparts than did their monolingual peers. This result suggested that learning practical business Chinese could help foreign business professionals with their working relationships.

However, speaking the Chinese language alone does not necessarily guarantee a business professional's adaptation to Taiwanese working culture. The respondents pointed out several conventions that were often hard for foreign business professionals to understand such as "worshiping gods/ghosts at different times throughout the year" (拜拜 bài bài) (without exception in "high-tech" companies), "women wearing revealing outfits for performances in the annual party (尾牙 wěi yá)," "no choice but sharing a room with colleagues on the company trip" (員工旅遊 yuán gōng lǚ yóu), and "collective purchasing behavior of the Taiwanese staff during working hours" (團購 tuán gòu).

All these cases which can be seen as "group ethos" in many Taiwanese workplaces were misunderstood as "superstition," "gender bias," "no privacy," and "slacking off" by some foreign employees. Although such facets of a workplace culture may not directly affect any professional tasks per se, any resulting cultural misunderstandings could increase the mental distance as well as social distance between the foreign business professionals and their Taiwanese counterparts.

Besides, in terms of daily operation and communication, more puzzling situations happened in meetings and in encounters with members of management. Some foreign respondents indicated that it seemed difficult for people to have "open discussions" in meetings with Taiwanese supervisors. They felt that their Taiwanese counterparts were reluctant to ask questions in front of their managers. As foreign employees, they had heard about the "face" issue often, but in respondents' opinion, it appeared to be more complex in reality.

"Code-switching" was another concern for some foreign respondents. In meetings, when Taiwanese people suddenly switched from English to either Mandarin or Taiwanese, it could cause confusion and a sense of exclusion.

When it comes to executing a task, some Western employees expected to understand the clear rationale behind the command before carrying it out. When their supervisors failed to explain the command clearly, they felt disappointed or supposed that the decision might have been made too intuitively or arbitrarily.

What is more, the issue of power distance was widely mentioned by the respondents, though the sense of power distance varied, subject to the respondents' cultural origins and the corporate cultures they were in. For example, some Asian respondents indicated that Taiwanese supervisors were very friendly, while several Western respondents mentioned that their workplaces were quite hierarchical.

At this point, when considering how to help business professionals to overcome the challenges they faced in the workplace, we can reach the following conclusions based on the research results above:

- Studying business Chinese could help foreign business professionals to fit in the Taiwanese workplace.
- Studying business Chinese is beneficial in developing interpersonal relationships.
- Some aspects of workplace cultures such as local customs, examples of group ethos, and common practices in local offices could be discussed in a business Chinese class in order to reduce the risk of cultural shock.
- Other issues in intercultural business communication such as euphemisms, code-switching, and power distance could be also introduced to business Chinese students to help them decipher the cross-cultural differences and prepare to adapt when necessary.

7.2.2 *Significant Needs of Learning Culture for Intercultural Communication*

In order to understand foreign business professionals' learning needs of culture in business Chinese program further, the authors conducted another quantitative research project (Lee and Chen 2014b) with 59 valid survey questionnaires. In this research, the respondents were given 17 specific cultural topics to rate on their learning needs and preferences. The items include "Big C" cultural concepts such as national history, heritage, architecture, literature, arts, politics, economy, etc., as well as "Little c" culture contents like values, lifestyle, work habits, perceptions of time, gender roles, and so on. The cultural content items list in the questionnaire is attached (Appendix).

All of the respondents of this survey had experience in working in a greater Chinese-speaking region and had studied Chinese for more than a year. The respondents' age ranged from 20 to above 50; the majority of them were between 20 and 40, coming from Asia, Europe, and North America.

According to this research, the most wanted cultural contents in a business Chinese program, as identified by foreign business professionals, are summarized as follows based on the statistical significance level (Lee and Chen 2014b, p. 62):

- Chinese business people's mental patterns with intercultural dimensions
  - Core cultural values, life philosophy
  - Chinese perceptions of time, gender roles, and risks
  - Chinese perceptions of hierarchy and relationships.
- Chinese Business people's behavioral codes
  - Work lifestyle
  - Dos and Don'ts in business contexts
  - Preferred communication and decision-making style.

- Chinese Economic Environment
  - Market trends and societal fashion
  - Corporate organization, labor regulations, and the economic system.

The first type of cultural contents listed above (also the most significant items) indicates how Chinese business people think and perceive the business world and working relationships. Perceptions, values, ideals, and beliefs may all sound abstract, but they are important because they direct people's behaviors and decisions.

The second most important type of cultural contents, in contrast, is on the surface. They are about how Chinese business people lead their working lives, what they do or not do in the workplace, and how to talk and communicate. Finally, there comes the background information of economy and finance specifically.

The research results show that business Chinese students and foreign business professionals do not expect to learn traditional culture in the business Chinese study program. Unlike in general Chinese courses, their needs in learning business culture are rather goal-oriented when enrolling in a business Chinese study program. What is more, their stated learning needs manifest the importance of those cultural dimensions useful to communication and adaptation. It can be assumed that understanding people's values, thoughts, perceptions, and conventions are helpful to everyday communication and fitting into the local workplace.

7.3 Suggestions for a Business Chinese Curriculum

Although earlier theoretical articles indicated the importance of teaching culture in business Chinese programs, it was not until the above-mentioned empirical studies were conducted that business professionals' learning needs were addressed. Herewith it is clear to see the foreign business professionals' cultural learning needs and wants. To fulfill these learning needs and wants, further suggestions for business Chinese study programs are made as follows.

7.3.1 Pedagogical Suggestions

As far as linking business Chinese students' language learning experience with the reality of workplace, Lee (2016) in her action research has shown the possibility of using an "experiential learning method" to facilitate authentic intercultural communication, students' cultural understanding, and thus to eventually boost learning outcomes.

Lee's (2016) motivation for action research was that she found that her business Chinese beginner students had low motivation when studying the language only through drills and textbook practices. Then, she began to explore upcoming students' learning needs seriously and found that her students' learning needs were in line with their previous study (Lee and Chen 2014b). Although her foreign students did not expect to live and work in Taiwan for the long term, many of them expressed a desire to learn some useful language and know general Chinese business culture and etiquette. They assumed that their cultural insights, in addition to basic language proficiency, would equip them with competitiveness when returning back to Europe.

Based on a needs analysis, Lee (2016) later decided to implement the "experiential learning method" which allows students to apply their professional knowledge as well as language skills in real life. The instructor aimed to liberate students from mechanical drills within the classroom and enable them to participate in authentic interactions in the real workplace. She thus followed a three-stage teaching procedure—introductory, developmental, and concluding activities—to facilitate student-centered experiential learning. The three-stage course activities were concentrated on the transactional language which was redesigned and simplified so that beginners could grasp it. The course activities included lectures, oral practice, simulations, and final application in a real-world workplace.

It is noteworthy that at the end of the teaching and learning procedure, the students in the concluding seminar paid a lot of attention to cultural differences and discussed their cultural observations, which all indicated that they had gained a good understanding of language use and Taiwanese business culture through this experiential learning experience.

Instead of teaching business Chinese language in a traditional way with translation, drills, and in-class practices, perhaps leading students to step out of the classroom and experience a Chinese-speaking workplace could be an option to fulfill students' cultural learning needs.

7.3.2 Material Design and Teacher Development

Some suggestions follow material design and teacher development. First, it is apparent that cultural knowledge is often embedded in the language. The language is used within a given context. Language and culture are hard to separate, and students need to know how the language is truly used and interpreted in context.

As the previous study showed, foreign business professionals would like to know why and what their colleagues were saying when they code-switched in a meeting. For example, when their colleagues suddenly switched from English to using an idiom/proverb in Chinese or Taiwanese in a meeting, it could cause unease and hard feelings to foreign participants, who felt that they were being excluded.

Perhaps in a business Chinese course, one of the best ways to introduce the culture of business is to do so through language. Take the most desired cultural content for example—Chinese business people's mental patterns—a lot of cultural values and perceptions (of time, hierarchy, gender, virtues, and so on) can be found in proverbs. Teaching some common proverbs and idioms that reflect Chinese people's character and values is not only relevant in a language class, but also useful for students to understand cultural ethos in the business context. This can be done either via textbook design or through the instructor's explicit teaching.

Second, local culture and regional differences should be considered and discussed. Chinese people all over the world indeed share some cultural heritage and virtues, no matter whether they comprise mental patterns (Type I cultural content) or behavior codes (Type II cultural content). Nevertheless, when studying, living, and working in Taiwan, learning about Taiwanese customs and common business practices is apparently helpful in cultural adaptation. Dialogues and discussion about Taiwanese business culture (including Taiwanese proverbs and local beliefs, for example) should be considered to be introduced in current business Chinese study programs. This will not only help students to reduce the risk of culture shock, but also help them fit into their workplaces' communities.

Third, to integrate the cultural contents mentioned above in a business Chinese study program, another possible way is to consider how modern business English curriculums integrate intercultural study. For example, when mentioning issues concerning mental patterns and behavior codes, an instructor could lead students to compare and contrast the Chinese/Taiwanese context with their own experiences back in their home countries through the use of examples ranging from organizational hierarchy and gender equality to working lifestyle. By doing so, the language use would become practical and even more meaningful to students because they will understand, for example, how and when euphemism/collectivism is necessary and in what kind of situation. In the sense of intercultural competence, there are no good or bad cultures, only "different" cultures. When business Chinese students develop such intercultural business communication competence, they will be able to adapt to Chinese-speaking working environments better and thus resist culture shock or cross-cultural misunderstandings.

Last but not least, although the teaching material is an important resource to fulfill foreign business professional cultural learning needs in the business Chinese curriculum, the instructor, on the other hand, plays a critical role. According to the research results (Lee and Chen 2014a), students prefer to study business Chinese from a qualified Chinese teacher with business experience. The teacher in the classroom is not just a language instructor, but also a cultural agent. A business Chinese teacher who has never worked in industry may face difficulties in sharing business experience or describing office culture to her students. Helping students to make intercultural comparisons, as mentioned above, may also be challenging. Therefore, it will be helpful if Chinese teachers or student teachers, who are interested in teaching business Chinese, consider the possibility of gaining work experience in industry.

7.4 Conclusions

Learning Chinese for business purposes is becoming more popular nowadays. Since there is a significant number of students studying Chinese all over the world, business Chinese naturally becomes an advanced choice for them. How we can further help students to prepare for their future career life and business practice in Taiwan is an important concern. Through our studies and suggestions, we hope that we have pointed out a direction to rethink the curriculum design of business Chinese study programs. There are many limitations of our previous studies, especially in scale and timeframe. In the future we wish to see more studies to make up the insufficiency and gap in current literature on cultural teaching and learning business Chinese curriculum.

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Appendix

Cultural content items listed on the questionnaire

Code	Cultural content
01	The history of the nation, people, and local society
02	The customs, rituals, and traditions of Chinese festivals and local holidays
03	Knowledge of Chinese cultural heritage (i.e., traditional architecture, monuments, landscape, etc.)
04	Study of Chinese literature (i.e., poetry, drama, fiction, proverbs, and idioms)
05	Knowledge or study of Classical Chinese arts (e.g., calligraphy, martial arts, painting …)
06	Knowledge about political systems, laws, and local and state organizations
07	Knowledge about economic systems, corporate organizations, and labor regulations
08	Information about local people’s work lifestyles, general market, trends, and societal fashion
09	Chinese people’s cultural values and life philosophy
10	Chinese business people’s perceptions about hierarchy, social relations, and interpersonal/business relationships
11	Chinese business people’s attitudes toward time, gender roles, and risk management
12	Chinese business people’s preferred communication, negotiation, and decision-making style
13	Chinese business people’s behavior codes (i.e., “do’s and don’ts in business contexts)
14	The regional characteristics of Chinese business people
15	General descriptions of Chinese people’s personalities and characteristics
16	Introductions to local beliefs or religion related activities
17	Intercultural skills for adapting to Chinese (business/working) culture

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Chapter 8
Designing a Task-Based and Community-Engaged Business Chinese Course

Qiaona Yu

Abstract Language for specific purposes courses aim to foster students' interdisciplinary and intercultural competence in a foreign language through targeted contextualization. However, applied linguists and language professionals are rarely experts in both linguistic and content instruction which may render threat to the LSP course relevance and accountability. This study, based on needs and means analyses, presents a task-based and community-engaged business Chinese course design. The course consisted of three modules: *Job Search*, *Work and Social Life*, and *International Business and Entrepreneurship*. Domain experts (e.g., school career coaches, multinational corporation business professionals, and Chinese international students) from local and virtual communities joined the instructor in conducting a variety of performance-based assessments, including job interview, social gathering, on-site visit, online multimedia competition.

8.1 Introduction

In contrast to language for general purposes courses, "language for specific purposes (LSP) courses are those in which the methodology, the content, the objectives, the materials, the teaching, and the assessment practices all stem from specific, target language uses based on an identified set of specialized needs" (Trace et al. 2015: 2). Common examples of LSP include courses like Japanese for Business, Spanish for Doctors, Mandarin for Tourism, or English for Air-traffic Controllers. In each of these cases, the content of the language instruction is interdisciplinary with other subjects. The language use is situated in a specific context and embodies a particular subset of tasks and skills. Importantly, unlike general purposes language instruction, which is often driven by theory alone, LSP curriculum is typically driven by the context and the people involved such as

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learners and professionals in the field (Widdowson 1983). Therefore, the LSP field, ever since its inception in 1960, has explicitly called for course design to reflect real-world use in professional domains (Halliday et al. 1964).

In response to the increasingly extensive and integrated globalization, LSP has seen increasingly diverse course offerings in the past decades. While business Spanish and medical Spanish courses remained the most popular non-English LSP courses offered in the USA (Long and Uzcinski 2012), business Chinese course offerings have risen substantially over the three decades following the surveys by Grosse (1982, 1985) and Grosse and Voght (1990). In response to the increased institutional demand, this study explored a business Chinese course design to ingeniously connect task-based language teaching (TBLT) and community engagement. The task-based and community-engaged design centered real-world practices throughout the course development: syllabus design, instructional material development, and learning assessment.

8.2 Task-Based Language Teaching in LSP

The real-world focus of LSP courses intrinsically connects with the rationale for TBLT which also advocates language for real-life use. TBLT employs a systemic needs analysis to elicit the real-life tasks from the language users. By incorporating such tasks in LSP instruction, students learn *what* tasks they need to perform and *how* to effectively perform these tasks for specific purposes.

8.2.1 Defining Task

Task has been defined in a variety of ways, ranging from communicative instructional activities to real-life undertakings beyond the classroom. Simply understood, goal orientation is a defining characteristic of task. Willis (1996) suggested these goals must target authentic outcomes, while Nunan (2004) emphasized the importance of designing tasks that convey meaning more than manipulate form. While the outcome-focused nature of task is important, one must also consider the process by which outcomes are achieved. Ellis (2003: 16) viewed task as “a workplan that requires the learner to process language pragmatically in order to achieve an outcome that can be evaluated in terms of whether the correct and appropriate propositional content has been conveyed.” Definitions centered on the *what* and *how* of classroom activities, however, fail to draw upon the true authenticity that one encounters beyond the classroom. To that end, Long’s (1985: 89) early definition of task is essential: “the hundred and one things people do in everyday life, at work, at play, and in between.” Task in the classroom must root strong process and clear outcomes in meaningful authentic activity—these “hundred and one things.”

More recently, definitions of task have expanded to consider the increasing integration of technology into language teaching. Gonzáles-Lloret (2016) suggested that the technology-mediated task should not be a direct translation of face-to-face exercises and activities to a computer platform. Rather, technology-mediated learning experiences are themselves shaped by the digital tools being used. Such tools might be used both to enhance face-to-face activities in a redesigned format and to open up the possibility for new activities that could not previously be completed.

8.2.2 TBLT Models

Different definitions of task, then, inform different models and practices of TBLT. Willis's model operationalized TBLT in several steps: a *pre-task phase* to introduce the topic and task; a *task cycle* where students perform the task and go through the meaning-focused and interactive process; and a *post-task phase* where students prepare for the written report and attend to the form (Willis 1996; Willis and Willis 2007). While Willis's TBLT model separated tasks from the linguistic component, Long (1985, 2014) took a more holistic approach. In Long's model, TBLT begins by identifying the real-world *target tasks* that a particular group of learners need to be able to do in the new language and then presents learners *target discourses* in the units. These discourses present increasingly complex tasks based on communicative needs. Finally, learning is assessed based on *task completion* instead of, or in addition, to language ability. Long's TBLT model, employed by this study, provides the strongest template for designing LSP courses that reflect real-world usage in professional domains.

According to Long's model, the first step of TBLT is to conduct needs analyses to identify the real-world target tasks to teach. Since LSP courses aim to develop students' interdisciplinary and intercultural competence in a foreign language by practicing target tasks in real life, effective LSP instruction is not achieved by the mere limiting of language materials to a specific professional context. In the same way that one cannot create a well-written Chinese résumé by simply conducting a verbatim translation of an English résumé, one does not master business Chinese by simply becoming adept at Chinese conversations in a business context. Instead, students must be able to perform real-life tasks in a business context by applying a full range of linguistic, cultural, and content knowledge. Designing such courses, however, can prove challenging for language teachers and applied linguists whose expertise is rare in both linguistic and content instruction. Therefore, the intuitive assumptions of applied linguists and language teachers can differ significantly from student needs in terms of practical use. This discrepancy then leads to the development of mismatched or irrelevant learning materials and courses (Long 2014) and unmet needs on the part of LSP learners. Rather than bridging the gap between learners and authentic language practice, poorly designed instructional materials replete with generic tasks and synthetic conversations end up widening this chasm and ignoring the true needs of LSP students (Wang 2011).

A thorough needs analysis, then, identifies appropriate target tasks that enhance the relevance and accountability of LSP courses. Brown (2009: 36) defined needs analysis as "the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of particular institutions that influence the learning and teaching situation." A comprehensive needs analysis collects information from various stakeholders via triangulated research methods. When developing a business Chinese curriculum, Wang (2011) conducted a comprehensive needs analysis by triangulating theories, methodologies, disciplines, times, and locations. She included different stakeholders (including L2 Chinese speakers who used Chinese in various business contexts at different ranks and current business Chinese students) and applied varied data collection methods (survey questionnaire, video recording, face-to-face interview, and telephone interview) to maximize the representativeness of real-life needs. Among the 20 language skills in her survey, *answering questions in a job interview* topped the list of needs voted on by the respondents. However, job interviews were seldom included in business Chinese textbooks (Wang 2008). Other essential tasks that the stakeholders identified in their interview responses included both the ability to conduct online searches to identify relevant information and collect, process, organize, and analyze data in compiling files. Wang (2011) also reported that the survey revealed that students of business Chinese of all language proficiencies are more concerned about their general social and personal skills than generic business or specific business-related language skills. Therefore, this study's course design included tasks featuring both job interview and social skills in the work context. When completing these tasks, more authentic materials were used to enhance learners' ability of real-life data processing and analyzing.

While a needs analysis identifies *what* to teach, the course designers also need to take into account *how* a program is implemented. In addition to needs analysis, Long (2014) argued for a means analysis for course designers to identify and analyze a wide variety of situational factors in actual course delivery. Means analysis addresses a variety of factors that come into play when implementing a course. It enhances the applicability of a course's design by also considering political concerns, social matters, methodological techniques, and cultural differences. This study conducted a means analysis by reviewing the institutional and programmatic interest.

8.3 Community Engagement in LSP

Though the traditional notion of learning held that knowledge is first discovered and then applied, it was long ago challenged by Boyer (1990) arguing that social problems themselves define an agenda for scholarly investigation. Taking such social problems solving as an essential feature in general learning process, community engagement defines itself as "…the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices" (CDC 1997: 9). By engaging collaborative work with and for the community, community engagement blends knowledge learning with its application by: (1) extending the classroom into real-life settings beyond the physical campus wall, and (2) synchronizing learning and application rather than delaying knowledge application until after students' graduation. Community engagement pairs nicely with one of TBLT's philosophical underpinnings: learn by doing. Knowledge is learned through its real-life application. "What we urgently need today is a more inclusive view of what it means to be a scholar—a recognition that knowledge is acquired through research, through synthesis, through practice and through teaching" (Boyer 1990: 24). This urgent need is intensified in LSP courses due to the direct and specific purposes of language learning. A task-based and community-engaged design is created in this study to address this need by enabling real-world relevance through the entire LSP course.

8.3.1 Domain Experts' Continuous Involvement

Community engagement enables domain experts' involvement to power through each step of the TBLT model. Though TBLT identifies target tasks by conducting needs analyses with various domain experts in the real world, the assessment of learners' task completion typically remains in the classroom. In the absence of consistent internship or integrated service learning, simulated role-plays are commonly used to create proxy experiences (Lafford 2012). However, these proxy experiences are not themselves real-life application. Another criticism is that the assessment administrators, often the language instructors themselves, are rarely experts in both the linguistic and content areas of LSP courses (Anthony 2011; Huckin 2003). Inauthentic tests assessed by non-experts create the potential for negative *backwash* effects on curriculum design, teaching practices, and learning behaviors. Learners might develop behaviors that hinder real-world practice, and instructors might further adjust their instruction away from, rather than toward, beneficial practices.

Community engagement serves as an effective bridge to fill this gap by both extending the task-based learning beyond the classroom while inviting domain experts back in to assess students' performance. In the community engagement model, the same domain experts who inform the needs analysis process are continuously involved in the development and assessment of student learning throughout the course. The experiential learning in a community-engaged model advances the learning experience from simulated role-plays to real-world applications that take the form of internships, study abroad experiences, or community service learning. Such experience is reflected on and contributes to learning and development (Kolb 1984).

8.3.2 *Holistic Performance-Based Assessment*

In addition to situating the LSP course assessment in the real world, community engagement also helps to resolve the tension between task completion and linguistic knowledge assessment. There is a lack of consensus around whether or not task-based assessment should focus solely on task completion—disregarding linguistic, sociolinguistic, and pragmatic errors—or aim for a more holistically sound objective. Many prefer to focus solely on task completion, arguing that the discrete-point tests of linguistic knowledge do nothing to address the underlying construct—that is, the transferable task-based ability (Long and Norris 2000; Mislevy et al. 2002; Robinson and Ross 1996). However, other research posits that grammatical and pragmatic knowledge may be an essential part of task completion, such as in the case of Australian duty-free shop encounters (Marriot and Yamada 1991). In deciding whether or not to focus solely on task completion, one should consider the uses that will be made of the assessment (Norris 2008; Long 2014). Provided the interdisciplinary nature of LSP courses, the linguistic knowledge should not be assessed in discrete-point linguistic knowledge tests. "CSL [community service learning] and internships in workplace settings offer unique opportunities for learners to make *connections* to other disciplines as they *communicate* with members of the target *culture* and *compare* their native language and culture to what the *communities* they serve" (Lafford 2012: 21). Authentic task completion in a community-engaged assessment provides a holistic unit of analysis to measure and evaluate learners' ability adequately to apply both linguistic and content knowledge. In addition, this type of assessment addresses three major needs identified by Trace et al. (2015: 9): "(a) the level of specificity/specialization of the language taught; (b) the methods and focus of instruction; and (c) the role of power and values in LSP instruction."

In this community-engaged model, real-life tasks to be completed with and for the community were the primary units of both instruction and assessment. Discrete language uses and features for instruction were selected based on their utility to students in conducting and completing the selected tasks. In other words, the selection of authentic tasks for learning and assessment preceded language specification and instruction in this LSP course design. Task-based assessment could *backwash* the focus of instruction and learning, empowering students to concentrate deeply on task performance that reflected their needs. Ultimately, language is based not on linguistic forms but rather holistic meaningful interactions in authentic context to reach purposeful goals. Holistic performance-based assessment contextually situated in community prepares students to develop and demonstrate real language knowledge via purposeful and meaningful interactions.

8.3.3 Community Engagement in a Continuum

Like TBLT, community engagement takes a variety of forms and has been defined and practiced across a broad continuum. While community engagement focuses on collaboration, but not necessarily teaching, community-based learning (CBL) is a teaching strategy that aims to bridge academic theory and real-world practice. However, despite their different starting points, community engagement and CBL embark on a shared path that eventually leads to a shared destination. To clarify the conceptual imprecision of CBL literature, Mooney and Edwards (2001) identified six distinct types of CBL that provided a heuristic continuum for the design and evaluation of CBL endeavor. The six types were: (1) out-of-class activities; (2) volunteering; (3) service add-ons; (4) internships; (5) service learning; and (6) service-learning advocacy. One can further synthesize these six forms of CBL according to the level of community integration required: *instructional connections*, *community integration*, *community participation*, and *citizen action* (Glossary of Education Reform 2014). For *instructional connections*, educators make connections between the material in the classroom with local community. This occurs when, for instance, a teacher asks students to categorize the forms of local firms. For *community integration*, local experts are invited to speak as guest or partner with students on course projects. *Community participation* requires more from the students. Students must walk out of the classroom and actively participate in their communities. They can take a field trip to a local corporation or participate in a social gathering with the area professionals. The ultimate integration is *citizen action*. Here, students draw upon their roles as the knowledge taker to use what they learn from the community to influence, change, and give back to the community. For example, students might present their business proposal to a corporation, ultimately convincing the corporation to adopt and execute their plan.

8.3.4 Campus Community Collaboration

In addition to the local community off campus, there are other community resources within the institution that match the needs of LSP and could greatly enhance the relevance and accountability of LSP courses. Most universities host some varieties of centers and offices (e.g., career services, study abroad center, health center, and entrepreneurship center) that offer domain experts potentially available for LSP course design. Collaboration with these offices enables LSP instructors to leverage the expertise that already exists within the school to inform their own language and content instruction.

Another valuable community for teaching Chinese language for specific purposes is the steadily increasing Chinese international student population in the USA. "In SY 2016–17, China was the top origin country for international students, representing 33 percent of the total (Zong and Batalova 2018, May 9)." With this growing population of students has come an increased awareness of both the personal and sociocultural stress that Chinese international students face in adapting to the American educational environment, as evidence by the growing body of research into the services and programs American universities deliver to their foreign students (Wei et al. 2007; Yan and Berliner 2013). In addition to top-down support from the school offices and programs, however, bottom-up efforts that focus on opportunities for collaboration and integration between individual students, both domestic and international, might also drive campus diversity and inclusion. Both groups of students experience challenges related to diversity and inclusion, and both groups have something to offer in these efforts. American students taking Chinese courses have an increased familiarity with Chinese language and culture, and potentially an increased motivation to engage with Chinese international students. Additionally, Chinese international students might contribute insight into needs and means analysis while also providing a more authentic context for practicing real-world tasks. Both groups of students, therefore, might serve as ambassadors to each other, facilitating intercultural communication and celebrating diversity.

8.3.5 *Virtual Community and Technology-Mediated TBLT*

Despite the broad potential of community engagement efforts, community-based learning is heavily dependent on, and restricted by, local resources. For LSP courses, especially less commonly taught language courses in rural areas, limited access to community resources could present great challenges for community engagement. Yu (2015), in presenting a proposal for a Business Chinese course aimed at advanced university learners interested in interning or working for businesses in mainland China, reflected that one of the major challenges of the program is accessing authentic materials and making the content and instruction relevant outside the classroom. The program's location in rural Pennsylvania limited direct opportunities to use and practice the language.

Fortunately, in a time when globalization exists online as much as, if not more than, anywhere else, community engagement might as well extend beyond physical communities to virtually formed ones. Web-based applications have developed from information-oriented in Web 1.0 to community-fostering in Web 2.0 with web-based applications (blogs, wikis, podcasting, multimedia sharing sites) featuring greater degrees of interactivity, inclusion, collaboration, authentic materials, and digital literacy skills (Haythornthwaite and Kazmer 2004; Lankshear and Knobel 2007; Thomas 2009). Social networking sites in the current online infrastructure provide ready-made and active virtual communities that lend themselves to LSP teaching and learning. Social constructivism views learning as a social process which is affected by the roles of interacting individuals, the forms of interactions, and the context and culture of the learning environment (Kukla 2000). The interactive nature of social networks enables active communities with shared interests. These communities are not restricted by physical proximity and, therefore, provide a perfect learning context and culture. The unique nature of online interaction also enables multi-model communications (using texts, emojis, images, etc.) which complement the interaction in physical community. A hybrid course design consists of both face-to-face and online interactions could integrate both local and virtual community resources into a single learning environment. Face-to-face instruction augmented with and complemented by well-designed technology makes learners more independent and responsible and provides a high degree of exposure to instructional content (Hinkelman and Gruba 2012; Scida and Saury 2006; Ushida 2005).

8.4 Authentic Materials and Scaffolding

As the primary objective of foreign/second language learning has been shifting from knowledge *about* language to knowledge *of* language, language-teaching approaches have been marching on the journey to be *real*. Authentic materials instead of scripted texts provide learners exposures to and preparation for language use in real-life situations. In content-based instruction where authentic materials are widely used, the target language functions as both the means for and the by-product of learning various subjects. Authentic material use for foreign/second language teaching is not without its drawbacks, however, some that might be exacerbated in an online setting as compared to a conventional classroom. Authentic materials often contain unneeded and beyond-level language items and culturally biased texts that can lead to a comprehension burden that violates the learners' developmental stages (Richards 2001; Martinez 2002; Kilickaya 2004). In line with Bruner's (1983) model of scaffolding and Vygotsky's (1978) zone of proximal development, language learning is best facilitated where both high challenge and high support are present.

In this course design, the authentic materials, in the forms of text, audio, and video, presented high challenge because students were expected to learn new content knowledge while working to comprehend the unknown or unfamiliar linguistic items in the target language. Meanwhile, authentic materials were accompanied by a supportive learning environment that contextualized linguistic elements by comparing and contrasting them with their English counterparts, and facilitated understanding by including scaffolding questions throughout.

8.5 Course Design Background

The approach described in Brown (1995) detailed six core steps in the development of curriculum: (a) needs analysis; (b) goals and objectives; (c) assessment; (d) materials selection and development; (e) teaching; and (f) program evaluation. After identifying the general needs for this business Chinese course through a literature review, this study also reviewed the institutional and programmatic background, and available local community resources to inform the course design. Resulting from the needs and means analyses, then, the study identified and designed three course modules: *Job Search*, *Work and Social Life*, and *International Business and Entrepreneurship*. Students engaged in both local and virtual communities throughout the semester, and domain experts were invited to administer performance-based assessments focused on task completion at the end of each module.

8.5.1 Institutional and Programmatic Background

The business Chinese course design in this study was situated in an undergraduate Chinese program at a liberal arts education context in the USA. The program offers both Chinese majors and minors, and many students in the institution pursue double majors, or add a cross-disciplinary minor. Business Chinese courses have been offered every other semester since 2008 in response to student demand and interest in improving their Chinese proficiency in the business context. Prior to taking the business Chinese course, a student must have successfully completed third-year college-level Chinese language courses, obtained equivalent proficiency, or received permission of the instructor. The course qualifies as an elective both for the Chinese major/minor, and the minor in global trade and commerce studies.

The university has a nationally ranked Business School and the trailblazing Center for Entrepreneurship. The Chinese program here draws upon a unique student demographic that takes Mandarin Chinese courses, often majoring or minoring in Chinese with the aim of using Chinese in professional development and/or liberal arts entrepreneurial practice. In addition, the university offers a very-well-resourced Office of Personal and Career Development (OPCD) to "teach and equip students to navigate the path from college to career with clarity, competence, and confidence (http://opcd.wfu.edu/about-us/)." The office's English Profile Service provides students with a variety of resources and courses designed to help them to explore career paths, learn to network, find an internship or job, write a résumé, and learn to interview.

Within the Chinese program, an urgent course redesign was needed in order to better tailor to students' needs and potentially increase student enrollment. Though the course had steady enrollment for several years, it began to experience a decline in 2013. While a variety of causes might be responsible for this downturn, among them was the reality that the previously designed student learning outcomes no longer fully met the students' needs. The original course design focused on introducing the macro- and micro-Chinese economic situations and developing students' advanced reading and writing skills. It did not provide students with sufficient proficiency and cultural competence to perform real-life tasks for professional development. The student learning outcomes were measured mainly in terms of students' language skills by writing assignments, vocabulary quizzes, presentation, and examinations focused on language skills. There was a lack of sufficient practice and training for students to proactively apply the target language in an authentic context. The redesign placed an emphasis on fostering students' intercultural communicative competence by demonstrating four skills in real-life situations in order to better fit students' needs.

8.5.2 Students Learning Outcomes

Instead of aiming at developing students' language skills discretely, this design took a task-based and community-engaged approach to develop students' interdisciplinary and intercultural competence in business Chinese. Two primary student learning outcomes grew from the design process. Upon completion of the course, students shall be able to: (1) perform various forms of tasks with real-life implications by integrating all four skills of listening, speaking, reading, and writing, and cultural competence; and (2) conduct responsible community collaboration and contribute to the diversity and inclusion of the campus. The various tasks and community collaboration were then delivered across the three course modules.

8.5.3 Course Modules

In an effort to foster students' interdisciplinary and intercultural competencies, the course design incorporated both linguistic and content instruction. This design reflects a substantive departure from language for general purpose courses in which the focus is primarily on developing students' reading, writing, speaking, and listening skills. The final structure required students to apply both Chinese oral and written communications in the completion of authentic tasks across three modules relevant to the business context.

Job Search. In this module, students completed a series of tasks essential to a Chinese job search. Many universities have career services offices to support students' professional and career development. In this case, the instructor and researcher collaborated with professional career coaches from the institution's OPCD for specialized support and resources. The office provides an English profile service where students can access job and internship opportunities, event invitations, and resources specifically matching their career interests. Using the English profile service as a template, the instructor created a Chinese customized profile service that integrated both linguistic and cultural differences into its design. The profile service then guided students through the process of creating a Chinese résumé, searching for information on international internships and job opportunities, honing their interview (both online and face-to-face) skills in Chinese, and publishing a bilingual personal website.

Rather than relying on scripted textbooks to scaffold instruction, the course content was drawn primarily from authentic and up-to-date online Chinese text and multimedia resources. Since authentic materials presented significant challenges to students, these materials were first introduced in comparison with their English counterparts, allowing students to draw upon expertise in their native language to the Chinese materials. Students began by polishing their English résumés with career coaches from the OPCD. Then, in class, students compared typical English and Chinese résumés. After critiquing the résumés in terms of both content and format, students then created their own Chinese résumés. This process improved their awareness of the nuanced differences in content, perspective, and format. After drafting their Chinese résumés, they refined them by integrating peer and instructor feedback and finally created a personal, bilingual website based on their final drafts.

Following the résumé construction process, students were next presented with authentic Chinese job advertisements and tasked with decoding the key information. Building upon the reflective process that was integral to their résumés and personal Web sites, students identified their career interests and selected key words with which to conduct a job search on several major job websites used in China. Part of this process involved following the official WeChat account of this job site so students could receive the most updated job information. Students then brought to class a minimum of two job postings that fit their interests and qualifications. Students reviewed these advertisements with their peers and strategized with each other on how to apply.

With their target jobs selected, students turned their focus to interview preparation. The OPCD provided a video training on interview skills in the USA that helped familiarize students with the interview process and practices in American business settings. Students also set up individual appointments with career coaches to develop their general interview skills and conduct a mock interview in English. After completing and reflecting on the typical American interview process, the business Chinese class introduced Chinese interview skills and etiquette using authentic video material. While watching these authentic video lectures, students were expected to be able to: (1) identify and perform appropriate interview skills and etiquette in a Chinese business interview context; and (2) predict the meaning of the new linguistic items based on the context clues. A series of scaffolding questions were provided to facilitate students' comprehension. While several of the skills are transferable between contexts, in-class discussion often focused on contrasting how the interview skills and etiquette in a Chinese context differ from those in an American, English-speaking context. Among the differences identified were alternative forms of greeting, the appropriate gesture to hand over a business card, and especially the need to remain humble while selling oneself.

Work and Social Life. In this module, students acquired skills for interaction and developed cultural knowledge on Chinese consumer psychology, euphemisms, and workplace etiquette. These required students to practice tactful conversation skills in professional and after-work settings with both superiors and peers. Selected course assignments and projects aimed to enhance intra-institutional community collaboration by requiring collaborations with the Chinese international students.

Students surveyed and interviewed Chinese international students on campus to contrast the consumption conceptions of the young Chinese and American generations. Course members also collaborated with Chinese international students to film short video tutorials to teach lower level Chinese language students about business Chinese interactional skills and cultural knowledge. By partnering with the growing population of international students from China on campus, these learning activities provided authentic contexts for international students to serve as mentors and experts as domestic students developed a deeper awareness of the nuances of Chinese culture and language.

International Business and Entrepreneurship: Students began the final module by surveying the various forms that business enterprise takes in China. They analyzed case studies on how multinational incorporations employed different marketing strategies in targeting the Chinese market. To maximize community resources, a virtual Chinese-speaking community was invited to provide diagnostic feedback. The Chinese program developed its social media accounts that were followed by both Chinese international students and American students learning Chinese (current students and alumni). Among the projects in this module, students posted original product posters and videos to promote Amazon.com in China and among Chinese-speaking consumers. This work was posted on the program's social media accounts on Facebook, Instagram, and WeChat Group. Whichever team received the most "likes" won the competition. In addition to surveying existing case studies, students worked in groups to develop and present their original business marketing proposals. Such proposals included rebranding a local Chinese restaurant familiar to students, introducing an American e-cigarette brand to China, promoting NHL ice hockey in China, and starting an organic cafe chain targeting urban women in China. Students conducted market research, identified target consumers, analyzed their consumer psychology, chose the most appropriate sales channel, and produced their own commercials. While time constraints resulted in most of the community collaboration taking the form of *instructional connections*, *community integration*, or *community participation*, there emerged a need for *citizen action*. In response to students' enthusiasm to execute their original proposal which aims to include their interviewed Chinese restaurant within the student meal-card options and ultimately diversify student dining experience across campus, the instructor offered a sequenced independent study course in the following semester to guide students for further community engagement in forms of *citizen action*.

8.5.4 Assessment and Evaluation

This business Chinese course aimed to cultivate students' intercultural communication skills and interdisciplinary competence in business Chinese. Therefore, the assessment and evaluation required linguistic skills to be demonstrated through holistic task completion. Both summative and formative assessments were developed to best support student learning.

The module tests were performance-based which required students to demonstrate their proficiency by completing various real-world tasks relevant to job searching, working, and socializing in a Chinese business context. Domain experts from the community, rather than the instructor, conducted the module tests in real-life situations. These experts were multinational corporation entrepreneurs and business professionals identified and invited from the local community. Students received rubrics in advance of the assessments to assist their preparation. The rubrics were developed with input from both the language instructor and the domain experts. For the *Job Search* module test, a local business professional with work experience in both China and the USA was invited by the OPCD to conduct and rate one-on-one simulated student interviews in a formal conference room setting (see Appendix 8.1 for the rubric). Students were assigned to compete for the same internship position in a Chinese multinational e-commerce, retail, Internet, AI, and technology conglomerate. Before the face-to-face interview, students received formative feedback by completing a round of mock interviews that consisted of listening and responding to pre-recorded questions online via VoiceThread. Many of the questions appeared in both the formative (mock) interview and the summative (face-to-face) interview. However, the business professional asked a few improvised questions in each interview according to a given student's individualized background and responses. For the *Work and Social Life* module test, students took an on-site visit to a local Chinese restaurant near campus. Drawing on her multinational entrepreneurial experience, the restaurant owner accepted an informal interview by students and rated students' performance based on their conversation. In the final assessment for the *International Business and Entrepreneurship* module, a multinational corporation entrepreneur joined students at a social gathering in a local restaurant. During this gathering, students learned about the entrepreneur's experience in the USA and China and asked questions about the differences between the two markets. Students then shared their marketing proposals with the entrepreneur to elicit feedback. The entrepreneur rated students' performances based on their interaction over the dining table following a rubric (See Appendix 8.2). The same rubric was previously shared with students and used for a peer review to guide their preparation. At the end of the semester, students hosted an Open House to showcase their coursework from the three modules. They presented their bilingual personal Web sites which included: their text and video self-introduction, Chinese-style résumés, conference job interview videos, and original international marketing plans. Students and faculty across the campus, especially those who were involved in students' projects, were invited to celebrate the students' achievements.

Formative assessment, mentioned briefly earlier, took various formats throughout the course. Students received regular feedback from their instructor, domain experts, and the online Chinese-speaking community, on both their personal website/learning portfolio and their self-reflection journals. In addition to domain experts and their instructor, students also provided peer evaluation on tests and assignments, according to the given rubrics. The instructor created a site to keep a record of task-based community-engaged projects and students' personal websites. Students collected their own coursework from across the three modules to upload to their personal websites, eliciting feedback from each other throughout the semester. Some multimedia assignments were uploaded to social networking sites. Reactions and comments from the virtual Chinese-speaking community on social network sites were also included to provide students diagnostic feedback. Monthly journals were required at the completion of each module. In these journals, students were provided guiding questions to prompt reflection on their own learning and evaluate the course design and teaching. Student responses to the course design were largely positive. Students appreciated the community-engaged design by commenting that they particularly "*enjoyed how the class was not always in the classroom such as the May Way Restaurant trip and making a poster. All of these methods help us [them] apply our Chinese in methods that would be used later on in life. I [He/she] do hope we [they] have more field trips as they help us [them] use the materials we [they] learned in class.*" "*The skills we [they] learned in this class were applicable outside the realm of Chinese business culture.*" Students also commented that the interdisciplinary course design helped them "*practice and use our [their] Chinese skills as well as improve our [their] interview skills.*" "*The advertisement project was a thought-provoking challenge, just because it incorporated so many different facets, including cultural knowledge, advanced vocabulary, and very specific vocabulary related to the product we were advertising*." In addition to increasing student motivation by receiving direct feedback from the community, the various formative assessment also helped the instructor to constantly monitor student growth and adjust instruction to ensure continuous improvement.

8.6 Conclusion

The research-informed task-based and community-engaged design of business Chinese course addressed many of the challenges presented by LSP instruction. First, to address the limitation that LSP courses often function simplistically as language courses with a limited focus, this design nested language learning in a broad selection of real-life tasks based on needs and means analyses. This enhances the relevance of the course design and better achieves the interdisciplinary student learning outcomes. Second, to address the common mismatch between the interdisciplinary nature of an LSP course and the lack of interdisciplinary expertise in a single instructor, this design engaged domain experts across the broader community to join the instructor in designing authentic tasks and assessing student work. Student performance on module tests was evaluated by the domain experts rather than the language instructor. As a result, successful completion of the course focused on language-informed task completion instead of discrete linguistic skills and content competence. Third, community resources are often limited, especially for less commonly taught languages at universities located outside of large metropolitan areas. This course design leveraged a variety of resources—university intra-institutional offices and centers, international student population, virtual community resources—to expand upon the conventional local community and provide students with exposure to a broad constituency of native and other speakers.

Several limitations to the course design leave room for improvement. First, while this study reviewed available needs analysis research conducted in correspondence programs and analyzed the local institutional and programmatic background in selecting three course modules to better reflect students' needs, this was restricted by limited funding and resources. Ultimately, an institutionally situated systemic needs analysis, following Long's TBLT model, would be ideal at the start of the course design. Second, due to the required timeliness of truly authentic materials, the teaching content and strategies must be constantly updated and edited, resulting in a substantial workload for the language professionals. Third, more technology-assisted scaffoldings would be valuable to enhance the delivery of authentic multimedia materials. The presentation of scaffolding questions could also take various digital formats online to present high support.

Appendix 1

See Table 8.1.

Table 8.1 Job interview rubric

Criteria	0–30%	40–60%	70–80%	90–100%
Appearance appropriate for a job interview (5%)	Overall appearance is untidy; choice in clothing is inappropriate	Appearance is somewhat untidy; choice in clothing is inappropriate	Overall neat appearance; choice in clothing is acceptable	Overall appearance is very neat; overall appearance is businesslike
Professional behavior and language (5%)	Unacceptable behavior and language; unfriendly and not courteous	Used typical behavior and language—did modify behavior to fit the interview	Acceptable behavior, well mannered, professionalism somewhat lacking	Professional behavior and language (handshake, "hello," "thank you," etc.)
Answers are well structured and concise, do not sound as rehearsed or unsure (15%)	Answers with "yes" or "no" and fails to elaborate or explain; talks negatively about past employers	Gives well-constructed responses, but sounds rehearsed or unsure	Gives well-constructed responses, does not sound rehearsed, student somewhat hesitant or unsure	Gives well-constructed, confident responses that are genuine

(continued)

Table 8.1 (continued)

Criteria	0–30%	40–60%	70–80%	90–100%
Answers emphasize at how the applicant matches the position (30%)	Answers shows no knowledge of the position and potential employer	Answers randomly touched upon the match between the applicant and the position	Answers provided some facts about how the applicant is a fit for the position and potential employer	Answers provided evident facts how the applicant is a good fit for the position and potential employer
Interview demonstrate confidence, appropriately utilized interview skills and etiquette (10%)	Demonstration of no knowledge of interview etiquette, and poor interview skills with little confidence displayed	Demonstrated limited proficiency and interview etiquette; limited demonstration of competent interview skills in a generally confident manner	Demonstrated average proficiency and interview etiquette; average demonstration of competent interview skills in a generally confident manner	Highly proficient with great etiquette; appropriately utilized interview skills in an enthusiastic, motivating, and engaging manner
Attitude shows interviewees' engagement to the interview process (20%)	Lack of interest and enthusiasm about the interview; passive and indifferent	Somewhat interested in the interview; shows little enthusiasm	Shows basic interest in the interview; shows some enthusiasm	Appropriately interested and enthusiastic about the interview process
Communication is clear and concise (15%)	Speaking is unclear—very difficult to understand the message of what is being said	Speaking is unclear—lapses in sentence structure and grammar	Speaking is clear with minimal mistakes in sentence structure and grammar	Speaks clearly and distinctly with no lapse in sentence structure and grammar usage

Appendix 2

See Table 8.2.

Table 8.2 Rubric for multinational marketing proposal

策划人 [*Planner*][a] ____________	评分人 [*Reviewer*] ____________				
	强烈同意 [*Strongly agree*] (5分)	比较同意 [*Relatively agree*] (4分)	同意 [*Agree*] (3分)	比较反对 [*Relatively disagree*] (2分)	强烈反对 [*Strongly disagree*] (1分)
1. 这组同学的营销方案 (yíngxiāo fāng'àn)/广告有很清楚的公司业务和目标 [*The marketing proposal demonstrates clear business goals and objectives*]					
2. 这组同学的营销方案/广告有很清楚的产品用途和好处 [*The marketing proposal clearly introduces the function and value of the product*]					
3. 这组同学的营销方案/广告对当地的市场和消费心理了解得很清楚 [*The marketing proposal shows a comprehensive understanding of the local market and consumer psychology*]					
4. 这组同学的营销方案/广告有很清楚的销售渠道和销售策略 [*The marketing proposal engages applicable sales channels and strategies*]					
5. 这组同学的营销方案中的宣传方案(海报、视频广告、网络宣传等) 很吸引人 [*The advertising plan engages effective means (e.g., poster, video, Internet advertising) and seems appealing*]					
6. 这组同学的语言使用很准确 [*The proposal uses accurate language*]					
7. 这组同学努力使用了有表现力的语言 [*The proposal uses sophisticated and expressive language*]					
总分 [*Total score*]:					
其他评论或建议 [*Any other comments and suggestions*]:					

[a]English translation was added for this article. The rubric students received in class were written in Chinese only

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Part III
Chinese for Medicine and Heath Care

Chapter 9
Chinese Metaphorical Expressions in Talking About the End-of-Life Journey

Huei-ling Lai and Yi-chen Chen

Abstract Aging, illness, and death are inevitable stages of life that are prominently conceptualized in every culture and language. Considered as taboo topics, they are often euphemized through metaphor. Therefore, it is necessary for language learners and medical practitioners to understand the nature of metaphoric euphemisms and their implicated meanings since talking about them is unavoidable. This chapter investigates the Chinese metaphoric euphemisms related to aging, illness, and death. The LIFE IS A JOURNEY metaphor is elaborated with Chinese examples to illustrate the formation of metaphoric expressions. In light of the findings, this chapter outlines pedagogical implications for the teaching of Chinese during medical and nursing training or for use in the training of already qualified medical professionals for effective patient–physician/nurse communication.

9.1 Introduction

It is normally assumed that communication between people in poor health and medical professionals is a necessary element in the doctor–patient relationship. Effective doctor–patient communication is at the heart of the art of medicine and can lead the delivery of high-quality health care (Ha and Longnecker 2010). Research finds that most complaints about medical and nursing experiences are related to issues of communication, not clinical competency (Tongue et al. 2005; Clack et al. 2004; Semino et al. 2018). Other researches also indicate that the element of trust embodied in the patient–physician relationship, which is built upon effective communication, can significantly impact on patients' willingness to seek

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medical services (Lin et al. 2016). Thus, it is necessary for medical practitioners and nursing personnel to familiarize themselves with the art of communication.

However, patient–physician communication can be very different from daily conversation. Topics related to ill health, including aging, sickness, dying, and death, are considered unpleasant in many cultures; many people find themselves embarrassed, uncomfortable, and even depressed when talking about these topics. One reason for the 'untellable' nature of these topics is that the content may be 'too personal, too embarrassing or obscene' (Norrick 2005: 323) and thus exceed the maximum threshold for the sharing of experience in an open way in most contexts. For instance, the topic of death is generally avoided in conversation due to the 'potential transgression of taboos' (ibid: 328). Demken et al. (2016) are in line with this viewpoint, noting that conversation about the topic of dying remains highly individual, subjective, and elusive, thus leading to difficulty in overt discussion. In addition to concerns about individual privacy and topic sensitivity, the process of aging, becoming ill, and dying is often associated not only with physical discomfort, but also with uneasy emotions like anxiety, fear, and the feeling of isolation. The experiences of death are fraught with complications, and the related feelings are too abstract from everyday experience to be verbalized in a literal way. That is to say, when it comes to conversation about aging, illness, dying, and death, people may find it difficult to express themselves properly and clearly, and medical practitioners and nursing personnel may be confused about what the patients really feel and experience.

Metaphorical expressions that are euphemistic are commonly adopted for talking about taboo topics so as to conceptualize the associate intangible ideas (Kövecses 2000) and, accordingly, to facilitate the conveyance of thought on these unpleasant topics. Metaphor is recognized as a powerful device, linguistically and socially, which reflects conventional and implicit ways of thinking, and bridges communication gaps between speakers (Kövecses 2000). Metaphor is defined by cognitive linguists as a conceptual mechanism that allows for a mapping of thoughts across different conceptual domains. The experience that we may wish to talk about—the topic or target domain—is more abstract and less mutually accessible between speakers and listeners, while the other experience that we may have had—the vehicle or source domain—is more concrete and intersubjectively accessible (Dancygier and Sweetser 2014; Lakoff and Johnson 1980). The feature of mapping conceptually allows people to talk about taboo topics, like death, in a euphemistic way.

As euphemism is adopted to prevent the expression of inappropriate topics and so to facilitate communication, the ability to incorporate metaphorically euphemistic expressions in an acceptable manner is deemed as a demonstration of communicative competence. Thus, being able to communicate effectively and appropriately in different situations and for different purposes and at the same time to be able to grasp properly cultural practices for interpersonal communication are considered essential global competencies for language learners, a viewpoint confirmed by the two most popular and world-recognized references for foreign language proficiency—the Common European Framework of Reference for Languages (CEFR) and the American Council on the Teaching of Foreign Languages (ACTFL) proficiency guidelines. That is to say, the ability to understand and use euphemistic expressions is not only critical for medical professionals, but also for language learners in general.

This chapter investigates Chinese euphemistic expressions related to aging, illness, and death, and analyzes the metaphorical nature of the expressions. In light of the findings, this chapter then proposes some pedagogical implications for raising the awareness of and improving the comprehension of the use of metaphorical euphemism in Chinese for foreign language learners of Chinese. The study also highlights the implications for the teaching of Chinese for medical and/or nursing purposes, such as in long-term nursing education, and for the training of medical professionals, including medical practitioners and nursing personnel, in effective communication skills.

9.2 Background

This section will briefly summarize studies of Chinese for specific purposes (CSP) so as to lay the groundwork for the goals of the chapter. Then, the background and conventions of the topics of death and dying are introduced first to develop a comprehensive understanding of the nature of these taboos. Then, the definition of metaphor, the ways in which metaphors are formed, and their functions are reviewed to establish a theoretical background. Finally, relations and reasons of how metaphors contribute to communicative exchanges about the common understanding of health matters in Chinese are proposed.

9.2.1 Studies on Chinese for Specific Purposes

Language for Specific Purposes (LSP) courses, according to Trace et al. (2015: 6), are ‘those in which the methodology, the content, the objectives, the materials, the teaching, and the assessment practices all stem from specific, target language uses based on an identified set of specialized needs.’ Courses such as Spanish for Tourism, Business for Chinese, or Japanese for Nursing can illustrate. However, as pointed out by Trace et al. (ibid), given the growth of English as a global language, most of the research regarding LSP has focused on English for Specific Purposes (ESP). Nevertheless, LSP should integrate both language and content area knowledge that is specific to a particular local context. To this end, several proposals are provided by Trace et al. (ibid) on non-English LSP curriculum design. Seven of the chapters are devoted to CSP, with six related to business and one to the needs of students of nursing.

Compared to work done on ESP, that done on CSP is indeed much scantier, although work on some areas of CSP is gradually developing. For instance, Wang et al. (2015) built a Web Business-Chinese Corpus (WBCC) to assist learners of Chinese in studying business collocations used in Chinese. Chen and Lee (2012), noticing the diversified nature of the cultural content in the current teaching materials in business Chinese, developed indicators for use in probing the cultural content of the materials so as to provide foundations for more in-depth research. A recent collection of work on CSP is found in an edition edited by Peng (2016), in which eight topics of CSP, including business, journalism, traditional Chinese medicine, tourism, technology, law, Christianity, and tour guide practice, are presented in terms of the current status quo of the topic, the specific terms used, their definitions and related studies, vocabulary, teaching materials, activities, and curriculum designs.

9.2.2 Chinese for Medical and/or Nursing Purposes

The areas of CSP for medical and/or nursing Chinese are relatively underexplored, although some situational conversations in hospitals or between doctors and patients have been designed (e.g., Tsai 2017). In particular, as the number of aging and aged people is growing, the capacity to carry out long-term nursing is of paramount importance to society. It is impossible for family or other persons concerned for health care and nursing professionals to avoid mentioning unpleasant topics such as death. Since topics related to death are often culturally sensitive, learning the culture and the language at the same time is crucial for CSP. Learners of Chinese need to be aware of language use in context as well as sociocultural situations for culturally appropriate communication.

To illustrate, this chapter conducted an informal corpus research: a small-scale investigation of two news events happening in the same period (from June to September 2018). The two news events were both about dying and/or death of celebrities: the former sports commentator Fu Da-ren, and the political commentator Yang Wei-zhong. Corpus data were collected from five major online newspapers in Taiwan, including Chinatimes News (CTnews), TVBS-News, Central News Agency (CNA), Apple Daily, and Liberty Times Net (LTN), as well as from two news media, including SET News (SETN) and ET Today News (ETtoday). In total, 17,683 Chinese characters were collected for the analysis. Among those characters, twenty-four different Chinese expressions about death/dying were identified. The expressions are listed in Table 9.1: (Note that the table reports types rather than token numbers of expressions; i.e., similar combinations of uses, regardless of exact wording, were counted as one type of expression rather than several tokens.).

The concept of dying/death can be expressed by a noun (e.g., 亡 *wáng* 'death') or a verb (e.g., 結束 *jiéshù* 'to terminate') or by combinations such as adjective and noun (e.g., 善終 *shànzhōng* 'good ending') or an adverb and verb (e.g., 安息 *ānxī* 'peacefully rest').

Table 9.1 Expressions about death of Fu Da-ren and Yang Wei-zhong collected from Chinese news media

Expressions about death and/or dying	Number of occurrences
安樂死 *ānlèsǐ* ‘euthanasia’/ 陪伴性自殺 *péibànxìng-zìshā* ‘accompanied suicide’	14
溺斃 *nìbì* ‘drown’	14
享壽 *xiǎngshòu* ‘to enjoy a lifetime (of …years)’/ 享年 *xiǎngnián* ‘to live to the age of…’	7
得以*déyǐ* ‘can’/尋求 *xúnqiú* ‘seek’/ 安樂善終 *ānlèshànzhōng* ‘rest in peace’	6
尊嚴結束一生 *zūnyán-jiéshù-yīshēng* ‘end one’s life with dignity’/ 結束生命 *jiéshù-shēngmìng* ‘end one’s life’	5
我要走了 *wǒ-yào-zǒu-le* ‘I’m leaving’	5
最後一站 (程) *zuìhòu-yīzhàn(chéng)* ‘the last station (mile)’/ 人生終站 *rénshēng-zhōngzhàn* ‘the last station of life’	5
犧牲生命 *xīshēng-shēngmìng* ‘sacrifice one’s life’	5
喪生 *sàngshēng* ‘perish’/ 意外喪生 yìwài-sāngsheng ‘accidental death’	4
安息主懷 *ānxí-zhǔhuái* ‘rest in peace in the arms of God’	3
死得其所 *sǐdéqísuǒ* ‘die a worthy death’	3
辭世 *císhì* ‘pass on’	3
爲國捐軀 *wèiguójuānqū* ‘die for one’s country’	3
沒了心跳 *méi-le-xīntiào* ‘no heartbeat’/ 停止心跳 *tíngzhǐ-xīntiào* ‘heart stops beating’	2
離世 *líshì* ‘leave the world’/ 離開這個世界 *líkāi-zhège-shìjiè* ‘leave the world’	2
邁向生命終點 *màixiàng-shēngmìng-zhōngdiǎn* ‘approach the end of life’	2
過世 *guòshì* ‘pass away’	2
人生最後旅程 *rénshēng-zuìhòu-lǚchéng* ‘the last journey of life’	2
一路好走 *yílùhǎozǒu* ‘have a good journey’	2
臨終離別 *línzhōng-líbié* ‘parting’	1
仗已打完 *zhàng-yǐ-dǎ-wán* ‘finish fighting’	1
身亡 *shēnwáng* ‘die’	1
驟逝 *zòushì* ‘pass away suddenly’	1
魂斷異鄉 *hún-duàn-yì-xiāng* ‘die in foreign land’	1
Total	94

Moreover, the expressions can be in one character, two characters, or even longer phrases. No matter the differences in the linguistic forms, the meaning about death/dying was frequently expressed in indirect ways. For instance, the expressions, 享壽 *xiǎngshòu* ‘to enjoy a lifetime (of …years)’ and 享年 *xiǎngnián* ‘to live to the age of…’, are used to disguise the sadness of losing the person under discussion by reporting numbers of the years of his life. In addition, expressions like 最後一站 (程) *zuìhòu-yīzhàn(chéng)* 'the last station (mile)' or 人生終站 *rénshēng-zhōngzhàn* 'the last station of life,' 邁向生命終點 *màixiàng–shēngmìng-zhōngdiăn* 'approach the end of life,' and人生最後旅程 *rénshēng-zuìhòu-lǚchéng* 'the last journey of life' apply the concept of journey and metaphorize human life as a journey, and thus the end of life is like the end of the journey.

The preliminary findings of this small-scale investigation of Chinese expressions of death/dying from two news events about the death of celebrities are still able to demonstrate some valuable insights even though the process of analysis was not done under the strict control of a coding and calculation procedure. First, the use of euphemistic expressions when discussing sensitive topics like ill health or death is common. Secondly, such euphemistic expressions are often created based on the metaphoric nature of language, such as metaphorizing a life as a journey. Thirdly, the expressions used may highlight positive perspectives on living rather than negative perspectives on dying so as to mitigate the emotional impact.

The use of different expressions to give positive or negative appraisals highlights the cultural values embodied in the Chinese language and reinforces the necessity of explicitly teaching metaphoric expressions which function as euphemisms. Consider the following two headlines in the news collected for the corpus:

(1) 永別了!傅達任用餘生爭取善終權 (CTnews 2018/06/07)
Yŏngbié-le-Fùdárèn-yòng-yúsheng-zhēngqŭ-shànzhōng-quán
Goodbye forever-LE-Fudaren-use-fight for-good death-right
'Goodbye forever! Mr. Fu Da-ren used the rest of his life to fight for his right to a good death'.

(2) 楊偉中「死得其所」? 葉毓蘭的這句成語引發論戰 (SETN 2018/08/31)
Yangwĕizhōng-sĭdéqísuŏ Yèyùlán-de-zhè-jù-chéngyŭ-yĭnfā-lùnzhàn
Yangweizhong-die-get-the-path-Yeyulan-NOM-this-CL-idiom-cause-controversy
'It's a worthy death for Mr. Yang Wei-zhong? This comment of Mr. Ye Yu-lan has caused controversy.'

The fact that both persons died is undoubted. However, different Chinese expressions are employed to describe their deaths due to the different causes of death. Mr. Fu was a famous sports reporter and commentator, and he died by asking for the operation of euthanasia in Switzerland. Expressions of the LIFE IS A JOURNEY conceptual metaphor such as 永別 *yŏng-bié* 'so long forever' are found extensively in news reports. In addition, because he was 85 years old and had suffered from long-term illness, his death was 'fought for' and was interpreted as a good death (善終 *shàn-zhōng* 'good end'). On the other hand, Mr. Yang, a Taiwan government official and a political commentator, drowned while attempting to save his daughter in a rafting incident. His death was totally unexpected as he was only 47 years old and in good health at the time. Expressions such as 意外喪生 *yìwài-sāngsheng* 'accidental death' were widely used to report his death in the news. The expression 死得其所 *sĭ-dé-qí-suŏ* 'a worthy death,' which often carries a positive connotation to praise people who die in a way which is considered to have shown benefit to society in some way, was criticized as inappropriate to use in this case. While both of these expressions can be employed for describing death, subtle differences exist in their use.

The understanding of language use in the context is indeed important for learners of Chinese. The successful selection of culturally appropriate language content and use depends on a proper understanding of what can be said to whom, how to say it, and in what circumstances. This part of knowledge is lacking in the field and still needs to be developed for a more comprehensive long-term nursing education. As shown by the two news headlines, metaphorical expressions based on LIFE IS A JOURNEY are much more appropriate for raising issues related to death since death is still considered to be an unpleasant topic to talk about.

9.2.3 Perception of the End-of-Life Journey

Aging, illness, and death are signposts that no one can miss in the journey of life. The possible pain and distress associated with such biological phenomena commonly lead to an unwillingness to discuss such topics among people of various cultures. For centuries, aging, illness, and death have been regarded as taboo topics. In the USA, for example, though topics about death, dying, and the dead can be commonly found in popular culture, such as on TV programs, in movies, or in music, such topics are often associated with feelings of fear and the occurrence of violent actions (Leming and Dickinson 2002; Durkin 2003). For the British, talking about death and dying in public are commonly regarded as improper social acts; in a survey conducted on behalf of The National Council for Palliative Care (ComRes 2016), about two-thirds of British adults agreed that dying is one of the topics that the British people feel least comfortable discussing with others, with only sex receiving a lower score on the scale of uncomfortableness.

The open discussion of topics about the end of life is socially and consciously rejected by convention not only in Western countries, but in Eastern ones as well. A reluctance to talk about death was also found in a survey of a total of 923 physicians in Japan, Korea, and Taiwan: 50% of the Japanese physicians, 59% of those in Korea, and 70% of those in Taiwan reported that they often or very often experienced a situation where families were reluctant to discuss end-of-life issues (Cheng et al. 2015). Another example of how people's perception of death influences their behaviors can be illustrated through the practice, whereby Chinese people avoid giving a clock to others as a gift. The pronunciation of such behavior 送鐘 *sòng-zhōng* 'give a clock as a present' in Chinese sounds the same as 送終 *sòng-zhōng* 'attend the funeral,' which implies death. The giving of a clock would be considered improper and unwelcome because hearing the sound of this homonymous lexical item can trigger an association with death.

Generally speaking, since preserving and prolonging the length of one's life are often valued, the termination of life is treated as a taboo in various cultures (cf. Xu 2007). Likewise, it is often equally offensive to discuss events such as aging and becoming ill that lead toward death. A number of reasons for such negative attitudes have been identified and commonly agreed upon (Dying Matters Coalition 2018):

1. Concern about embarrassment, such as saying the wrong thing and making matters worse, and feeling guilty about what has happened in the past
2. Concern about privacy, particularly in hospital wards
3. Reluctance to face the truth with the self-delusion that everything is alright
4. Respect for authority, i.e., the notion that professionals know best so no matters of concern are addressed.

The social taboo against direct talk about topics related to death and dying is also evident in various linguistic manifestations. When referring to aging, becoming ill, death, and dying, it is normative to use euphemisms, such as passed away or expired. A survey conducted by the Dying Matters Coalition (2011) shows that four out of five British people consider it appropriate to use euphemisms when talking about the death of someone they know; their survey also reveals that the commonly used euphemisms are often metaphorical, such as kicked the bucket, popped their clogs, and brown bread. It is agreed that linguistic taboos not only reinforce social norms, but also place boundaries on our perceptions, conceptions, and reactions to the world in which people function (Black 2016). Such manipulation of people's cognition is realized by adopting the metaphorical nature of language for the purpose of euphemism. An understanding of how metaphor and metaphorical euphemism work is necessary for communication and for acculturalization.

9.3 Metaphor and Its Euphemistic Nature

9.3.1 Definition of Metaphor

Traditionally, metaphor was viewed as being based on the notions of similarity or comparison between literal and figurative meanings of an expression. The ancient Greek philosophers argued that metaphor is an implicit comparison based on the principles of analogy, such as Socrates' analogies of death: Death is either a dreamless sleep or migration to a place.

> Now being dead is either of two things. … And if in fact there is no perception, but it is like a sleep in which the sleeper has no dream at all, death would be a wondrous gain. … On the other hand, if death is like a journey from here to another place, and if the things that are said are true, that in fact all the dead are there, then what greater good could there be than this, judges? (Plato, *Apology*, 40c–41a, translated by Thomas G. West, 1979)

As stated in the above-quoted paragraph, Socrates' comparison of death to a dreamless sleep or to migration is based on the similar characteristics that the three concepts possess. Based on this comparison, Black (1977) moves further to propose an interactive view of metaphor, taking it as one subject which projects its associated implications onto the distinct other; the two subjects interact with each other through the selection of related properties and the construction of parallel implications.

Black's interactive view of metaphors states the concept that metaphor is more than a manner of language use, but also a way of thinking about things. His idea of relating two subjects, or two domains, has been developed into the contemporary metaphor theory (CMT), which postulates that metaphor is a mapping between two conceptual domains in the conceptual system (Lakoff and Johnson 1980; Lakoff 1993). People, based on their embodied experience, explain and reason the source domain by associating features to another domain. For instance, the conceptual metaphor LIFE IS A JOURNEY implies that life is a progress through which one keeps moving onward in order to reach certain goals, just as a journey is a process of moving forward to reach each subsequent destination; therefore, the fact that life will reach its end is envisioned in the same way as a journey on which the destination has been reached. The Chinese usage 善終 *shàn-zhōng* 'good end' is one linguistic realization of the LIFE IS A JOURNEY conceptual metaphor.

In sum, metaphor is the conceptual mechanism through which we comprehend abstract concepts and perform abstract reasoning. Metaphor allows people to understand a relatively abstract subject matter in terms of a more concrete subject matter in a structured way. The perceived similarity between two subjects or two concepts among the participants in a conversation is the key to facilitate communication.

9.3.2 Functions of Metaphor

Metaphor is known as having several communicative functions: Metaphor can express matters that are otherwise inexpressible, it is a tool for evaluation, it can be used to persuade, and it can play a role in interpreting cultural entailments.

As for the inexpressibility of metaphor, Ortony (1975) claims that words cannot describe every aspect of experience and that metaphors can be used to bridge that gap. He points out that the communicative functions of figurative language are inexpressibility, compactness, and vividness: People can verbalize what is unknown or difficult to express by using metaphor, and can deliver compact and abundant information about the object in a limited amount of words. In a similar vein, Searle (1979) deems metaphor as an indirect speech act, suggesting that metaphorical meaning is used when the use of literal meanings cannot be relied upon. Littlemore and Low (2006) discuss the importance of metaphors and argue that competence in the use of metaphors has a great influence on second language learners' development of communicative competence. Figurative language is an indispensable tool in communication for both native and second language speakers.

The evaluative and persuasive potential of metaphor is related to its ability to frame topics in particular ways, highlighting some aspects and backgrounding others (Lakoff and Johnson 1980). Musolff (2006: 27) uses the term 'scenario' to depict 'any kind of coherent segment of human beliefs, actions, experiences or imaginings that can be associated with an underlying conceptual 'frame',' while Lakoff and Johnson (1980) name it 'image schema.' Both of these two terms emphasize the invariable properties and typical structure of the concepts involved in metaphor. The selection of a source domain can be seen as involving the framing of a topic which includes the highlighting of certain aspects and the backgrounding of others (Semino et al. 2017). The deliberate selection of a source domain and certain metaphorical scenarios reflects the experience of particular groups of language users. In other words, by using metaphor people can deliver a positive or negative connotation of a subject matter, and can empower the process of communication.

In addition to fulfilling the purpose of communication, the understanding of the operation of metaphor is also believed to be able to disclose cultural insights and to enable the interpretation of ideology. Metaphor is formed not only on the basis of a language user's embodied experiences of living (Lakoff and Johnson 1980), but also from the ideology produced or nurtured in the historical and cultural context (Goatly 2007). In other words, metaphor themes are created not only through the universal body, but also through cultural experience; conversely, metaphor themes also construct the thinking and social behavior of language users. Being unfamiliar with the metaphors of a language can keep language users in the dark as to certain aspects of a situation, and they will lack a full understanding of the target culture. Conversely, the study of metaphor can disclose cultural entailments and also the ideological constituents of a culture.

To sum up, metaphor is a distinctive linguistic behavior in its communicative functions. Metaphor can deliver vivid images of things that are difficult or impossible to express, and the use of metaphor allows one to infer the values and judgements of the user of a language. An understanding of how to use metaphor can be a valuable tool to access elusive ideas or to enable communication on topics which cannot be spoken directly about. The cultural entailments of metaphor can provide insights into the unspoken ideology of a language user's community. Therefore, metaphor is a suitable linguistic device to use to talk about taboo topics like death and dying.

9.4 Life as Isomorphic as Journey

Life goes on just as time goes on. Such a universal is prominently conceptualized in every culture and is thoroughly pervasive in every language. As time goes on, events occur, and changes happen, transforming things into new and various shapes. Even if we cannot sense time itself, our visual systems allow us to detect events occurring in a sequence ordered by time. Since the concept of time is relatively more abstract to grasp, the understanding of time is hence often based on concrete embodied daily life experiences and/or common folk knowledge of the world. Thus, the use of linguistic expressions about journeys to characterize life is widespread. Understanding a metaphor of lifetime as an isomorphic experience of journeys demonstrates how ordinary language readily realizes the LIFE IS A JOURNEY concept in an extensive and systematic way. A conceptualization of life as a journey gives rise to all of the ontological correspondences and inferential patterns that are present in our common knowledge. All of the entities in the domain of life correspond systematically to the entities in the domain of journey—the travelers, their goals, the states and changes, their difficulties, and destinations.

In discussing how abstract inferences can be characterized as concrete spatial inferences, Lakoff (1993: 216) maintains that time can be understood through two special cases—location and object—of the time metaphor TIME PASSING IS MOTION, which belongs to a general system of event structure metaphor. While examples of English are used to show the differences between the two special cases, they converge as to why time is understood metaphorically in terms of motion, entities, and locations, because, as claimed by Lakoff (1993: 218): 'it makes good biological sense that time should be understood in terms of things and motion.' Yu (1998: 85) points out that 'for ages and across cultures, the models in which the conceptualization of time is cast have all been spatial in nature.' Understanding time as things and motions in space is indeed pervasively realized in Chinese. To illustrate, the example in (3) explicitly combines the two concepts together—life being a journey to be travelled and also being an object to be painted. The expressions used in (4) also manifest clearly that the paths of life are realized as the concrete paths, locations, or destinations of journeys. The process of life cannot be stopped, just as the process of time cannot be stopped; hence, facing the end of life is a part of a path which it is necessary to take; everybody is equal in having to undergo this process, and the necessity of going through the journey of life is unavoidable as shown by the expressions in (5).

(3) 人生路這麼走 - 用創意的彩料,塗繪絢爛的人生
Rénshēng-lù-zhème-zǒu- yòng-chuàngyì-de-cǎiliào-túhuì-xuànlàn-de- rénshēng
Life-road-how-walk-use-creativity-DE-paint-paint-dazzling-DE-life
'This is how life goes: using creative paints, paint your dazzling life.'

(4) 看清前程路、走好自己的路
Kànqīng-qiánchéng-lù-zǒuhǎo-zìjǐ-de-lù
see-clearly-future-road-walk-well-self-DE-road
'To think about your future carefully, to be aware of what you are doing'
生命世界的道場、登高望遠之樂
Shēngmìng-shìjiè-de-dàochǎng-dēnggao-wàngyuǎn-zhī-lè
Lifeworld-DE-field of rites-ascend-high-look-far-DE-happiness
'The field of rites for life in the world, the happiness of being mature and sophisticated'.

(5) 死亡是每個人必須走的一條最平等的路
Sǐwáng-shì-měi-gè-rén-bìxū-zǒu-de-yī-tiáo-zuì-píngděng-de-lù
Death-be-everyone-must-walk-DE-one-CL-most-equal-DE-road
'Death is the most equal road that must be taken by everyone.'
死亡是不能逃避的奇幻之旅
Sǐwáng-shì-bùnéng-táobì-de-qíhuàn-zhī-lǚ
death-be-cannot-escape-DE-fantastic-DE-trip
'Death is a fantastic trip that cannot be avoided.'

The LIFE IS A JOURNEY metaphor, which belongs to the hierarchy of the event structure metaphor, also consists of two systems based on locations and objects, respectively (cf. Lakoff 1993; Yu 1998). Generalizations on the use of the metaphor can be made based on the observations made at both the linguistic and the inferential levels in Chinese. An abundance of surface realizations of this metaphor is found in use due to the ubiquitous and pervasive nature of the topic about which the metaphor is being employed. In particular, since events related to the end of life happen all the time as time passes, people have to talk about them. The examples to be discussed in this section show that Chinese metaphors that are employed to depict human end-of-life situations are found in various ways as shapes of journeys or courses of life that exhibit exactly the same process as the passage of human life. Linguistic metaphorical expressions are used to represent the lifelong topics of aging, becoming ill, and dying. For instance, as time goes along, people age, become ill, and die, just as plants grow, wither, and die. Such an example as in (6) illustrates a use of metaphor in portraying aged people as plants that are withering. Just as difficulties occur in a journey, impediments arise in life. Obscure diseases can hinder our motion as shown in (7). The examples in (8) and (9) indicate how our bodies need to be protected and how we must fight against diseases as they are considered as enemies that can attack and destroy our bodies.

(6) 老人是枯黃的植物
Lǎorén-shì-kūhuáng-de-zhíwù
Old-people-be-withered-DE-plants
'Old people are withered plants.'
(7) 被這怪病給阻礙了
Bèi-zhè-guàibìng-gěi-zǔài-le
BEI-this-strange-illness-GEI-hinder-LE
'Hindered by a mysterious illness'.
(8) 免疫系統隨時為健康備戰出擊
Miǎnyì-xìtǒng-suíshí-wéi-jiànkāng-bèizhàn-chūjī
Immune-system-always-for-health- get armed-fight
'The immune system is always armed and ready to fight for health.'
(9) 沒有被病痛掠倒
Méiyǒu-bèi-bìngtòng-luèdǎo
Not-BEI-illness-defeat
'Not defeated by illness'.

The systems of locations and objects also manifest when novel expressions are employed for depiction of aging and becoming ill. Inferential reasoning about views on aging or becoming ill follows as instances of inferential patterns occur. The states of aging and becoming ill are considered as locations. Example (10) illustrates aging as a deep and dark gulf that people can fall into, and the example in (11) illustrates that the old and ill bodies that people possess are like lonely boats with long-ago marks etched on them. The human body is understood as an object or machine that can lose its function and expire after time changes, as shown in (12)—an old body as an old worn-out car. Machines get rusty and lose function after being used for a certain amount of time, as illustrated in (13). Old bodies are like old cars. Once people get old and sick, their motion slows down, as illustrated in (14).

(10) 終於墜入老年黑淵
Zhōngyú-zhuìrù-lǎonián-hēiyuān
Finally-fall-into-old-age-black-hole
'Finally falling into the deep black hole of old age'.

(11) 身體是刻了舊痕的獨木舟
Shēntǐ-shì-kè-le-jiùhén-de-dúmùzhōu
Body-be-carve-LE-old-mark-DE-canoe
'The body is a canoe etched with old marks'.

(12) 老化的生命是古董老爺車
Lǎohuà-de-shēngmìng-shì-gǔdǒng-lǎoyéchē
Old-DE-life-be-old-car
'Old lives are old worn-out cars.'

(13) 身體總有使用年限,用久了就鏽了鈍了
Shēntǐ-zǒngyǒu-shǐyòng-niánxiàn-yòng-jiǔ-le-jiù-xiù-le-dùn-le
Body-certainly-have-use-year-limit-use-long-LE-JIU-rust-LE-blunt-LE
'The body has a limited time of use; it becomes rusted and blunt after being used for a long time.'

(14) 拖著病軀緩緩行至終點
Tuōzhe-bìngqū-huǎnhuǎn-xíng-zhì-zhōngdiǎn
drag-ZHE-ailing-body-slowly-walk-to-destination
'Dragging the ailing body and slowly advancing to the destination'.

The examples discussed so far have clearly shown how ordinary Chinese expressions—ranging from descriptions of various physical states of being to different kinds of journeys—are realized to metaphorically characterize end-of-life topics, including aging, becoming ill, and dying. The DEATH IS DEPARTURE metaphor has long been manifested crosslinguistically and cross-culturally. The following examples in (15) employing the system of locations demonstrate the concept of departure for death. When a person dies, he or she leaves the last station of the journey and says good-bye forever to people. When a person dies, he or she completes a performance or finishes a game, and takes a bow, leaving the stage forever.

(15) 離開人世的最後月台
Líkāi-rénshì-de-zuìhòu-yuètái
leave-human-world-DE-final-station-platform
'Departing from the world'
與世長辭
Yǔ-shì-zhǎng-cí
With- world-long-resign
'Departing from the world for long'
終曲謝幕
Zhōngqǔ-xièmù
Finale-take a curtain call
'Taking a curtain call from life'.

No one can avoid facing their end-of-life journey. The examples of Chinese usage discussed so far carry a certain negative evaluation of the topic. They manifest, on the one hand, the universality of the LIFE-IS-A-JOURNEY metaphor and, on the other hand, the specific cultural evaluation of this concept in Chinese. Since life is considered as so precious and valuable, the loss of life is reckoned as distressing. The value which people accord to having life makes them unwilling to face the end of life. End-of-life situations are often imagined as negative—topics not to be mentioned directly. The unwillingness to accept departure from life leads people to conjecture that leaving this journey implies continuing on another journey. Hence, the cycle of various kinds of journey goes again. All of the inferential patterns for reasoning recycle too. For instance, use of the cycle of day and night or of the four seasons to represent the cycle of life is commonly found in Chinese. The repetition of cycles of behavior or going on to another journey to gently represent the loss of life helps to tone down the sadness of having to face death. Consider the following examples. The first one in (16) explicitly indicates that it is time to start the next journey, referring to the journey after this lifetime. The cases in (17) directly refer to the locations after death—heaven, the Western Paradise or the Western Pure Land of Ultimate Bliss or *Sukhavati*. In (18), the first example realizes the novel expression of buying a business class ticket to go to paradise, and the second example is a very common euphemistic expression for dying 往生*wǎngsheng* 'going to life,' which explicitly represents death as an act preceding that of going on another life. All of these expressions manifest death as the departure of this life and the inception of the next journey. What is even more interesting about these examples is that they symbolically represent cultural perspectives. Not only is the leaving of this life transformed from a matter of sorrow to one of happiness, but leaving this life also means going happily on to another life—life in the pure land. The Western Pure Land of Ultimate Bliss, a sacred religious land of beauty that surpasses all other realms, comes from Buddhism. In the Pure Land traditions, entering the Pure Land is equivalent to the attainment of enlightenment. The land is believed to be a place in which no aging, no sickness, and hence no pain should arise at all, and it is a place for rebirth if people so wish.

(16) 啓程的時刻來臨
Qǐchéng-de-shíkè-láilín
start off-DE-time-come
'It is time to start on a new journey.'

(17) 上天堂/上西天/去極樂世界
Shàng-tiāntáng/Shàng-xītiān/Qù-jílèshìjiè
ascend-heaven/ascend-heaven/go-the Pure Land
'Going to heaven/Going to heaven/Going to the Pure Land'.

(18) 買一張登仙列車商務艙/往生
Mǎi-yī-zhāng-dēngxiān-lièchē-shāngwùcāng/wǎng-sheng
Buy-one-CL-aboard-immortal-train-business-class/bound-for-life
'Buying a business-class ticket for the train to heaven/Being bound for another life'.

Such a deep culturally loaded conception of the life cycle is even realized in novel expressions as shown by the passage in (19) in which the cosmos is metaphorically realized as a super-large computer, and each individual within it is a small computer with the capacity to record all of the details of his or her life. When a person is leaving this world, the small computer will review the life of that person at tremendous speed.

(19) 宇宙間有一部非常大的超級大電腦，每個人就像一部小電腦，錄著這一生的一切。既將離開人世的時候，小電腦會以極快的速度回顧這一生。
Yǔzhòu-jiān-yǒu-yī-bù-fēicháng-dà-de-chāojí-dà-diànnǎo měi-gè-rén-jiù xiàng-yī- bù-xiǎo-diànnǎo-lù-zhe-zhè-yīshēng-de-yīqiē-jìjiāng-líkāi-rénshì-de-shíhòu-xiǎo-diànnǎo-huì-yǐ-jí-kuài-de-sùdù-huígù-zhè-yīshēng
Universe-between-have-one-CL-very-big-DE-super-big-computer-everyone-just-like-one-CL-small-computer-record-ZHE-this-life-DE-everything-soon-leave-world- DE-time-small-computer-will-with-extremely-fast-DE-speed-review-this-life.
'While the universe is a supercomputer, each one of us is just like a small computer, recording everything happening in our lives. When we are about to leave the world, the small computers will review our lives at an extremely fast speed.'

9.5 Pedagogical Implications

In the extant literature of the teaching of Chinese for Specific Purposes, only a few studies have explored the use of Chinese for general common health themes. Some studies give an overview of aspects of Chinese medicine such as acupuncture (e.g., Peng 2016). Some provide useful situational Chinese sentence patterns for medical treatment such as how to make a doctor's appointment, how to get around in a hospital, how to describe physical symptoms to doctors, how to pay medical fees, and the like (e.g., Tsai 2017). Still others provide situational Chinese vocabulary or phrases for teaching foreign nursing worker aides (e.g., Yeh 2014). While these materials are useful for the situations described, there seems to be little systematic and in-depth investigation into the linguistic choices available in Chinese for topics such as aging, illness, and particularly death. Nevertheless, events like these will need to be discussed since they are unavoidable. To circumvent the problem of bringing up these topics directly, metaphorical expressions related to the above-mentioned topics function as useful devices to refer to such topics in indirect and euphemistic ways, hence maintaining interactional politeness as the uncomfortable feelings of the addressees are acknowledged.

Although quite natural, aging, getting sick and dying are still unpleasant situations that are distressing. Metaphorical expressions give rise to expressions producing comforting effects while conveying points about the unpleasant topics in an indirect manner. The projected imagery of going on another journey such as discussed in the previous section seems to make the issues related to death less difficult to accept by leveling down the degree of sadness and embarrassment. Hence, it is a useful undertaking to raise the awareness of foreign learners of Chinese on the metaphorical expressions used in Chinese and to improve their comprehension of such expressions.

9.5.1 Cognitive Learning and Explicit Instruction

Researchers in the field of second language acquisition contend that learners' awareness of linguistic motivations is the key to second language acquisition (Ammar et al. 2010; Ellis 2002). Cognitive perspectives on SLA support this claim and stress the beneficial effects of enhanced awareness in language learning (Boers and Lindstromberg 2006; Ellis 2006), particularly in the learning of metaphors. There is accumulated evidence in favor of the use of a cognitive-oriented method which focuses on providing training in the use of conceptual metaphors in raising the awareness of L2 learners, improving their comprehension, and enhancing retention as learning metaphor along with conceptual metaphor (cf. Boers 2000a, b). However, adopting conceptual metaphor as an instruction raises a concern about whether enough cognitive supports will be provided to the L2 learners. Only supplying a conceptual metaphor on its own requires L2 learners to elaborate the isomorphic structure which connects a source and target domain themselves, and the process may be constrained by the pre-existing L1 framework (Littlemore 2009; Ellis 2006) or be influenced by each individual's own cognitive style (Boers and Littlemore 2000; Littlemore 2001; Chen et al. 2014).

To address these concerns, more direct and explicit guidance should be integrated into any instruction. Kövecses (2001) proposes that a methodology which includes explicit instruction in the use of metaphors based on the understanding of metaphors as conceptual mappings can assist learners to form better conceptual associations between two domains. Instruction in ontological mapping, which maps the correspondences between the basic constituent elements of the source and target domains, may assist learners to associate entities across two distinct conceptual domains. On the other hand, instruction in epistemic mapping, which maps knowledge about the source domain onto knowledge about the target domain, may assist learners in understanding the reasoning involved in analogies.

Instruction in the use of conceptual mappings may allow learners to relate their knowledge of the abstract to the concrete. It not only values learners' awareness of semantic motivation, but also aids in resolving possible linguistic and cultural gaps by utilizing the already existent world knowledge and universal concepts of the learners.

Regarding concerns about the differences in the individual cognitive styles of learners, the application of conceptual mapping has been found to result in a better awareness of expressions which involve complicated and abstract mapping relationships, and to allow for better comprehension of expressions which are distinctive from L1 usages. Empirical evidence also supports the claims of potential benefits.

In the study of Chen et al. (2014), the cognitive styles of the participant EFL learners were cross-checked with their performances on an awareness test and on a retention test of metaphorical expressions. The results show that learners with a holistic/field-dependent cognitive style benefited more from being given explicit instruction about conceptual metaphors, while learners with an analytic/field-independent cognitive style performed better when supported with information on conceptual mappings. Instruction involving conceptual mappings is thus proved to facilitate the construction of correlative relationships between abstract concepts in the mind of the learner, and so the comparative ease in the learning of metaphors which is enjoyed by learners with holistic cognitive styles of learning can also be extended to those with analytic/field-independent cognitive styles of learning.

Finally, when dealing with culturally specific metaphors, instruction on conceptual mappings bridges some of the gaps between two cultures by displaying the correspondences between the entities of the two conceptual domains, and by facilitating L2 learners in linking what is known to what is not known. The empirical evidence from Kövecses' (2001) study with Hungarian EFL learners and from Chen and Lai's (2014, 2015) studies with Chinese EFL learners provides positive support for explicit instruction. Instruction related to the clear and detailed correspondences between two complex structures of conceptual domains can be illustrated by reference to conceptual mappings so as to facilitate L2 acquisition by helping learners to construct a new construal system of the L2 (Ellis 2006; Littlemore 2009).

In sum, while explicit instruction about the application of conceptual mappings and explicit instruction about conceptual metaphors are both helpful for L2 learners in learning metaphorical expressions, instruction about conceptual mappings can provide additional benefits to help learners overcome the problems caused by L1–L2 transfer and non-language influences, such as cognitive styles.

9.5.2 Implications for Teaching Chinese Metaphorical Euphemism

A review of the roles of cognitive learning and explicit instruction leads to a discussion of the pedagogical implications for teaching and learning metaphorical euphemisms. The principles include: (1) The conceptual metaphors in euphemistic expressions should be made explicit to learners, considering the metaphorical nature of the euphemisms; (2) the conceptual mappings which conceptual metaphors consist of should be introduced to learners to facilitate the use of the cognitive processes involved in the establishment of the capacity to construe the meaning of metaphor; (3) the use of explicit instruction, which emphasizes the learners' awareness of the metaphorical nature of the language through direct intervention, should be adopted. In abiding by these principles, the indirect and euphemistic features of the metaphoric euphemisms can be learned in a systematic and effective way.

In the present study of the use of end-of-life euphemism in Chinese, the analysis of Chinese euphemistic expressions of aging, illness, and death has revealed the metaphorical nature of such expressions: The method of the analysis of LIFE IS A JOURNEY which is an easily recognized generic conceptual metaphor euphemizing such topics can be extended to other metaphorical uses of LIFE IS A JOURNEY. An elaboration of the conceptual mappings of the conceptual metaphor LIFE IS A JOURNEY for instructional purposes is demonstrated in (20):

(20) Conceptual mappings of LIFE IS A JOURNEY
Ontological mappings of LIFE IS A JOURNEY:

Source: JOURNEY	←→	Target: LIFE
• Travelers	←→	• People
• Journey	←→	• Lifetime
• Fatigue/injury	←→	• Illness
• Destination	←→	• End of life

Epistemic mappings of LIFE IS A JOURNEY:

Source: JOURNEY	←→	Target: LIFE
• Travelers go through different places and have various experiences	←→	• People go through different life phases and have various life experiences
• Travelers travel a long way, suffer from fatigue or injury, and move closer to the end	←→	• People live for a long time, get old, and become weak in health and age as time passes
• Travelers finally reach the destination and stop traveling	←→	• People reach the end of life and cease living

The LIFE IS A JOURNEY metaphor can be inferred to apply not only in the case of human beings, but also in the case of other organisms that exhibit the property of life, such as living plants or animals. The knowledge of the life cycle can be applied to other organisms. Thus, the expressions regarding the various stages of the growth of plants can be illustrated through the extensions of LIFE IS A JOURNEY, as shown in (21). Examples of linguistic instantiation are referred to as in (6) to (9).

(21) Epistemic extensions of LIFE IS A JOURNEY on plants
Inference: Plants are organisms. → Plants live a life. → Life of plants is a journey.
Ontological mappings of LIFE OF PLANTS IS A JOURNEY:

Source: JOURNEY	←→	Target: LIFE OF PLANTS
• Travelers	←→	• Plants
• Journey	←→	• Growth
• Close to the end	←→	• Withering
• Destination	←→	• Death

Epistemic mappings of LIFE OF PLANTS IS A JOURNEY:

Source: JOURNEY	←→	Target: LIFE OF PLANTS
• Travelers go through different places and have various experiences	←→	• Plants go through different stages of form as they grow and mature
• Travelers travel a long way, suffer from fatigue or injury, and move closer to the end	←→	• Plants grow, suffer from sickness, and gradually wither
• Travelers finally reach the destination and stop traveling	←→	• Plants reach the end of life and die

Another type of extension of LIFE IS A JOURNEY is inferred with reference to the tools of traveling, or the vehicles used, to be specific. The extension is illustrated as in (22) and can be instantiated in examples (10)–(14).

(22) Epistemic extensions of LIFE IS A JOURNEY on vehicles
Inference: Traveling needs tools or vehicles. → Vehicles for traveling may include cars, ships, and planes. → Life is a journey in a (selected) vehicle.
Ontological mappings of LIFE IS A JOURNEY IN A VEHICLE:

Source: JOURNEY	←→	Target: LIFE
• Travelers	←→	• People
• Vehicles	←→	• Body
• Mechanical problems	←→	• Illness
• Destination	←→	• End of life

Epistemic mappings of LIFE IS A JOURNEY IN A VEHICLE:

Source: JOURNEY	←→	Target: LIFE
• Travelers in vehicles go through different places and have various experiences	←→	• People live with their bodies through different life phases
• Vehicles gradually get old, get rusted, or are impeded by obstacles on the way	←→	• People's bodies gradually age, become ill and sick, and even become disabled as time goes by
• Travelers **in** vehicles finally reach the destination and stop traveling	←→	• People reach the end of life, their bodies stop functioning, and they cease living

9.5.3 Implications for Chinese for the Purpose of Long-Term Nursing Education

Every journey comes to an end eventually. It is incontrovertible that there is no way to hide from mentioning the topics of aging, illness, and death. It is necessary for aged persons themselves, the family, and healthcare professionals to have the ability to talk about such taboo topics while maintaining pragmatic appropriateness.

The conceptual mappings demonstrated in 5.2 prove the feasibility of learning and teaching metaphorical euphemism through explicit instruction. Learners can be equipped with the formal linguistic knowledge of metaphorical euphemism that they need to develop productive skills, i.e., the ability to communicate with others. The comprehension of the pragmatic conditions for appropriate interaction is an essential indicator of pragmatic and cultural competence.

The world is facing the reality of the acceleration of the aging of its population. The number of people aged 65 and over is projected to grow from an estimated 500 million in 2010 to nearly 1.5 billion in 2050 (United Nations 2018). An aging population brings a greater demand for long-term care. Communication about end-of-life topics is no longer limited within the intimate groups, like family and friends, but has been extended to health professionals, including medical staff and caregivers. Issues such as the social distance caused by power imbalances may intensify the uncomfortableness and embarrassment, and thwart the initiation of conversation.

The use of language is central to the practice and provision of health care, and to mediate the ways of experiencing illness; it can both facilitate and hinder positive experiences and good quality in health care (Semino et al. 2018). The art of successful communication depends on using the right tool appropriately. Discussion between family and healthcare professionals about the long-term care plans for the loved one is encouraged. Communication between the elderly and the family is also necessary in order to raise awareness for the handling of important issues. Moreover, a direct understanding of meaning in communication between the elderly and the nursing staff can help relieve emotional stress and even palliate pain.

Metaphors are a tool for use in skillful communication. If used inappropriately, metaphors may cause misunderstandings and confusion; yet, with skillful application, metaphors can facilitate challenging discussions, improve patient comprehension, and help patients and their families to plan ahead. The Oxford Textbook of Palliative Nursing (Ferrell et al. 2001: 521) suggests that nursing staff use metaphors to discuss death with families. Researchers also encourage medical practitioners (e.g., Hui et al. 2017) and nursing staff (e.g., Berdes and Eckert 2007) to empathize with patients in pain or the elderly in nursing homes by using metaphors.

The journey metaphor illustrates the experience of illness, including the end of life. It can be used in a variety of ways, including to express both positive and negative emotions and to refer to different stages of life. The use of the metaphorical euphemism rooted in the LIFE IS A JOURNEY metaphor can empower the participants in a conversation to explain the stages of treatment, to discuss end-of-life plans, and to express feelings related to being aged or ill.

9.6 Conclusion

The ability to carry out social exchanges on taboo topics and ideas in an appropriate way is thus a demonstration of communicative competence. Such ability is necessary for medical professionals—the target language users for the medical and nursing purposes—to conduct effective communication with people looking for health advice; moreover, it is also important for language learners to properly express themselves about sensitive health topics, including, but not limited to, aging, becoming ill, dying, and death.

Such communicative competence is also stressed by internationally recognized language proficiency indexes: The ACTFL (2012: 4) emphasizes the appropriate use of language, saying that '[p]roficiency is the ability to use language in real world situations in a spontaneous interaction and non-rehearsed context and in a manner acceptable and appropriate to native speakers of the language.' The CEFR (Council of Europe 2011) defines communicative language competence as comprising components like linguistic, sociolinguistic, and pragmatic competences. While linguistic competence refers to the linguistic system itself, sociolinguistic competence refers to the knowledge of values and beliefs held by social groups, such as religion and taboos, and pragmatic competence refers to the functional uses of language. It is a necessary step for language learners to understand the essence, function, and purpose of euphemistic expressions to enhance their communicative competence. Knowing about and understanding the metaphorical nature of euphemistic expressions can therefore assist language learners to be aware of them, to comprehend them, and to produce them appropriately.

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Chapter 10
Expressing Uncertainty with Conditionals in Medical Discourse: A Comparison Across Genres

Wan-Hua Lin

Abstract The purpose of this study is to investigate the forms and functions of conditional construction in Chinese medical interactions, in terms of genres. Indefiniteness and uncertainty are ubiquitous in the medical realm; therefore, medical specialists tend to employ *if*-conditionals to qualify their commitment to the truthfulness of the propositions, as the inherent non-assertiveness of conditional clauses enables speakers/writers to hedge, hypothesize, and manage interactions with their audience/readers and simultaneously modify degrees of commitment to their propositions. The results demonstrate that the *if*-clause + consequence clause is the prototypical pattern of conditionals in Chinese. Forty-three conditional connectors are identified in spoken discourse, whereas ten are found in written discourse. The speakers prefer *ruguo* 如果 to initiate Chinese *if*-conditionals, while the writers favor monosyllabic *ruo* 若. Conditionals serve different communicative purposes in the physician-to-physician discourse: 12 functions are observed in either speaking or writing, respectively, with nine of them shared by both genres and the other three identified exclusively in the respective genre. To meet the communication-oriented goal of foreign language teaching, three pedagogical applications that are beneficial for both Chinese language instructors and learners are generalized and discussed.

10.1 Introduction

The analysis of conditionality has been popular since the late 1970s. *If*-conditionals are assumed to constitutional natural class of linguistic phenomena in every world language, which can be fully interpreted by Ferguson et al.'s (1986: 3) claim:

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> Conditional (*if-then*) constructions directly reflect the characteristically human ability to reason about alternative situations, to make inferences based on incomplete information, to imagine possible correlations between situations, and to understand how the world would change if certain correlations were different.

In conditionals, the consequence (apodosis) is considered as a speculative state of affairs since its value depends on a hypothetical condition (protasis). The protasis (*if*-clause) typically sets up a certain situation that departs in some degree from the actual world, and the apodosis denotes the outcome depending on the protasis (Ferguson 2001). Based on its natural non-assertive feature, *if*-conditionals essentially imply uncertainty about actual circumstances, and they are used to qualify the speaker's/writer's commitment to the truth of a proposition (Perkins 1983).

In English, *if* is the leading character for conditionals, and yet the functions of conditionals vary in accordance with disciplines and genres. By characterizing the meaning of the three conditional domains proposed by Sweetser (1990),[1] Werth (1997) argues that the epistemic domain conditional 'corresponds to at least two communicative functions, hypothetic deduction and deduction from a known fact to a conclusion', which requires world knowledge to complete the reasoning process. The following examples elicited from Werth's study display these two types of epistemic conditional:

(1) If he doesn't answer, then he's probably at his girlfriend's house.
(2) If it's Tuesday, this must be Belgium.

(Werth 1997: 247)

Example (1) is a hypothetical-deductive conditional, given a hypothetical situation, and the conclusion is drawn from a number of possible outcomes. It is the knowledge about this person's habits that helps to draw the conclusion. Concerning (2), the information 'It's Tuesday' is taken as known information, and on the basis of this extant knowledge, the process of reasoning is conducted. In this example, the *if*-clause does not set up a situation, but rather offers a piece of given information, a form of *modus ponens*, as the initial statement of the syllogism.

If-conditionals have been widely applied in both casual and academic discourses (Mead and Henderson 1983; Ford and Thompson 1986; Ford 1997; Hyland 1998; Ferguson 2001; Varttala 2001), whether spoken or written, as they can be utilized to hypothesize, establish an alternative argumentative space, and shape the writer-reader/speaker-hearer relationship. Ford and Thompson (1986) examine the discourse functions of conditionals in both spoken and written English, and it is observed that conditionals are used more in spoken discourse (7.2 conditionals per 1000 words) than in written text (4.6 conditionals per 1000 words). The initial conditional clauses outnumber final conditional clauses by a ratio of approximately three-to-one. Ford and Thompson then claim that the preponderance of initial conditional clauses is a language-universal phenomenon. Ford (1997) further explores discourse functions of conditionals from 13 casual conversations between

[1]They are the content domain, epistemic domain, and speech-act domain.

native American English speakers, and she finds that the *if*-clause format allows the speaker to make his or her current turn relevant to the prior talk, to display a new or divergent understanding, to soften disagreeing turns, to make difficult moves hypothetical, and to show an acknowledgement of the imposition upon others. *If*-clauses are employed as vehicles to maneuver masterly in the delicate interaction, as politeness and face considerations figure prominently in these face-to-face discourses. Based on the conversation corpus, Ford suggests that hypothetical formats, presented in *if*-conditionals, 'treat their content as provisional, less than certain' (p. 389). Since there is always an alternative implicitly acknowledged, with *if*-conditionals, speakers are able to utter their propositions without making a full commitment.

The comparison of *if*-conditionals in spoken versus written discourse is also conducted in the medical profession (Ferguson 2001; Cater-Thomas and Rowley Jolivet 2008). Ferguson (2001) probes *if*-conditionals in three medical genres (research articles, journal editorials, and doctor–patient consultations), attempting to determine whether conditionals function distinctly between naturally occurring discourse and intuition-derived data. The results show that a significant variation exists across genres. Conditionals occur with higher frequency in spoken than in written discourse, which is consistent with Ford and Thompson's (1986) findings. Conditionals proved to be a useful resource for managing the interaction with politeness and reassurances of consultations, which are not found in RAs and editorials; conditional clauses without apodoses and clauses distributed across speaker turns to occur exclusively in the spoken genre. Similar to Ferguson's (2001) research, Cater-Thomas and Rowley-Jolivet (2008) explore how *if*-conditionals are employed in three medical genres, namely research articles (RA), conference presentations (CP), and editorials (ED). They point out that *if-con*ditionals are a potentially highly valuable resource in academic discourse since the inherent non-assertiveness characteristic can be utilized for hypothesizing, hedging, and setting up an alternative argumentative space within which the author can manipulate and situate the research claim. Three macro-functions are identified in their data, factual,[2] refocusing,[3] and discourse management functions.[4] The results demonstrate that the majority of *if*-conditionals occur in the initial position (59% initial position vs. 33% final position), and the communicative purposes found in spoken data are distinct from those in the written genre. In the RA, factual conditionals (68% of occurrences) are the preferred function, while discourse management functions are absent in this genre. The distribution of functions is strongly related to the discourse features of scientific research, which seek to establish facticity of its statements. In the CP, the three functions

[2]The factuals category covers many of the features that have been called course of event, generic, or habitual conditionals in other approaches (Athanasiadou and Dirven 1997; Ferguson 2001).

[3]The refocusing category comprises occurrences which have a marked argumentative function. The traditionally referred to 'hypothetical conditionals' in other approaches (Athanasiadou and Dirven 1997) are included in this category.

[4]The discourse management category involves occurrences which guide readers and listeners to the author's intentions and the development of the text.

distributed evenly, with factuals 41%, refocusing 28%, and discourse management 31%. The function which marks the real specificity of the CP genre is discourse management, which is absent in the highly standardized medical RAs. In conferences, audiences expect to hear breaking news and up-to-date results, and the discourse management functions enable speakers to lead their audience through the talk by 'signposting its structure, chunking it into manageable segments and marking topic boundaries' (p. 199). *If*-conditionals are one of the preferred ways for speakers to guide their audiences in a polite way. In the ED, the refocusing function of *if*-clauses is preferred, which accounts for 87.7%. The refocusing *if*-conditionals are used to expand or contract the argumentative space in some type of speculative or hypothetical world. With this category, hypotheses and predictions are the preferred sub-function (together 71.3% of occurrences). The relative scarcity of factuals (10.5%) is because there is little or no need for editorials to describe methodology and research results. The almost entire absence of discourse management functions (1.8%) is because the editorials are usually short and rarely contain tables and figures. Thus, the authors do not need discourse management functions to explicate their findings or argue for ratifications from readers. Cater-Thomas and Rowley-Jolivet further conclude that 'prognosis in medical research is fraught with uncertainty, making prediction extremely hazardous, and although a certain amount of hypothesizing is in order, speculative forays into imaginary worlds would have little scientific weight' (2008: 203).

A number of studies exist that focus on or involve exploring conditionality in Mandarin Chinese (Eifring 1991; Yeh 2000; Wang 2002, 2006; Chen 2008; Lo 2010; Wu 2012; Zhuo 2017). Based on 15 Chinese spoken discourse (approximately 150 min), Yeh (2000) finds that 88% of conditional clauses occur prior to their associated material and *ruguo*…如果… 'if', *ruguo*…*de hua* 如果…的話 'if', …*de hua* …的話 'if', *jiaru*…*de hua* 假如…的話 'if', *jiashe*…假設… 'if', *wanyi*…萬一… 'if', and *chule*…*yiwai* 除了…以外 'besides' are the conditional connectors observed in her spoken data. Speakers normally employ initial conditionals to create backgrounds for the following hypothetical or conditioning utterances. The postposed conditional clauses are more likely to be taken as a post-completion extension, functioning as self-editing for interactional needs. Wang (2002, 2006) examines adverbial clauses applied in spoken and written Chinese discourses. The conditional connectors found in her data include *ruguo*…如果 'if'…, *jiaru*…假如… 'if', …*de hua*...的話 'if', *chufei*…除非… 'unless', *youshi*… 要是… 'in case that', and *tanguo*…倘若… 'in case that.' Her results also show that an extremely large portion of conditional clauses occurs before their associated main clauses, with 77.4% in speaking and 96.3% in writing. In both spoken and written genres, initial conditionals serve to establish an optional situation frame for the upcoming assertion, whereas final conditionals are mainly used to comment on a condition that is relevant to the preceding modified clause. In Chen's (2008) naturally occurring conversation data, speakers utilize conditionals to mitigate the force of utterances when the speech act might threaten the addressee's face. In addition, conditionals are utilized to reduce the degree of commitment to the propositions, while elaborating hypothetical situations. Lo (2010) investigates realization and distribution of Chinese hedges in academic journal papers in three different fields.[5] She observes that writers apply conditionals to express uncertainty. Conditionals are mainly used to qualify the truth of the authors' plausible reasoning and to weaken the imposing force of their suggestions and conclusions. In view of a usage-based constructionist approach, Zhou (2017) analyzes three major pairings of counterfactual constructions in Chinese, namely the [*yaobushi* X, Y] construction, the [COND X, *zaojiu* Y] construction, and the [*ruguo zao* X, Y] construction, with particular patterns of casual attribution and discourse functions in ordinary communication. To explore the collocational preferences and idiosyncratic constraints of [*yaobushi* X, Y], the co-occurring modality makers in the apodosis are examined. The results show that 35 modality markers[6] with distinct lexemes are found to attract the construction. All of these collexemes 'uniformly signal speaker stance in the sense that they are subjective and evaluative, conveying both epistemic and affective states' (p. 36). In addition, the causal attribution denoted by this construction is highly personal, as the collocational preference of the first- and second-person pronouns over other personal pronouns is observed in the protasis. The pragmatic functions served by the [*yaobushi* X, Y] construction involve assigning credit and placing blame, depending on the affective valence of the outcome. The [COND X, *zaojiu* Y] construction contains two subtypes, [*ruguo* X, *zaojiu* Y] and [*yaosh*i X, *zaojiu* Y], and significant differences exist between these two subtypes in terms of collocational preference and constraints. In Zhou's corpus data, seven ways of presenting the NP in the protasis are identified. The seven structures comprise six collocates, each combined with the NP and a bare NP. The collocates include the copula *shi* 是, the negative copula *bushi* 不是, existential *you* 有, its negative counterpart *meiyou* 沒有, locative *zai* 在, and verb *huan*(*cheng*) 換成 'switch'. The NP presentation with *shi*, *you*, *bushi*, and *meiyou* prefers [*ruguo* X, *zaojiu* Y], whereas the NP with *zai*, *huan*(*cheng*), and a bare NP prefer [*yaosh*i X, *zaojiu* Y] construction. Another significant discrepancy found between these two subtypes is that the *bushi* NP rejects [*yaosh*i X, *zaojiu* Y], while the bare NP rejects [*ruguo* X, *zaojiu* Y], in which case the distinction 'is not a matter of degree or preference, but pertains to categorical collocational constraints' (p. 41). The [*ruguo* X, *zaojiu* Y] construction is applied to express relief and gratitude for an actual positive outcome and to refute an argument with the assistance of heightened affective force. The [*yaosh*i X, *zaojiu* Y] construction serves to create a hyperbole that magnifies the affective or argumentative force of an utterance. The collocational analysis of the [*ruguo zao* X, Y] construction reveals a strong attraction between the construction and verbs designating the epistemic states of knowing. The verb *zhidao* 知道 'know' is the top collexeme, followed by *renshi* 認識 'know', *faxian* 發現 'discover', and *liaojie* 了解 'be informed.' The collocational preference indicates an alternative outcome and causally attributes its

[5]The three fields are biology, business, and history and literature.

[6]The two highest ranked modal expressions are *buhui* 'won't' and *hui* 'will which express high epistemic certainty'.

non-occurrence to the lack of timely knowledge or action that is pivotal to the alternative outcome. The expression of regret serves as a primary function of this construction. Zhou (2017) further argues that ‘counterfactual constructions in Chinese convey affective evaluation and casual attribution,’ and the functions served by these constructions ‘invariably revolve around affectively significant, yet ordinary and ubiquitous human experiences’ (p. 48).

While some attention in conditionality has been directed toward casual spoken and academic written discourses, both in English and Chinese, conditional construction in the medical discipline has not yet received advertency. Medicine is tightly related to matters of human welfare, as our lives have immediate entanglement with medical science. Medical professionals, especially physicians, are generally regarded as consummate experts, who know everything related to medicine and who possess the professional knowledge to treat patients’ health problems. However, the reality seems not to meet ordinary people’s expectations, as uncertainty always exists in the medical discipline (Bosk 1980; Schwartz et al. 1981; Prince et al. 1982; Kong et al. 1986; Simon 1988; Levenkron and Johnson 1988; Tsai 2006; Carney et al. 2007; Srivastava 2011; Smith et al. 2013). Doctors realize that, in clinical practice, there are layers upon layers of explanation, and ‘it’s sometimes exceedingly difficult to arrive at simple, understandable definitions of diseases and how they afflict us’ (Srivastava 2011). As clearly indicated by Bosk (1980: 72):

> It is rarely the case that signs and symptoms are unambiguous markers of specific diseases. Signs and symptoms often do not appear exactly as described in textbooks, and the full constellation that describes the “class” presentation of a disease is often not seen (p. 72).

Uncertainty is commonplace clinically, and it is the most basic problem that all physicians face while making diagnoses and prescribing treatments. However, uncertainty arises not only in diagnosis in doctor–patient communication, but also in descriptions of physical findings in physician-to-physician discourse. Prince et al. (1982) examine physicians’ talk in the rounds of a pediatric intensive care unit and identify an uncommonly high rate of hedged assertions. The common hedges identified in the physician-to-physician discourse are classified into approximators (e.g., *sort of*, *about*, *around*, and *approximately*) and shields (e.g., *I think*, *according to her estimates*). The high frequency and great variety of hedging devices observed in the physicians’ talk demonstrate that uncertainty constitutes a ubiquitous feature in the medical realm. In the present study, I investigate the realization of conditionality in Taiwan’s medical field, attempting to explore and compare Chinese conditional forms and functions applied in medical research articles and physician-to-physician interaction.

This chapter is composed of seven sections. The introduction presents the general features and usage of conditional construction, literature reviews on conditionality phenomena in both English and Chinese languages, the correlation between uncertainty and medical science, and the purpose of this study. Description of the database and analytical framework is introduced in Sect. 10.2. In Sect. 10.3, I compare the frequency, positions, and forms of conditionals by means of genres. Next, I discuss the communicative purposes which are found to be shared by the spoken and the written discourses. In Sect. 10.5, I further expatiate the functions observed exclusively in either genre. Section 10.6 recapitulates the findings. Chinese language pedagogy with respect to conditionals is also addressed in this section. I then make my concluding remarks in Sect. 10.7.

10.2 Data and Analysis

The data consist of both spoken and written genres: ten lectures obtained from a teaching hospital located in central Taiwan (HOS hereafter) and 40 research articles selected from two leading medical journals published in Taiwan.

Ten speeches, which amount to 12 h and 13 min, from the 'intra-hospital conference', were chosen as the spoken corpus for the present study. The 'intra-hospital conference' is one of the educational activities held in the hospital. They regularly invite medical specialists, either from their own hospital, other local hospitals, out-of-town institutions, or even overseas, to share advanced knowledge and up-to-date medical technologies in the conference. Almost all of the audiences are employees working for HOS, including physicians, residents, interns, nurses, and others from various departments. The conference is a specialist-to-specialist discourse since the participants are comprised of medical specialists, and the invited speakers are experts of different medical departments, either from HOS itself, other medical institutions of Taiwan, or foreign countries. All of the chosen speakers are Taiwanese physicians who work in HOS. 'Peer lecture' is termed especially for my spoken data because those physician-to-physician speeches seem to embrace a hybrid characteristic which combines features from lectures and seminars.

The written database is composed of 40 Chinese medical research articles, published in 2012 and 2013, from two leading medical journals in Taiwan, namely The Journal of Internal Medicine of Taiwan (內科學誌) and Taiwan Medical Journal (台灣醫界). The Journal of Internal Medicine of Taiwan is published by The Taiwan Society of Internal Medicine, and Taiwan Medical Journal is published by The Taiwan Medical Association. As the spoken data cover not only internal medicine (e.g., infectious diseases, chest medicine, endocrinology and metabolism), but also other medical specialties (orthopedics, radiation oncology, physical medicine, and rehabilitation), these two journals are recommended by several speakers as the written counterpart on a par with the academic spoken corpus, given that both journals possess an accredited reputation and are well acknowledged in the Taiwan medical field. For both journals, the research articles were written by medical professionals from various disciplines, and the contents include clinical studies, medical opinions, insights gained from medical experience, medical administration, and professional affairs.

Discourse analysis and a corpus-based approach are adopted to analyze the data. Discourse analysis is used to examine how humans use language to communicate and 'in particular, how addressers construct linguistic messages for addressees and how addressees work on linguistic messages in order to interpret them' (Brown and

Yule 1983: ix). Since discourse analysis is essentially the analysis of language in use, it cannot be restricted to the description of linguistic forms. Likewise, linguistic forms are considered to be inseparable from the functions or purposes which those forms are designed to serve. For exploring the relationship between theoretical concepts and actual language use, an empirical study is critical. Corpus data are a useful and significant means for the empirical analysis, which not only provide a basis for establishing categories, but also assist in assessing existing classification systems. In this study, the analysis is both qualitative and quantitative. I explicate the discourse of both medical genres through representative examples and theoretical supports. The quantitative analysis, including statistical numbers and tables, is used to characterize the distribution and frequency of various conditional forms and functions utilized in both the spoken and written data, and for their further comparison.

My data comprise spoken and written genres, and three languages are observed in the medical communication. In the written data, Mandarin and English (indicated with encircling brackets <E E>) are the main codes, whereas in the spoken discourse, three different codes are used, which are Mandarin, Taiwanese (indicated with encircling brackets <T T>), and English. In Taiwan, most of the speakers are native speakers of Mandarin and Taiwanese, so they code switch unconsciously with both languages. Furthermore, as all of the participants are medical professionals, English medical jargon is employed frequently in the speeches. In medical specialist-to-specialist communication, either in speaking or writing, medical jargon is usually transmitted in its original form. Since each of these three codes is utilized in a considerable amount in the spoken discourse, they are all included in the transcription. If we only focus on Mandarin and exclude Taiwanese and English, the utterances would become fragmented, and the meanings would be incomplete.

10.3 Frequency and Forms of Conditionals

There are 486 conditionals employed by medical professions in face-to-face communication, whereas 313 conditional formats are found in the medical journal articles. Unlike English, a Chinese word may contain more than one character, and each character may stand alone as another Chinese word. The Chinese Word Segmentation System[7] is used to segment my data into words. Table 10.1 displays the numbers of conditionals used in the spoken and written data and the total words numbers of these two genres, respectively.

As shown in Table 10.1, conditional clauses occur more in spoken than in written discourse, with 3.63 conditionals per 1000 words in speaking and 2.62 conditionals per 1000 words in writing. The finding confirms Ford and Thompson's

[7]The Chinese Word Segmentation System is a free program offered online by Academia Sinica of Taiwan, which can be accessed at http://ckipsvr.iis.sinica.edu.tw/.

Table 10.1 Distribution of conditionals in spoken versus written genres

	Spoken	Written
Number of conditionals	486	313
Total of words	133,889	119,579
Conditionals/per 1000 words	3.63	2.62

Table 10.2 Distribution of conditionals in terms of genres across three studies

Studies	Genres		
Ford and Thompson (1986)	Spoken	Written	
Conditionals/per 1000 words	7.2	4.6	
Carter-Thomas and Rowley-Jolivet (2008)	CP	RA	ED
Conditionals/per 1000 words	3.85	1.06	1.8
Lin (2018) The present study	Spoken	Written	
Conditionals/per 1000 words	3.63	2.62	

(1986) academic study and Carter-Thomas and Rowley-Jolivet's (2008) medical research. Table 10.2 illustrates the distribution of conditionals in the three studies, and the frequency is displayed in terms of genres.

Table 10.2 demonstrates *if*-conditionals are applied more frequently in speaking than in writing, irrespective of language. Among the studies, conditional clauses are produced the most in Ford and Thompson's study. The frequency of *if*-conditionals in the spoken discourse is approximately two times more than that in the spoken data of the other two studies, while the frequency in the written discourse is much higher than that in the other two studies, as well. Carter-Thomas and Rowley-Jolivet point out that the frequency of *if*-conditionals varies considerably according to genre. In their study, the occurrences of conditional clauses range from only 1.06 per 1000 words in the RA to almost four times as many in the CP (3.85 per 1000 words). The distribution of conditionals found in the present study seems to be closer to Carter-Thomas and Rowley-Jolivet's findings. This similarity is most likely due to the research area from which the data come. Both Carter-Thomas and Rowley-Jolivet's and my study take medical science as the research core. In Ford and Thompson's research, the sources of spoken data include lectures, a presentation, conversations (official encounters), and meetings, whereas the written data are made up of three books.

A conditional construction normally takes two clauses to complete its meaning and function. The prototypical pattern of conditionals is *if*-clause + consequence clause, which is borne out by my Chinese data. Table 10.3 shows the frequency of positions where the conditional clauses appear.

In Table 10.3, we see that initial positioning is positively the norm for both genres. This result not only conforms to Ford and Thompson's (1986) and Carter-Thomas and Rowley-Jolivet's (2008) English data, but also to Yeh's (2000)

Table 10.3 Distribution of positions in spoken versus written conditionals

	Spoken	Written
Initial conditionals	485 (99.8%)	313 (100%)
Final conditionals	1 (0.2%)	0 (0%)
Total	486 (100%)	313 (100%)

and Wang's (2002, 2006) Chinese data. Although Ford and Thompson (1986) claim that the initial conditional clauses are dominant and universal, it remains surprising to identify only one example which does not occur in the initial position from my Chinese corpus. This very final positioning conditional is identified in my spoken data, whereas all of the conditional clauses in the writing occur exclusively in the preposed position. This final positioning example will be presented and discussed in detail in Sect. 10.5.1.

Different from English, where *if* is the protagonist for conditionals, in Chinese, a number of words, phrases, and larger units with temporal adverbs, negators, or other linguistic forms can be utilized to connect conditional format, such as *ruguo* 如果, *ruguo…dehua* 如果…的話, *ruguo…, jiu…* 如果…就…, *yaoshi…, jiu* 要是…, 就, *yaobushi…, zaojiu* 要不是…, 早就…, *chufei…, fouze…* 除非…, 否則…. Feng and Yi's (2006) study demonstrates that Chinese counterfactual thoughts are presented and comprehended by larger, yet irreducible, units. Several lexical and syntactic markers are found to be strongly associated with the counterfactual reading of Chinese sentences. The markers identified in their data include temporal reference *zao* 早, aspect marker *le* 了, negators *yobushi* 要不是, *youburan* 要不然, predicates *jiuhaole* 就好了, *haiyiwei* 還以爲, and *…dehua* 的話. Feng and Yi argue that these linguistic forms can either independently, without explicit contextual information, signal a counterfactual reading or work with contextual cues to highlight counterfactuality. The constructions, *yaobushi* X, Y, *ruguo* X, *zaojiu* Y, *yaoshi* X, *zaojiu* Y, and *ruguo zao* X, Y, discussed in Zhou's (2017) study, also support the idea that Chinese conditionality is essentially presented 'in the form of language-specific combinations of multiple linguistic structures' (p. 32). In the present study, the conditional forms merely refer to the linguistic forms identified in the protasis; therefore, the linking elements attached in the apodosis will be omitted.

In the Chinese corpus, 43 distinct syntactic forms are observed in the spoken discourse, whereas ten are identified in the written discourse. Table 10.4 illustrates the top ten conditional forms found in speaking, compared with all of the forms from writing.

Table 10.4 shows that speakers prefer *ruguo* 如果 'if' to initiate Chinese conditionals, while writers favor the monosyllabic *ruo* 若 'if.' These two words are seen to occupy an overwhelmingly high proportion in either genre, with 41.77% in the spoken discourse and 43.13% in the written discourse. In addition to words, the speakers and writers also make good use of phrases to build conditional clauses, such as *ruoguo…dehua* 如果…的話 'if', *ruguo…deshihou* 如果…的時候 'if', and *yidan…shi* 一旦…時 'in case.' When comparing the conditional forms used

Table 10.4 Forms and frequency of conditionals in spoken versus written genres

Spoken	*N*	%	Written	*N*	%
ruguo 如果	203	41.77	*ruo* 若	135	43.13
ruguo…dehua 如果…的話	68	13.99	*ruguo* 如果	84	26.84
<T *nah* T> 若	42	8.64	*ruo* 如	38	12.14
ruguoshuo 如果說	34	7.00	*yidan* 一旦	33	10.54
jiashe 假設	25	5.14	*tangruo* 倘若	10	3.19
ruguo…deshihou 如果…的時候	14	2.88	*jiaru* 假如	5	1.60
*jiaru*假如	13	2.67	*ruguo…dehua* 如果…的話	3	0.96
ruguoshuo…dehua 如果說…的話	12	2.47	*yidan…shi* 一旦…時	2	0.64
jiashishuo 假使說	8	1.65	*ruo…shi* 若…時	2	0.64
wanyi 萬一	8	1.65	*ruguoyi…eryan* 如果以…而言	1	0.32

between these two genres, we see that the spoken forms heavily outnumber written forms by more than four times (43 in speaking vs. 10 in writing). This great discrepancy is presumably due to the difference in genre. Normally, speech is recognized as less planned and more highly contextualized. During the talks, speakers need to acknowledge time constraints, cope with immediate feedback, and meet audience expectations. In academic writing, the research article has its conventional structure and particular linguistic features. Rowley-Jolivet (2002) points out that the written article, especially the research report, has been seen as a textual artifact. Without direct contact with an audience, scientific writing is removed further from spontaneous language. The linguistic expressions used in writing are essentially more restricted than in speech, owing to the formality, and rhetoric convention in writing. The distinct characteristics between these two genres account for the discrepancy in numbers of conditional forms. Among these various forms, certain of them overlap between both genres, such as *ruguo* 如果 'if', *jiaru* 假如 'if', and *ruguo…dehua* 如果…的話 'if.' It is worth noting that the forms used in the spoken data seem to be relatively ordinary and colloquial, while those utilized in the written data are formal and literary.

10.4 Functions of Conditionals Shared by Both Genres

The conditionals found in my corpus serve a variety of functions. They can be utilized to make deductions, either from hypotheses or known information; they can be used to offer support, to make suggestions, or to make predictions; they can be employed to call for attention; they may serve as warnings or invitations; and they may be used to announce further actions. Some of the functions mentioned above

Table 10.5 Functions of conditionals observed in spoken versus written genres

Spoken	Written
A. hypothetic deduction	A. hypothetic deduction
B. deduction from known information	B. deduction from known information
C. supportive examples	C. supportive examples
D. suggestion	D. suggestion
E. prediction upon conditions	E. prediction upon conditions
F. treatments offering upon alternative condition	F. treatments offering upon alternative condition
G. explanation for successive treatment	G. explanation for successive treatment
H. warning	H. warning
I. call for attention	I. call for attention
J. circumscription of the scope	**J. cause–effect relationship**
K. announcement for potential future actions	**K. categorization**
L. invitation	**L. reference offering**

can be observed in both genres, whereas some are employed exclusively in either. Table 10.5 illustrates different functions identified in the medical discourse in terms of genres.

As shown in Table 10.5, conditional clauses are identified to serve 12 communicative purposes in each genre, nine of which are shared by both genres. The three exclusive functions of either genre are marked in bold. Conditional clauses with these nine shared functions will be discussed in this section, and the unique functions exclusively observed in either genre will be explained afterwards in Sect. 10.5. In the following, each function will be explicated with two examples, one from the spoken data and the other from the written data:

(3) 如果我們好好地去..照顧這種傷口的話, 可以降低那個醫療成本 hon, 也會提高病人的那個滿意度 hon。(S5[8])
Rúguǒ wǒmen hǎohǎo de qù.. zhàogù zhè zhǒng shāngkǒu dehuà, kěyǐ jiàngdī nàgè yīliáo chéngběn hon, yě huì tígāo bìngrén dì nàgè mǎnyì dù hon
'**If** we can take care of this kind of wound carefully, it can reduce the cost of medical care hon, and that will also improve patients' satisfaction hon.'

(4) 如果腫瘤躲避免疫系統監控 (tumor evasion) 而不表現MHC, 這時T細胞就無法偵測、 清除癌細胞了。(W2)
Rúguǒ zhǒngliú duǒbì miǎnyì xìtǒng jiānkòng (tumor evasion) ér bù biǎoxiàn MHC, zhèsh T xìbāo jiù wúfǎ zhēn cè, qīngchú ái xìbāole

[8]The source is specified at the end of each example. S refers to speaking and W stands for writing. The digit for spoken data presents the code of the speaker; W1 means that the example is extracted from the Journal of Internal Medicine of Taiwan, while W2 is from Taiwan Medical Journal.

‘**If** the tumor escapes from the monitoring of the immune system (tumor evasion), without performance MHC, then T cells cannot detect or remove the cancer cells.’

Conditional clauses in examples (3) and (4) are used to make deductions. These two examples clearly exhibit a dependent relationship between the protasis and the apodosis. In other words, the possible occurrence of the consequence depends on the protasis (*if*-clause). The hypothetic conditions proposed in (3) and (4) are indeterminate: it outlines an ideal prospect for the further in (3), while it hypothesizes a possible condition in (4).

(5) 如果你遇到一個病人有..有. 有呼吸道感染, 那像細菌感染, 可是也以 lymphocytosis 爲主, 啊你一定要考慮百日咳。(S7)
Rúguǒ nǐ yù dào yīgè bìngrén yǒu… yǒu. yǒu hūxīdào gǎnrǎn, nà xiàng xìjùn gǎnrǎn, kěshì yě yǐ lymphocytosis wéi zhǔ, a nǐ yīdìng yào kǎolǜ bǎirìké
‘**If** you encounter a patient who has respiratory infections, analogous to bacterial infections, but also has the symptoms of lymphocytosis, then you must consider it as pertussis.’

(6) 如果冠狀動脈是正常, 造成cTn升高的原因不外乎是第2型心肌梗塞, 或者非冠狀動脈因素引發。(W1)
Rúguǒ guānzhuàng dòngmài shì zhèngcháng, zàochéng cTn shēng gāo de yuányīn bùwàihū shì dì 2 xíng xīnjī gěngsè, huòzhě fēi guānzhuàng dòngmài yīnsù yǐnfā
‘If the coronary arteries are normal, the reasons for elevated cTn must be type 2 myocardial infarction, or non-coronary factors.’

Similar to (3) and (4), examples (5) and (6) also make deductions with the conditional format; however, the deductions made in these two examples are based on given information, which is extant knowledge. The process of reasoning corresponds with Werth’s (1997) example, i.e., the conditional clause in (2). With the given symptoms, the outcomes are highly predictable, and therefore, linguistic terms with a firm tone are employed to cooperate with conditionals to strengthen the predictions, as *yiding yao kaulu* 一定要考慮 ‘must consider’ in (5) and *buwaihu shi* 不外乎是 ‘must be’ in (6).

(7) 如果是一個<E streptococcus E>的一個<E infection E>, 那<E penicillin E>不一定會比<E vancomycin E>來得差 hon, 尤其是在<E lung E>的<E infection E>, <E penicillin E>可能會比另外來得好。(S4)
Rúguǒ shì yīgè tramuro de yīgè infection, nà penicillin bù yīdìng huì bǐ vancomycin láidé chà hon, yóuqí shì zài lung de infection, penicillin kěnéng huì bǐ lìngwài láidé hǎo
‘**If** the infection is caused by streptococcus, penicillin is not bound to be worse than vancomycin. Especially in lung infections, penicillin may be better than others.’

(8) 而在執行經鼻內視鏡檢查過程中，因內視鏡並非由口進入，病患可以說話、觀看內視鏡影像，以及和內視鏡醫師溝通。如檢查過程中有任何不適或需求，也可立即表達與反應。(W1)
Ér zài zhíxíng jīng bí nèi shì jìng jiǎnchá guòchéng zhōng, yīn nèi shì jìng bìngfēi yóu kǒu jìnrù, bìng huàn kěyǐ shuōhuà, guānkàn nèi shì jìng yǐngxiàng, yǐjí hé nèi shì jìng yīshī gōutōng. **Rú** jiǎnchá guòchéng zhōng yǒu rènhé bùshì huò xūqiú, yě kě lìjí biǎodá yǔ fǎnyìng
'In the implementation of transnasal endoscopy procedure, the endoscope does not go through the oral cavity, so the patient can talk, watch endoscopic images, as well as communicate with the endoscopist. **If** there is any discomfort or demands during the examination, the patient can react immediately.'

If-conditionals in (7) and (8) function as supportive examples for the speaker's/writers' claims. The speaker of example (7) advocates earlier that there is not a good or bad distinction on antibiotics. As long as they can function properly and effectively on patients' problems, they are all good ones. The so-called good or bad distinction is only a myth held by the majority. Example (7), a conditional utterance, is then offered as support for the speaker's advocate. He takes streptococcus infection as an example, asserting that vancomycin is not necessarily able to treat the infection better. Especially in lung infections, penicillin may be a superior choice to vancomycin, although vancomycin is traditionally regarded as a stronger and better antibiotic. The writers of (8) introduce the transnasal endoscopy, which has become the first line diagnostic and therapeutic tool of gastrointestinal disease. The writers regard this new equipment as a savior for patients with endoscopy phobia. Several advantages of this new equipment have been listed in example (8). Although the conditional clause displays one of the advantages, it primarily serves as a supportive example. The writers claim that, since the transnasal endoscopy does not go through the oral cavity, the patient can talk, watch the endoscopic monitor, and communicate with the endoscopist during the examination. The *if*-conditional clause further upholds the writer's advocate, since a free oral cavity allows the patient to express his or her discomfort or needs in a timely manner.

(9) 第一個是，其實我們可以盡量–如果這樣的醫療行爲，可以不用用到針頭或尖銳物品 hon，我們其實是–如果不需要使用，就不要使用 hon，是最好。(S9)
Dì yī gè shì, qíshí wǒmen kěyǐ jìnliàng–**rúguǒ** zhèyàng de yīliáo xíngwéi, kěyǐ bùyòng yòng dào zhēntóu huò jiānruì wùpǐn hon, wǒmen qíshí shì–rúguǒ bù xūyào shǐyòng, jiù bùyào shǐyòng hon, shì zuì hǎo
'The first is, in fact, we can try–**if** in such a medical practice, you may avoid using needles or sharp objects hon, we actually–**if** we do not need to use them, we'd better skip that hon, it will be the best way.'

(10) 若糖尿病病人以飲食控制及運動仍無法有效的控制血糖時，應早日考慮使用藥物治療。(W1)
Ruò tángniàobìng bìngrén yǐ yǐnshí kòngzhì jí yùndòng réng wúfǎ yǒuxiào de kòngzhì xiětáng shí, yīng zǎorì kǎolǜ shǐyòng yàowù zhìliáo

‘**If** the diabetic patients, with diet control and exercise, still cannot effectively control blood sugar, medical treatment should be taken into consideration as soon as possible.’

In (9), the speaker indicates that needlestick injuries may give rise to an infection problem for physicians, nurses, and sanitation workers. The injuries may be caused under different situations and occur in various locations within the hospital. The speaker then utilizes conditionality to provide his or her suggestion by advising the audience to try to keep away from needles as much as possible. Similarly, the writers in (10) also apply a conditional clause to indicate that medical treatment should be taken into consideration once the diabetic cannot be properly controlled via diet and exercise. In addition to applying the *if*-conditional, the tentative suggestion is further toned down by exploiting the hedging auxiliary *yin* 應 ‘should’ and the speculative verb *kalui* 考慮 ‘consider.’

(11) 那=如果 ABI 小於零點六到零點八的話，我們高度懷疑它是周邊血管方面的問題 hon, 阻塞了 hon, 啊零點五..小於零點五的話, 一般都是有那個..截肢的可能性 hon. 啊如果是大於一點二..的話 hon, 他可能動脈有硬化的情形 hon。(S5)

Nà=r**úguǒ** ABI xiǎoyú líng diǎn liù dào líng diǎn bā **dehuà**, wǒmen gāodù huáiyí tā shì zhōubiān xiěguǎn fāngmiàn de wèntí hon, zǔsèle hon, a líng diǎn wǔ.. Xiǎoyú líng diǎn wǔ **dehuà**, yībān dōu shì yǒu nàgè.. jiézhī de kěnéng xìng hon. A **rúguǒ** shì dàyú yī diǎn èr.. **dehuà** hon, tā kěnéng dòngmài yǒu yìnghuà de qíngxíng hon

‘**If** the patient’s ABI is less than 0.6–0.8, we highly suspect that it is the problem of peripheral vascular artilleries.., blocking the hon. **If** it is ah.. less than 0.5, then 0.5, usually there is a possibility of amputation.. hon. ah.. **if** the ABI is greater than the 1.2, he may have atherosclerosis hon.’

(12) 如果腎臟科醫師在術前把病人的體液狀態透析得剛剛好， 而麻醉科醫師卻在手術時給了太多靜脈注射液，就會造成病人肺水腫；相反的，若是腎臟科將病人透析過度, 而許多麻藥又會使得病人血管擴張, 共同作用下造成血壓過低的問題。(W2)

Rúguǒ shènzàng kē yīshī zài shù qián bǎ bìngrén de tǐyè zhuàngtài tòuxī dé gānggāng hǎo, ér mázuì kē yīshī què zài shǒushù shígěile tài duō jìngmài zhùshè yè, jiù huì zàochéng bìngrén fèi shuǐzhǒng; xiāngfǎn de, **ruò** shì shènzàng kē jiāng bìngrén tòuxī guòdù, ér xǔduō máyào yòu huì shǐdé bìngrén xiěguǎn kuòzhāng, gòngtóng zuòyòng xià zàochéng xiěyāguò dī de wèntí

‘**If** the nephrologist in the preoperative status dialyzes the patient’s body fluids just right, but the anesthesiologist gives too much intravenous injection during the surgery, which will cause pulmonary edema; Conversely, **if** the renal dialysis is done excessively, and too much anesthetic causes the patient vasodilation, which would jointly result in the problem of low blood pressure.’

Conditionals can be exploited to predict a patient’s possible health problems upon medical examinations. Conditional clauses in examples (11) and (12) are utilized to express the speaker’s/writers’ predictions according to the patients’ conditions. The speaker of (11) employs two different forms, *ruguo…dehua* 如果…的話 and …*dehua* …的話, to construct three conditional clauses. These clauses are used to predict three possible consequences, depending on three different values of ABI. The predictions made in (12) are based on treatments practiced by physicians from different disciplines. The writers attempt to explain that the potential disharmony of the co-therapy may cause different problems for the patient. Compared with this set of examples, it is easy to note that the tone of (11) is less assertive than that in (12). In (11), the speaker employs three hedging terms in his or her conditional clauses to tone down the argument, *gaodu huaiyi* 高度懷疑 'highly suspect', *kenengxin* 可能性 'possibility', and *keneng* 可能 'may.' The discrepancy observed may be due to a genre difference. The utilization of several hedges may express the speakers' tentativeness and cautiousness. Since the lecture is a face-to-face encounter, modesty and concealing tentativeness may make statements that are more acceptable to the audience.

(13) 那..<E renal clearance E>也是 hon, 你如果用..有用一些<E hypo-hemodynamic active E>的一個藥物 hon, 那或是..這病人現在正處在一個<E hyper dynamic E>的狀態的時候, 你多去<E enhance E>他..抗生素在..腎臟的 一個排除 hon, 所以這個你要考慮, 要加劑量 hon. 可是如果說病人的腎功能變不好, 他已經有在<E dialysis E>, 你可能要考慮減劑量 hon, (S4)

Nà..renal clearance yěshì hon, nǐ **rúguǒ** yòng.. yǒuyòng yīxiē hypo-hemodynamic active deyi1 gè yàowù hon, nà huò shì.. Zhè bìngrén xiànzài zhèng chù zài yīgè hyper dynamic de zhuàngtài de shíhòu, nǐ duō qù enhance tā.. Kàngshēngsù zài.. Shènzàng deyi1 gè páichú hon, suǒyǐ zhège nǐ yào kǎolǜ, yào jiā jìliàng hon. Kěshì **rúguǒ shuō** bìngrén de shèn gōngnéng biàn bù hǎo, tā yǐjīng yǒu zài dialysis, nǐ kěnéng yào kǎolǜ jiǎn jìliàng hon

'Then..about renal clearance hon.

If you use.. use some hypo-hemodynamic active in drug hon, or..the patient is now in a hyper dynamic status, you intend to enhance antibiotics.. removed through the kidneys hon, so that you have to consider raise the dose hon. However, **if** the patient's kidney function is turning bad and is going through dialysis, you may want to consider reducing the dose hon.'

(14) 左主幹病變若外科手術風險不高, 繞道手術仍爲首選治療; 但若繞道手術風險較高, <E Syntax score E>的分數 <22 者屬心導管介入治療的 class IIa 適應症。(W2)

Zuǒ zhǔgàn bìngbiàn **ruò** wàikē shǒushù fēngxiǎn bù gāo, ràodào shǒushù réng wéi shǒuxuǎn zhìliáo; dàn **ruò** ràodào shǒushù fēngxiǎn jiào gāo, Syntax score de fēnshù <22 zhě shǔ xīn dǎoguǎn jièrù zhìliáo de class IIa shìyìng zhèng

'**If** the risk of the surgery is not high for left main stream of cardiac, bypass surgery remains the first choice; but **if** the risk of bypass surgery is relatively high, and the syntax score is less than 22, the patient would fit the indication of class IIa in the heart catheter interventional treatment.'

In (13) and (14), *if*-conditionals are used to provide alternative treatments for a certain disease. Two conditional formats are, respectively, employed in each example to express the alternative conditions that the disease may manifest. The choice of treatment depends on the patient's condition. In addition to the function, the conditional forms applied in these two examples are also appealing. In writing, example (14), both conditional clauses are connected by the monosyllabic form *ruo* 若 'if' to explicate the alternative treatments. This form is comparatively more delicate and literary than *ruguoshuo* 如果說 'if', which only occurs in the spoken data. Furthermore, like example (11), the speaker of (13) employs the speculative verb *kaolu* 考慮 'consider' and the episteme auxiliary *keneng* 可能 'may' to show his or her tentativeness and makes his or her statements sound less assertive for the audience. The application of different hedging devices not only mitigates the arguments, but also reduces the speaker's commitment to what is being said.

(15) 如果說氧氣還可以維持，接下來你可能..你插不進去，你可能是病人的肌肉還是<E muscle tone E>不–太高，你給他補打一個神經肌肉阻斷劑，<E acetylcholine E>，而且這個劑量要大一點，每公斤兩<E milligram E> hon，那再來插管。成功了，那當然沒問題。如果還是不行 hon，插不進去，那氧氣是不是可以維持？如果氧氣維持不了就直接進到..hon fail的流程，那如..如果說氧氣還可以維持，那你可以再..再繼續插 hon。就是說，如果超過了三次還是不行，那你就要進入一個 <E fail E> 流程。那我們看看fail流程，事實上這個很重要 hon。(S3)

Rúguǒshuō yǎngqì hái kěyǐ wéichí, jiē xiàlái nǐ kěnéng.. nǐ chā bù jìnqù, nǐ kěnéng shì bìngrén de jīròu háishì muscle tone bù–tài gāo, nǐ gěi tā bǔ dǎ yīgè shénjīng jīròu zǔ duàn jì, acetylcholine, érqiě zhège jìliàng yāo dà yīdiǎn. Měi gōngjīn liǎng milligram hon, nà zài lái chā guǎn. Chénggōngle, nà dāngrán méi wèntí, **rúguǒ** háishì bùxíng hon, chā bù jìnqù, nà yǎngqì shì bùshì kěyǐ wéichí? **Rúguǒ** yǎngqì wéichí bùliǎo jiù zhíjiē jìn dào..hon fail de liúchéng, nà rú.. **Rúguǒshuō** yǎngqì hái kěyǐ wéichí, nà nǐ kěyǐ zài.. zài jìxù chā hon, jiùshì shuō, **rúguǒ** chāoguòle sāncì háishì bùxíng, nà nǐ jiù yào jìnrù yīgè fail liúchéng, nà wǒmen kàn kàn fail liúchéng, shìshí shàng zhège hěn zhòngyào hon

'**If** the oxygen can still be maintained, then you might.. you cannot insert in, it could be the patient's muscles or muscle tone is not—too high, you may supply him the neuromuscular blocking agent, acetylcholine. Besides, the dose should be greater, two milligrams per kg hon, and then you try the intubation. Of course, it would not be any problem as long as the process works. **If** it still does not work hon, you are unable to insert the endotracheal tube. Then, you have to see whether the oxygen can be maintained. **If** the oxygen cannot be maintained, you may directly get into the..hon the fail process, and.. **If** the oxygen can still be maintained, then you can keep.. keep inserting hon. That is, **if** you try more than three times, and it still does not work, then you have to shift to the fail process, Let's take a look at the fail process. As a matter of fact, it is very important hon.'

(16) 若 ACTH 仍然偏高, 可以在晚上睡前給予口服 1 毫克<E dexamethasone E>抑制試驗, 若<E dexamethasone E>抑制試驗可將 ACTH 抑制, 可以再調整下午<E cortisone acetate E>劑量或給藥次數, 再監測早 8點血糖、電解質、<E cortisol E>及 ACTH 濃度。 (W2)
Ruò ACTH réngrán piān gāo, kěyǐ zài wǎnshàng shuì qián jǐyǔ kǒufú 1 háokè dexamethasone yìzhì shìyàn, **ruò** dexamethasone yìzhì shìyàn kě jiāng ACTH yìzhì, kěyǐ zài tiáozhěng xiàwǔ cortisone acetate jìliàng huò gěi yào cìshù, zài jiāncè zǎoshang 8 diǎn xiětáng, diànjiězhì, cortisol jí ACTH nóngdù
'**If** ACTH is still high, 1 mg dexamethasone can be taken before going to bed for suppression test, **if** dexamethasone suppression test can suppress ACTH, you may then adjust the dosage and administration times of cortisone acetate in the afternoon, and then monitor the blood sugar, electrolytes, cortisol, and ACTH concentrations at 8 in the morning.'

If-conditionals in example (15) and (16) are applied to explain possible solutions in light of non-ideal conditions. In (15), the speaker employs *if*-conditionals to demonstrate several sets of condition-solution successively. He or she describes that if one condition yields, what would be the possible solution, and then if the solution does not work, what might be the alternative. The writers of (16) use the *if*-clause to indicate a potential ill condition and then offer a possible solution in the consequence clause. The second *if*-conditional suggests what may be the following treatment if the first situation works out. *If*-conditionals in these two examples are utilized to build hypothetic conditions which may or may not occur in reality, and the possibility of occurrence varies from case to case. With conditionals, the speakers/writers are able to reduce their commitment to the situations mentioned.

(17) 啊^假設你還是不要, 那也可以繼續<E care E>嘛。不過醫院會追蹤, <T ah li he koo T> (啊你那又)告告告, 啊大概公權力就會介入。(S10)
A ^**jiǎshè** nǐ háishì bùyào, nà yě kěyǐ jìxù care ma. Bùguò yīyuàn huì zhuīzōng, ah li he koo (a nǐ nà yòu) gào, a dàgài gōng quánlì jiù huì jièrù
'ah ^ **if** you still do not want to follow the regulation, you may continue to care for them. But, the hospital will track, ah if you get involved in a medical legal problem, ah the hospital authority will intervene then.'

(18) XDR-TB 曾在愛滋病盛行率較高的非洲地區造成死亡率極高的群聚感染。相信如無法更積極有效管理後線抗結核藥物, XDR-TB 絕不是結核病治療的後殘局, 恐怕有令群醫束手無策的全抗藥性 (Panresistant) 超級菌株被誘導出來。(W1)
XDR-TB céng zài àizībìng shèngxíng lǜ jiào gāo de fēizhōu dìqū zàochéng sǐwáng lǜ jí gāo de qún jù gǎnrǎn. Xiāngxìn **rú** wúfǎ gèng jījí yǒuxiào guǎnlǐ hòu xiàn kàng jiéhé yàowù, XDR-TB jué bùshì jiéhébìng zhìliáo de zuìhòu cánjú, kǒngpà yǒu lìng qún yī shùshǒuwúcè de quán kàng yàoxìng (Panresistant) chāojí jūnzhū bèi yòudǎo chūlái 'XDR-TB has caused high mortality with cluster infection in high HIV prevalent Africa. I believe **if**

we cannot actively and effectively manage the anti-TB drugs, XDR-TB is by no means the endgame for TB treatment, We are afraid that there might be full-resistant (Panresistant) super strain induced out, which may have doctors at wits' end.'

Conditionals serve as a warning in examples (17) and (18). The speaker of (17) is one of the vice presidents in the hospital, and he is invited to make a comment on the speech about diabetics care. In his comment, he proposes that if the audience has diabetic patients and it is not confident to take good care of those diabetics, perhaps the physicians should consider transferring those diabetics to the team specialized in endocrinology and metabolism. Since this proposal is an instant idea that emerges from the talk, it is not yet regulated by the hospital administration. Being aware of the idea is so far only an impromptu occurrence, and the speaker employs a conditional construction to make his well-intended suggestion not sound mandatory. The *if*-conditional seemingly serves as a euphemism, which states that the physicians still have the right to keep their diabetic patients if they do not like this suggestion. However, the speaker's true intention, expecting the proposal to be complied with, is manifested in his following statements. He foretells that if diabetic patients sue any physician for improper care, then the hospital authority will take action regarding it The declaration and the clause initiating with the transitional conjunction *bukuo* 不過 'but' in turn draws forth the implied meaning of the previous *if*-conditional, which makes the conditional clause function as a warning. Similarly, the writers of (18) also propose a serious warning to the readers by the *if*-conditional. The writers assert that as long as the condition predicted in the *if*-clause cannot be handled properly, XDR-TB, the disease which has caused high mortality in Africa, may not constitute the final stage. The worst, or even inevitable, consequence is then brought to light after the *if*-conditional. In these two cases, conditionals are employed as a warning; however, the warning reading is realized only after a more critical warning statement is made after the conditional clause.

(19) 如果在<E single energy E>呢, 我們就怎麼樣?我們就一直..一直掃嘛. <E delay face E>, 我剛才講, 再掃, 不然就怎麼?濃度加大, <E contrast E> 加大。(S6)
Rúguǒ zài single energy ne, wǒmen jiù zěnme yàng? Wǒmen jiù yīzhí.. Yīzhí sǎo ma. Delay face, wǒ gāngcái jiǎng, zài sǎo, bùrán jiù zěnme? Nóngdù jiā dà, contrast jiā dà
'**If** we operate with the single energy CT, how should we do? We would keep.. keep scanning. Delay face, I just said, keep scanning, or otherwise? We should increase the concentration and the contrast.'

(20) 此外病人生命徵象已越漸不穩定, 甚至出現休克問題, 倘若再投予 CMVIVIG, 藥物成效真能發揮?是否造成醫療成本與資源的浪費?相反地, 本案若提前檢 驗CMV, 提早給予 ganciclovir, 發現反應不佳, 及時能投注 CMVIVIG, 是否能扭轉病勢?值得省思! (W1)
Cǐwài bìngrén shēngmìng zhēngxiàng yǐ yuè jiàn bù wěndìng, shènzhì chūxiàn xiūkè wèntí, **tǎngruò** zài tóu yǔ CMV-IVIG, yàowù chéngxiào

zhēnnéng fāhuī? Shìfǒu zàochéng yīliáo chéngběn yǔ zīyuán de làngfèi? Xiāngfǎn dì, běn'àn **ruò** tíqián jiǎnyàn CMV, tízǎo jǐyǔ ganciclovir, fāxiàn fǎnyìng bù jiā, jíshí néng tóuzhù CMVIVIG, shìfǒu néng niǔzhuǎn bìngshì? Zhídé xǐng sī
'In addition, when the patient's vital signs are getting unstable, and even showing symptoms of shock, **if** we prescribe more CMV-IVIG, can drug effects really work? Or it may result in a waste of health care costs and resources? Conversely, **if** CMV test could have been conducted in advance for the dosing of ganciclovir, and then CMVIVIG was given in time once the poor response was found. In this way, whether the patient's ill condition could be reversed? It is worth our reflection!'

Conditionals may be formed together with interrogatives to call for attention. In this type of structure, the premise is normally provided in the *if*-clause, and the question is set in the consequence clause. In (19), the speaker produces a rhetorical question via an *if*-conditional during his talk. However, the speaker himself provides the answer immediately afterwards. The rhetorical question is not proposed to elicit answers from the audience, but rather to establish the speaker-hearer relationship in the face-to-face encounter. The writers of (20) discuss a case report in the article. The patient in this case expired eventually, even though the physicians had tried their best to help. The writers make self-examination on this case and raise several questions. The conditionals are used to express the writers' uncertainty about their treatments and simultaneously call for attention from the readers.

So far, I have discussed the nine communicative functions brought out by *if*-conditionals, which are shared by both the spoken and the written discourses. The above examples demonstrate that while most functions manifest in *if*-conditionals themselves, the warning function is found to be realized in connection with the surrounding materials. In the following section, I will expound on the functions which appear exclusively in either genre.

10.5 Functions of Conditionals Observed Exclusively in Either Genre

In addition to the above-shared functions, there are three other communicative purposes observed in each genre, respectively. The speakers are also found to utilize conditionals to circumscribe the scope of their following topics, to announce potential future actions, and to present modest invitations. On the other hand, the writers employ the conditional construction to express the cause–effect relationship between the symptom and the consequence, to make categorization, and to offer referential information. I will first discuss the functions identified in the spoken data, and then the functions discovered in the written data.

10.5.1 Functions of Conditionals Identified in the Spoken Discourse

In this subsection, I will set forth the other three pragmatic functions which are introduced by *if*-conditionals, and the elaboration will be carried out by examples. With the conditional construction, speakers are able to circumscribe the scope for the following discussion, to announce potential future actions, and to make an invitation. I claim that the functions proposed are based on the examples extracted from the ten peer lectures.

(21) 碰到評估困難氣道, 事實上有四個層次 hon.一個就是說我們的傳統喉頭鏡, 到底有沒有辦法看得到<E vocal cord E>?第二個就是說, 我的..那個..有沒有辦法換氣, 給他個<E bag-mask ventilation E>, 還有第三個就是說, 如果真要給他放 LMA hon, <E extraglottic device E>的時候, 放不放得進去? 第四個, 如果 的要緊急做環甲膜氣切術的時候, 有沒有辦法困難? 事實上這四個東西, 層次, 任何一個有問題, 事實上都要歸到困難氣道 hon。(S3)
Pèng dào pínggū kùnnán qìdào, shìshí shàng yǒu sì gè céngcì hon. Yīgè jiùshì shuō wǒmen de chuántǒng hóutóu jìng, dàodǐ yǒu méiyǒu bànfǎ kàn dédào vocal code? Dì èr gè jiùshì shuō, wǒ de.. Nàgè.. Yǒu méiyǒu bànfǎ huàn qì, gěi tā gè bag-mask ventilation, hái yǒu dì sān gè jiùshì shuō, **rúguǒ** zhēn yào gěi tā fàng LMA hon, extraglottic device de shíhòu, fàng bù fàng dé jìnqù? Dì sì gè, **rúguǒ** zhēn de yāo jǐnjí zuò huán jiǎ mó qì qiē shù de shíhòu, yǒu méiyǒu bànfǎ kùnnán? Shìshí shàng zhè sì gè dōngxī, céngcì, rènhé yīgè yǒu wèntí, shìshí shàng dū yào guī dào kùnnán qìdào hon
'While facing difficult airway assessment, in fact, there are four levels hon. The first is the traditional laryngoscopy, can we eventually see the vocal cord by this? The second is that, my..that..can the patient breathe freely, with the bag-mask ventilation? The third, **if** you really want to put him the LMA hon, extraglottic device, can it go through? The fourth, **if** you really have to do an emergency thyrocricoid tracheostomy surgery, would it work fine? The fact is that if there is any difficulty encountered in any of these four levels, it actually should be attributed to a difficult airway hon.'

In this example, *if*-conditionals are utilized to assist the speaker to circumscribe the scope of his following discussion. The speaker claims that there are four stages for a physician to evaluate if the patient should be treated for a difficult airway. In fact, these four stages constitute the topics for the speaker's successive discussion. *If*-conditionals are employed here to bring out the latter two stages.

(22) 那=改天如果有..eh..那個..有錢的話, 我們這個科內就會再買..申購這個..那個儀器 hon。 (S5)
Nà=gǎitiān **rúguǒ** yǒu..Eh.. Nàgè.. Yǒu qián dehuà, wǒmen zhège kē nèi jiù huì zài mǎi.. Shēngòu zhège.. Nàgè yíqì hon
'Then.. some other day **if** have..eh.. that.. we have the budget, in our department we will buy.. purchase this.. that instrument hon.'

(23) <T ah too tsoo kandan, anne tiau nian hon. liankang **<u>nah</u>** u kihue, ka ka dae kong T>。(啊就很簡單,這樣調而已 hon.改天若有機會, 再跟大家講.) (S10)
'Hon it is very simple, just mix it this way hon. I will talk about it another day **<u>if</u>** there is an opportunity.'

In (22) and (23), the conditionals are used to announce potential actions in the future. The possibility of the action is in line with the realization of the premise offered in the *if*-clause, 'if we have the budget some other day' in (22) and 'if there is an opportunity another day' in (23). Although the actions, to purchase certain equipment and to offer an advanced lecture, are highly likely, they are not guarantees. Thus, *if*-conditionals allow the speakers to express their anticipations and, at the same time, avoid making a full commitment to the announcements.

(24) 啊在這裡是先提出來跟大家討論 hon, <u>如果說</u>待會大家在演講過程中有意見的話, hon 也隨時歡迎大家可以討論 hon。(S9)
A zài zhèlǐ shì xiān tí chūlái gēn dàjiā tǎolùn hon, **<u>rúguǒshuō</u>** dài huì dàjiā zài yǎnjiǎng guòchéng zhōng yǒu yìjiàn dehuà, hon yě suíshí huānyíng dàjiā kěyǐ tǎolùn hon
'Ah, herein, I would like to discuss this issue with you beforehand. **<u>If</u>** you have any comments during the presentation, then hon you are always welcome to ask questions.'

(25) 那我們很有幸, 這是我跟我所有團隊在開會的時候, 各位可以看到, 成員很多, 每一科都會進來. hon 當然, 各個–各位醫師<u>假設</u>須要..這樣一個團隊, 你隨時可以跟我們講。(S10)
Nà wǒmen hěn yǒuxìng, zhè shì wǒ gēn wǒ suǒyǒu tuánduì zài kāihuì de shíhòu, gèwèi kěyǐ kàn dào, chéngyuán hěnduō, měi yī kē dūhuì jìnlái.Hon dāngrán, gège–gèwèi yīshī **<u>jiǎshè</u>** xūyào.. Zhèyàng yīgè tuánduì, nǐ suíshí kěyǐ gēn wǒmen jiǎng
'We are very fortunate. This photo was taken when my teammates and I were having a meeting. You can see that there are many members. Physicians from different departments come and join this team. hon of course, each–each physician **<u>if</u>** you need.. such a team to assist you, you can tell us at any time.'

Conditionals in example (24) and (25) function as humble invitations. In the opening remarks, with the conditional clause, the speaker of (24) modestly announces that, during the speech, any interruption is acceptable. In other words, the audience is welcome to express its opinions at any time. Besides inviting opinions, the application of the *if*-conditional shows the speaker's awareness of possible opposition to the issue that he is about to discuss. The utterances in example (25) are made at approximately the conclusion of the lecture. The speaker shows a photograph of his team members who were having a meeting, and then he makes a modest remark. He says that he is fortunate and honored to establish a solid team at the Diabetes Health Management Center, and the team members comprise the speaker himself and excellent physicians from various disciplines. Then, his following declaration is brought out by the *if*-conditional to convey both the speaker's modesty regarding his achievements and his uncertainty about whether his team is considered to be helpful to the audience, who are medical professionals from other departments. Examples (24) and (25) demonstrate that conditionals allow speakers to make modest invitations and simultaneously reveal speakers' concerns about the audience, the consciousness of possible contras on (24), and the uncertainty about audience demand on (25).

As mentioned previously in Sect. 10.3, among all of the 799 conditional clauses, I found only one conditional format which does not fall in the traditional P (the protasis) + Q (the apodosis) order. This example is identified in the spoken discourse and is illustrated below:

(26) 所以如果我們員工都有抗體, 即使是 source 是陽性的, B肝陽性hon, 他就不需要追蹤, hon 如果有抗體的話。(S9)
Suǒyǐ **rúguǒ** wǒmen yuángōng dōu yǒu kàngtǐ, jíshǐ shì source shì yángxìng de, B gān yángxìng hon, tā jiù bù xūyào zhuīzōng, hon **rúguǒ** yǒu kàngtǐ **dehua**
'So **if** our employees have antibodies, even if the source is positive, positive hepatitis B hon, he would not need to be tracked, hon **if** they have antibodies.'

Regarding the position of Chinese *if*-conditionals, in Yeh's (2000) spoken discourse data, the final *if*-clause[9] is applied to weaken the speaker's previous argument in order to avoid potential disagreement with the interlocutor. Moreover, the speaker utilizes a final *if*-clause to add extra information to augment the recipient's comprehension. In other words, the final *if*-conditional is found to serve a self-editing function during the interaction. Wang (2002, 2006) observes that the final adverbial clauses[10] only function to complete a unit of information without providing a pivotal frame for what follows. In her data, the final conditional clauses[11] are used by the speakers to present new or more detailed information elaborating on the associated clauses. The post-positioning *if*-clause from my data, in example (27), seems not to fit the above functions. Even though medical lectures are relatively formal and more planned in content than ordinary conversations, they are spontaneous and immediate, as well. Therefore, the realization of syntax is heavily influenced by cognitive limitations and interactional factors, which constantly shape the forms of actual utterances (Ono and Thompson 1995). As naturally occurring speaking is normally full of instances of repairs, repetitions, and reformulations, I assume that the very final *if*-clause found in my data is merely a repetition of the other *if*-clause produced earlier by the speaker himself. There are two *if*-clauses produced in example (27), and the second *if*-clause, which occurs in the final position, is actually a partially duplicate of the first one. It does not modify or provide any further information for the associated clause. Upon my observation of the videotape, the speaker also does not show any obvious signs of emphasis

[9]See examples in Yeh's study (2000: 372–373).

[10]The adverbial clauses in Wang's data include temporal, conditional, concessive, and casual clauses.

[11]See examples in Wang (2002: 158) and Wang (2006: 66).

while uttering this final *if*-clause. The tone is not strengthened or accompanied by body language. Thus, I suggest that the final *if*-conditional clause found in my spoken data merely constitutes a natural embodiment of spontaneous talk and does not serve any communicative function.

10.5.2 Functions of Conditionals Identified in the Written Discourse

The three communicative functions exclusively observed in the written discourse will be discussed in this subsection. The examples demonstrate that writers utilize *if*-conditionals to connect a definite cause–effect relationship, to make categorizations, and to offer statistical references.

(27) 一旦血流阻斷超過20、30分鐘以上, 就會導致心肌壞死, 也就是急性心肌梗塞。(W1)
Yīdàn xuè liú zǔ duàn chāoguò 20, 30 fēnzhōng yǐshàng, jiù huì dǎozhì xīnjī huàisǐ, yě jiùshì jíxìng xīnjī gěngsè
'**In case** the blood flow is blocked for more than 20 or 30 min, it will lead to myocardial necrosis, which is acute myocardial infarction.'

In (27), the conditional construction initiated by *yidan* 一旦 'in case' is used to manifest an absolute cause–effect relationship between the *if*-clause and the consequence clause. The writers utilize the *if*-conditional to claim that the serious condition depicted in the *if*-clause would definitely lead to a fatal consequence, which is acute myocardial infarction. It is commonly agreed that conditionality signals a certain degree of uncertainty; however, the writers here use a conditional structure to connect two clauses, which display a definite cause–effect relationship. This apparently contradictory usage, in fact, supports the writers to reduce the force of the claim, which enables them to avoid making full commitment to the argument, since the severe consequence only occurs under a certain condition, as stated in the *if*-clause.

(28) 假如病人在接受治療的二十四週內仍無法將血清中的C肝病毒清除時, 我們稱之爲「對治療無效者」(non-responder)。(W1)
Jiărú bìngrén zài jiēshòu zhìliáo de èrshísì zhōu nèi réng wúfă jiāng xiěqīng zhōng de C gān bìngdú qīngchú shí, wǒmen chēng zhī wèi `duì zhìliáo wúxiào zhě'(non-responder)
'**If** the patient's hepatitis C virus remaining in the serum cannot be eliminated within 24 weeks treatment, then we call him/her a "non-responder."'

(29) 假如病人在治療結束時血清中已經檢測不到病毒, 治療結束二十四週後的血清中仍檢測不到C肝病毒的核醣核酸時, 吾人則稱之爲「持續病毒學反應者」 (sustained virologic responder, SVR)。(W1)
Jiărú bìngrén zài zhìliáo jiéshù shí xiěqīng zhōng yǐjīng jiăncè bù dào bìngdú, zhìliáo jiéshù èrshísì zhōu hòu de xiěqīng zhōng réng jiăncè bù dào C gān

bìngdú dí hétáng hésuān shí, wúrén zé chēng zhī wèi `chíxù bìngdú xué fǎnyìng zhě' (sustained virologic responder, SVR)
'**If** there are no detectable levels of virus in the patient's serum at the end of the treatment, and the RNA of hepatitis C virus remains undetectable 24 weeks after the treatment, I myself call him/her a "sustained virologic responder, SVR."'

Conditionals can be used to make categorizations, as long as certain criteria are met, as shown in (28) and (29). The inclusive pronoun *women* 我們 'we' is employed in (28) as the subjects who make the categorization, while the first personal pronoun *wuren* 吾人 'myself' is used in (29) to refer to the writer himself. These two examples are actually produced by the same writer. The subjects of both examples imply that the categorizations are based on subjective viewpoints rather than publicly agreed upon terminology. The strategy shows the writer's awareness of the potential objections, as other researchers may prefer their own terms for the categorization.

(30) 在日本根據一個多中心的世代研究， 操作大腸內視鏡黏膜下切除術的出血機率爲 1.5%, 若經驗較少的醫學中心則爲 5.9%。(W1)
Zài rìběn gēnjù yīgè duō zhōngxīn de shìdài yánjiū, cāozuò dàcháng nèi shì jìng niánmó xià qiēchú shù de chūxiě jīlǜ wèi 1.5%, **Ruò** jīngyàn jiào shǎo de yīxué zhōngxīn zé wèi 5.9% 'In Japan, according to a multi-center cohort study, the bleeding rate for the operation of large intestine endoscopic mucosal resection is 1.5%, **if** the medical center has relatively less experience of it, the bleeding rate reaches up to 5.9%.'

(31) 而偏頭痛病人如合併危險因子 (高血壓、糖尿病、高血脂等)，中風的比例爲非偏頭痛的 1.3–9.6倍。(W2)
Ér piān tóutòng bìngrén **rú** hébìng wéixiǎn yīnzǐ (gāo xiěyā, tángniàobìng, gāo xiě zhī děng), zhòngfēng de bǐlì wéi fēi piān tóutòng de 1.3–9.6 bèi
'For migraine patients, **if** they also have other risk factors (hypertension, diabetes, high cholesterol, etc.), the proportion of getting stoke is approximately 1.3–9.6 times higher than non-migraine patients.'

The conditional formats of (30) and (31) are utilized to provide statistical references to the readers. In (30), the writers first offer a precise bleeding rate, 1.5%, for the general operation of large intestine endoscopic mucosal resection, and then the conditional clause brings out a much higher rate, 5.9%, for the same kind of operation. Besides offering reference data, the conditional construction is also employed to mitigate the force of the declaration, as the statistical number could be anxiety-provoking. The proviso set up in the protasis denotes that the high bleeding rate only occurs in some medical centers which are relatively less experienced in treating this health condition. In (31), the writers provide a range of numerical figures, i.e., 1.3–9.6 times, to indicate the high risk of stroke for patients who suffer from migraine plus other risk factors. The *if*-clause establishes the condition for the possible outcome, which points out that the multiple growth of risk, takes place only when the migraine patient simultaneously suffers from other health problems, such as hypertension, diabetes, or high cholesterol. The condition denoted in the *if*-clause of (30) refers to an abstract notion, *jiao shao de* 較少的 'relatively less', while it is used in (31) to refer to an indefinite numerical range, 1.3–9.6 *bei* 1.3–9.6 倍 '1.3–9.6 times.' Both conditionals allow writers to circumvent making full commitment toward the propositions being stated.

10.6 Discussion

This study investigates how *if*-conditionals are practiced in Chinese medical discourse in accordance with genres. The utilization of conditional clauses in physician-to-physician discourse and research articles is compared and discussed. The results demonstrate that conditional clauses are employed more by medical specialists in face-to-face encounters than in medical journal articles. The prototypical pattern of conditionals, *if*-clause + consequence clause, is unwaveringly borne out by my data. In fact, all of the conditional clauses found in the written discourse fall in this pattern, with *if*-clause preposed, and almost all of the *if*-clauses from the spoken discourse appear in this initial position, as well, except one. Upon my closer examination, this unique final conditional clause does not serve any communicative purpose, which may be considered as a natural embodiment occurring during spontaneous interaction. Unlike English, in which *if* plays the leading role to form conditionals, in my Chinese data, 43 distinct forms, including words and phrases, are applied by the speakers to connect the protasis and the apodosis; however, there are only 10 forms identified in writing. Different characteristics that lie between these two genres account for the great disparity in numbers. Moreover, the forms observed in speaking are comparatively more colloquial, while those used in the written data seem formal and literary. Among the variety of conditional forms, the speakers prefer *ruguo* 如果 'if', whereas the writers favor *ruo* 若 'if'. In my Chinese corpus, medical professionals utilize conditionals to achieve a number of communicative purposes, with some shared by both genres and others exclusively identified in either genre. Conditionals allow the speakers/writers to make deductions, predictions, and suggestions; they are utilized to provide supportive examples and alternative treatments; they also function as warnings for potential upcoming problems. Conditionals also serve the interactional function to evoke the hearers'/readers' attention. In addition to the shared functions, physicians also employ *if*-conditionals to achieve three other communicative purposes in the speeches: to circumscribe the scope for the following discussion, to announce potential actions, and to make an invitation. The other three functions observed exclusively in the research articles exhibit a definite cause–effect relationship, making subjective categorizations, and providing statistical data as references for the reader. Uncertainty is an inherent feature in medical science, and the non-assertiveness nature of conditional clauses is in accordance with the medical proprietary feature. *If*-conditionals serve as means for medical professionals to hedge, hypothesize, express tentativeness and caution for their arguments and claims either in face-to-face encounters or in writing, and simultaneously modify degrees of commitment to their propositions.

In all languages, *if*-conditionals are one of the complex constructions, as it requires two clauses to make its meaning complete. Chinese has been referred to as an 'isolating language' (Li and Thompson 1997: 11), in which the verb inflections corresponding to English subjective mood do not exist. In English, conditional sentences can be differentiated into various types in terms of tenses and degrees of probability. In Chinese, it is not necessary for speakers to change tenses and modality in order to distinguish whether the *if*-conditional is factual or counterfactual.

Although *if*-conditionals are not uncommon in many world languages, the language-specific features still distress a great number of Chinese language learners. Teng (2018) points out that the purpose of foreign language teaching is to enhance learners' cross-language communication ability; therefore, the focus of Chinese language pedagogy should also be communication-oriented. Based on the results of some research (Wu 1994; Li and Thompson 1997; Feng and Yi 2006; He and Wang 2010; Wu 2012; Chang 2014; Yong 2016; Zhou 2017; Teng 2018) and my corpus study, three pedagogical applications concerning Chinese conditional constructions are generalized. First, *if*-conditionals are positively correlated with if-words, negators, time references, and aspect markers. Because Chinese language has only one verb tense pattern, speakers of Chinese rely heavily on context to convey and understand conditional reading. In spite of the fact that context plays a critical role in communication, some empirical investigations have shown that Chinese possesses explicit linguistic markers for conditional constructions. An inventory of those conditional markers and constructional schemas would be beneficial for Chinese language learners. Second, Chinese if-words are various in forms, and they are applied differently in terms of genre. In Chinese, a number of words and phrases are equivalent to the English *if*, which are used to connect conditional clauses. While some connectors are commonly applied in both spoken and written discourse, many others appear merely in colloquial forms, such as *ruguoshuo* 如果說, *jiashishuo* 假使說, or *ruguo…laijian* 如果…來講. In my corpus data, conditional connectors used in speaking outnumber those in writing by more than four times. Speakers employ the connector *ruguo* 如果 the most, whereas writers prefer *ruo* 若. The analysis of language in use places emphasis on the importance of communication, which is consistent with the purpose of second language teaching. Regarding the usage of Chinese if-words, certain language-specific regulations should be taught. For example, the particle *dehua* 的話 occurs exclusively at the end of a conditional clause. If-words *ruguo* 如果 and *jiashi* 假使 are produced frequently in both spoken and written discourses; however, when these if-words are attached by the particle *shuo* 說, they can only appear in spoken language. In addition to the regulations, a list which specifies the if-words employed in both genres and respective genre can be useful for non-native Chinese learners. Third, learners' native languages affect their acquisition of Chinese conditional constructions. Chang (2014) examines the usage of *ruguo… dehua* 如果…的話, *ruoguo…* 如果…, and *…dehua …* 的話 from three different background language[12] learners. The learner corpus[13] and the native speaker corpus[14] are the sources of her data. It is found that English language background learners use *ruoguo* 如果 the most frequently (71.62%), which is closer to the usage of native Chinese learners (80.72%). Japanese background learners prefer *ruguo*…*dehua* 如果…的話, and Korean background learners utilize *dehua* 的話 the most. The common ground between Japanese and Korean background learners is that they favor the forms containing *dehua* 的話, but disfavor *ruoguo* 如果. Chang assumes that learners' native languages play a key role in this outcome. In Japanese, conditional sentences are normally connected by the postposed auxiliary, たら, which has similar linguistic features to *dehua* 的話. In Korean, the common conditional connector, 으면, is also attached at the end of a stem. From the above, we learn that the performance of conditional clauses in these two languages seems to correspond to that of Chinese *if*-conditionals with *dehua* 的話. Therefore, Japanese and Korean background learners unanimously choose the forms which demonstrate analogous features to their first language, instead of the target language. By incorporating knowledge of learners' native languages, instructors can make themselves more pedagogical in teaching and simultaneously assist students to be more effective in learning.

10.7 Concluding Remarks

Speech and writing are two common genres for communication. Besides representing differently in forms, spoken and written discourses possess distinct characteristics, respectively. Speech is normally recognized as 'more highly contextualized, far more dependent on a shared situation, more reliant on immediate feedback and involving more real-time monitoring and less planning', whereas it is often the case that formal written discourse tends to be 'more lexically dense (with a higher ratio of content words to grammatical words), to have greater nominalization (where events are presented as nouns rather than verbs) and to be more explicit (with clear signaling of semantic relations)' (Hyland 2009: 23). For quite some time, academic discourse has been recognized by means of written texts, yet the significance of speech seemed to be overlooked in academia (Dubois 1987; Hyland 2009). In the medical discipline, a disproportionate amount of spoken and written discourse has also been observed. However, in recent years, researchers have become increasingly aware of the important role that academic speech plays in education and research (Rowley-Jolivet 2002; Webber 2005; Hyland 2009). In Chinese, while some focus has been directed toward written academic discourse, so far there is no corpus providing access to authentic spoken discourse in Chinese

[12]They are English, Japanese, and Korean.

[13]The learner corpus is from the computer-based writing Test of Chinese as a Foreign Language (TOCFL), which consists of more than 1.14 million Chinese words.

[14]The native speaker corpus is from the Academia Sinica balanced corpus.

academia. This is probably due to that the compilation of speech corpora is "more time-consuming, complex, and costly" (Swales 2002:150). Given that much less or no attention has been paid to Chinese academic spoken discourse, I collect spoken data from medical disciplines in Taiwan, attempting to establish the spoken corpus as the counterpart of the written data. To the best of my knowledge, there is no study focusing on the application of conditionals in the Chinese academic field, especially in medical science. The present study constitutes a starting point for the analysis of physician-to-physician communication from the aspect of *if*-conditionals application. I hope that this research will contribute to the understanding of conditional constructions exploited in Taiwan's medical setting, and meanwhile evoke research interest in spoken discourse in Chinese academia.

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Chapter 11
Progressing in Medical Conversations: Overall Organization as a Resource for the Joint Management of Chinese Pediatric Interactions

Nan Wang

Abstract In this study, I investigate physician–patient conversations held in medical consultations. In particular, I evaluate how medical conversations are organized and how physicians and patients jointly manage the progression and completion of conversations held in the specific professional setting of pediatrics. Based on a corpus of 318 video-recorded physician–patient conversations, I use conversation analysis as my primary methodology to analyze the systematic organization of medical conversations. The results show that physician–patient conversations held in Chinese pediatric settings consist of the following eight normatively ordered phase components: (1) opening, (2) problem presentation, (3) history-taking, (4) physical examination, (5) diagnosis, (6) treatment, (7) addressing additional concerns, and 8) closing. In demonstrating how physicians and patient caregivers orient to the normative overall structure of conversations, I show that the overall organization serves as a resource that interactants make use of and rely upon to accomplish their goals through interactions. The findings from this study not only have implications for effective communication between physicians and patients in Chinese medical settings but also contribute to theories and practices of Chinese language education for task-oriented and professional settings.

11.1 Introduction

In medical consultations, patients seek medical assistance from physicians, and physicians help patients manage their health conditions (Parsons 1951). Effective physician–patient communication is essential to various outcomes, such as the delivery of high-quality healthcare services, improved levels of patient satisfaction, and optimal patient health outcomes (Haskard Zolnierek and DiMatteo 2009; Cabral et al. 2014). Problems can result from physician–patient interactions such as misun-

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derstandings or misaligned goals between physicians and patients. For example, studies conducted in American pediatric settings show that certain communicative behaviors between patient parents and physicians are likely to be misunderstood, leading to a higher likelihood of inappropriate prescription (Stivers et al. 2003; Stivers 2002a, b, 2005, 2007); in addition, ineffective communication affects physician–patient rapport and is found to be negatively correlated with patient medication adherence (Friedman et al. 2008).

Although physician–patient communication has been investigated extensively from various perspectives, one dimension of physician–patient communication has remained relatively understudied—the structural organization of physician–patient conversations. The few existing studies on this issue argue that a stronger understanding of the systematic structural organization of physician–patient communication holds the key to understanding low levels of patient participation in medical communication, as the structural organization of physician–patient communication places constraints on and shapes the ways in which patients participate in medical care (Robinson 2003).

Unlike ordinary conversations, in which matters are comparatively fluid and free to vary with the inclinations of the participants, medical consultations usually involve a more specific internal pattern or structural organization. The highly structured organization of physician–patient interactions has been examined by Byrne and Long (1976) in reference to British primary care settings and by Robinson (1999, 2001, 2003) in reference to American primary care settings. In particular, through conversation analyses, researchers have shown that while interactions are subject to a great deal of variation, both doctors and patients perceive such consultations as involving ordered component phases, the boundaries of which represent the result of physician–patient negotiations (Heritage 1997; Robinson 2003; Robinson and Stivers 2001; Robinson and Heritage 2005). Their findings show that the main component phases of a medical consultation include the following: (1) *opening*, (2) *presenting complaints*, (3) *examination*, (4) *diagnosis*, (5) *treatment*, and (6) *closing* (Byrne and Long 1976; Robinson 1999, 2003).

The purpose of identifying this overall organization of medical consultation, as Heritage and Maynard (2006) argued, is not to identify each part of a medical visit exhaustively; instead, it serves to testify that participants of the encounter have and exhibit for one another an understanding of the existence and relevance of specific task-focused activities occurring within the medical visit (p. 15). Therefore, this study aims not only to understand the nature of the medical consultation and how the social and medical process of diagnosing and managing a patient's health condition is conducted in Chinese pediatric consultations but also to provide insight into the methods and resources that physicians and patients (and their caregivers) make use of and rely upon to navigate the interactional process of medical consultations. Moreover, this study strives to provide empirical materials for teachers and learners of the Chinese language for the specific professional setting of medical encounters by showing that the overall organization of conversations is an important feature of task-oriented conversations and an important interactional resource for participants navigating this social interaction.

Despite its significance, existing research on the overall organization of medical consultations is primarily based on clinical contexts found in the UK and USA. Thus, little is known of how social encounters of medical consultations between physicians and patients are conducted and organized in the Chinese clinical context. Given distinctive features of the Chinese social and cultural environment, it is possible that the overall organization of medical consultations and the challenges and dilemmas that participants face may differ. Therefore, with this study, my objective is to answer the following questions: (1) How are physician–patient conversations organized? (2) How does the overall organization of the medical conversation shape how patients participate in medical care? (3) How is the overall organization of physician–patient conversations different from that observed in similar professional settings in the USA and UK? In the remaining sections, I first introduce the data and methods used for the study; I then present the results of the study in answering our research questions, and finally, the findings are discussed in terms of their implications for theory and practice.

11.2 Data and Methods

In total, 318 medical consultations were video-recorded in pediatric settings in 2013. Participants included 9 physicians, 318 patients, and their caregivers involved at 6 hospitals in China. Snowball sampling was used for physician recruitment. The patients and caregivers were recruited from physicians' consultation rooms on a consecutive basis. Written consent was obtained from all physicians, and informed consent was obtained from all participating patient caregivers. To ensure comparability, 187 consultations were analyzed, and during these consultations physicians and caregivers discussed patients' acute respiratory tract infections' (ARTIs) conditions. Each consultation lasted 5 minutes on average. The video-recorded conversational data were then transcribed according to conversation analysis (CA) conventions (Jefferson 2004). CA transcription conventions capture not only conversations held but also various speech production features, such as intonations, timed silences, and nonverbal activities (see Jefferson 2004 for further information).

Based on the transcripts, conversation analysis (CA) was used as the primary methodology to analyze and annotate the hierarchical structural organization of physician–patient conversations held during medical consultations. A detailed explanation of the analytical and annotation scheme used is given in Wang et al. (2018). Similar to pediatric consultations held in the American context, such conversations are primarily conducted between physicians and patient caregivers, including patients' parents or grandparents. In this study, I use "physician–patient conversation" to refer to discussions held between physicians and caregivers for simplicity.

From transcripts of the audio/video-recorded naturally occurring conversational data, CA aims to investigate the systematic organization of conversations as a type of small-scale social activity. The core questions that CA seeks to answer are: *How is conversation made possible between interactants?* In answering this question, CA maintains that conversation is an orderly product in all respects—despite its seemingly messy surface appearance, participants rely on their shared knowledge of systematic organizations and make use of this structure to produce intelligible actions (Heritage 1984).

In particular, for conversation analysts, the investigation of medical conversation can be conducted at the following three levels:(1) the overall structure of the primary care visit, (2) the sequence organization through which particular component activities and tasks are realized, and (3) individual turns that make up these sequences (Heritage and Maynard 2006). These three levels of analysis are interrelated: Turn design is a feature of sequence organization, and sequences are compiled into activities that finally compose the visit as a whole (Heritage and Maynard 2006, p. 14). In this paper, our focus is on the first level of analysis: the overall structure of medical conversations.

Overall structural organization is a critical characteristic of the systematic organization of conversations, which concerns how sequences of component activities are organized together to accomplish a project. In other words, a conversation can be understood as participants interacting to complete a larger project; to accomplish this overall project goal, participants complete several steps to accomplish a series of subgoals. A more detailed discussion of the hierarchical structural organization of conversation can be found in (Heritage and Maynard 2006; Schegloff 2007).

In this study, medical conversations are analyzed at the turn level. Each turn is analyzed by actions involved and based on whether they compose part of a coherently produced activity (e.g., problem presentation, history-taking, diagnosis, etc). Evidence in support of the overall organization of medical consultations includes the following: (1) Phases are normatively ordered in consultations and (2) consultations are oriented to by participants as relevant to interactions and are used to understand and produce their actions in medical consultations (Heritage 1997, Jefferson and Lee 1992, Sacks 1992, Schegloff 1992, Robinson 2003).

11.3 Results

The results show that Chinese pediatric consultations can be viewed as consisting of the following eight successive phases: (1) *opening*, (2) *problem presentation*, (3) *history-taking*, (4) *physical examination*, (5) *diagnosis*, (6) *treatment*, (7) *addressing additional concerns*, and (8) *closing*. Figure 11.1 shows a schematic representation of the overall structure of medical consultations. I describe the characteristics of these phases in the following subsections.

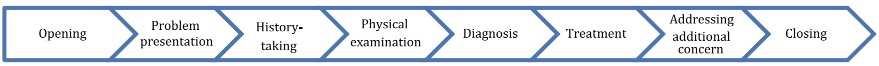

Fig. 11.1 A schematic representation of the overall structure of medical consultations

11.3.1 Opening

This phase primarily involves the physician and caregiver greeting each other, the physician confirming the patient's identity, and physician preparing the patient for the consultation. In other words, the primary goal of this phase is for physicians and patients to establish an interactional relationship before outlining the reasons for the medical consultation. Example 1 illustrates an example of the opening phase of a Chinese pediatric consultation.

Example 1
D: Doctor, M: Mother

1	**D:**	**六十 - 六十 谁 , @NAME@ [啊 , 有 没 ?**
		liu-shi liu-shi shei @NAME@ a you mei
		sixty sixty who @NAME@ PRT have not
		Number sixty-six. Who is number sixty-six? @NAME@? Anyone?
2	M:	[我 就 是 , @NAME@ 这 呢 .
		wo jiu shi @NAME@ zhe ne
		I just is @NAME@ here PRT
		I am @NAME@. Here.
3	D:	来 , 过 来 来 , 卡 呢 ?
		lai guo lai lai ka ne
		come over come come card PRT
		Come. Come over here. Where is your card?
4		(3.6)
5	D	咋 了 ?
		za le
		what PRT
		What is the matter?

As is shown in this example, the consultation begins with the physician summoning the patient (line 1) and with the patient caregiver entering the scene, answering questions, and confirming the patient's identity (line 2). After the patient and mother are seated properly, the physician proceeds to solicit the patient's primary reasons for the visit (line 5), thereby moving the consultation into the next phase. Of the 187 acute visits analyzed, physicians and patient caregivers engaged in such opening activities in 65% (n = 122) of the visits. In the rest of the cases, patient caregivers directly presented their reasons for the visit without engaging in social greetings or confirming identity.

11.3.2 Problem Presentation

In this phase, the goal is for the physician and the caregiver to establish the reason for the visit—the primary complaints from the patient. In American primary care settings, this phase is usually initiated by the physician with an open-ended question, such as "*What can I do for you today?*", which solicits the patient's reason for making the visit (Frankel 1996; Robinson 2003). It is noted that while this "offer to serve" makes relevant the specification of the service demanded, the patient normally responds with a just presentation of a problem, as the service is implicated as needed (Robinson 2001, 2003). In the Chinese pediatric context, I found that physicians similarly used open-ended questions to solicit each patient's primary complaint, yet the questions are usually designed in a way that specifically relates to the patient's problem. This is illustrated in Example 2, which serves as a typical example of the physician-initiated problem presentation phase.

Example 2
D: Doctor, M: Mother

1	D	宝宝 怎么 了 啊？ baobao zenme le a baby how PRT PRT *What's the matter, baby?*
2	M	发烧 了． fashao le fever PRT *He's got a fever.*
3	D	哦，多少 度 啊？ o duoshao du a ok how-many degree PRT *Ok. What's his temperature?*

In this example, after the mother and patient are seated, the physician initiates the problem presentation phase by asking about the patient's condition at line 1. The question is formulated in a way that it first explicitly sets up a topical agenda for the caregiver to describe a health problem in this environment, and second, the open-ended format gives the mother an opportunity to design her problem presentation in her own terms. In response, the mother presents a single symptom (fever) as the primary complaint from the patient (line 2). After the mother completes her problem presentation action, the physician proceeds to ask about a particular aspect of the symptom, i.e., the exact temperature recorded, thereby progressing to the next phase.

The above excerpt serves as an example of succinct problem presentation; however, the caregivers' problem presentation can also be elaborated on further. In American adult and pediatric primary care settings, patients' and parents' problem presentations vary in regard to whether they cover only symptoms or diagnoses as well (Stivers 2002); they also differ in terms of whether they reflect simple enumerations of a symptom or narratives of symptom development (Heritage and Clayman 2010, p. 119). As Heritage and Robinson (2006) argued, the *problem presentation* phase is distinct in that it is the only phase of a medical visit during which the patient is systematically given institutional license to describe his or her illnesses in his or her own terms and in pursuit of his or her own agenda. This is similarly observed in Chinese pediatric consultations, as this phase commonly involves more than two turns, and the physician and the patient caregiver may engage in an extended period of discussing the problem. In sum, in both Chinese and American medical settings, participants of medical consultations demonstrate a shared understanding that the presentation of the patient's primary complaint is relevant early on in consultations.

11.3.3 History-Taking

In the history-taking phase, the primary goal is for the physician to conduct a thorough verbal examination of the patient's history. A comprehensive history record includes details about the patient's present illness and information on past problems experienced, procedures applied, and family and social background information (Bates et al. 1995; Heath 1982; Cassell 1985; Stockle and Billings 1987; Frankel 1996). Since illnesses can often be diagnosed simply through effective history-taking, it is a critically important dimension of medical care that is essential for accurate diagnosis and appropriate treatment (Stoeckle and Billings 1987; Bates et al. 1995; Heritage and Clayman 2010). Therefore, this phase often consists of a series of question–answer sequences, during which various aspects of the patient's primary complaints are examined. Example 3 presents an excerpt of the history-taking phase of Chinese pediatric consultation in which a physician asks a mother four successive questions about the patient's symptom.

Example 3
D: Doctor, M: Mother

1	M	发烧 了 . Fashao le fever PRT *He's got a fever.*
2	**D**	**哦，多少 度 啊？** o duoshao du a ok how-many degree PRT ***Ok. What's his temperature?***
3	M	我 - 就 刚刚 量 的 三十七 度 多 , wo jiu ganggang liang de sanshiqi du duo I just just-now measure PRT thirty-seven degree more *I just took his temperature, it is slightly higher than thirty-seven degrees.*
4	**D**	**才 烧 的，是 吧？** cai shao de shi ba just fever PRT is PRT ***He just had a fever, right?***
5	M	就 昨天 晚上 就 - 估计 有 一点点 - 就 那个 有 症状 , jiu zuotian wanshang jiu guji you yidiandian jiu nage you zhengzhuang just yesterday evening just probably have a-little just that have symptom *Last night, he seemed to have a few symptoms.*
6	D	哦 哦 哦 , o o o ok ok ok *Ok, ok, ok.*
7	M	然后 今天 早上 量 就 三十七 度 四 . ranhou jintian zaoshang liang jiu sanshiqi du si then today morning measure just thirty-seven degree four *Then, this morning, I took his temperature, and it was thirty-seven point four degrees.*
8	D	哦 哦 . o o ok ok *Ok, ok.*
9		(0.5)
10	**D**	**喉咙 疼 吧？** houlong tong ba throat ache PRT ***Does his throat hurt?***
11	P	疼 . teng ache *It hurts.*
12	**D**	**咳嗽 吧？** kesou ba cough PRT ***Does he cough?***
13	M	咳 . 就是 昨天 晚上 就是 - 有 点 咳嗽 了 . ke jiushi zuotian wanshang jiushi you dian kesou le cough just is yesterday evening just is have a-little cough PRT *He coughed last night. He coughed a little.*

In this example, the mother presents a fever as the primary complaint for the visit at line 1. Upon receiving the problem presentation, the physician starts to record a history of the patient's condition. The unelaborated problem presentation of the patient caregiver is referred to as a "headline" presentation, which divides the problem in one word or phrase (Heritage 2009; Heritage and Clayman 2010). Although succinct in the turn design, both participants view it as sufficient for completing the phase of problem presentation. On lines 2, 4, 10, and 12, the physician moves on to initiate a series of "checklist" questions (Heritage and Clayman 2010) inquiring on several specific aspects of the patient's symptoms (e.g., the patient's body temperature, when the patient's fever first occurred, and whether a sore throat and coughing occurred).

According to the findings for the American primary care context, researchers argue that once physicians initiate the next phase, patients tend to lose their interactional initiative and become constrained by a pattern of physician questioning that is physician-centered and driven by a more medical–technical agenda (Beckman and Frankel 1984; Boyd and Heritage 2006). This is also observed in the Chinese pediatric setting and can be observed in Example 2.

After the mother finishes presenting the primary complaints from the patient (line 1), it is the physician who initiates a question on the particularities of the symptoms presented, inquiring about the child's body temperature when he had the fever (line 2). After the mother answers the physician's first question at line 3, the physician again poses a question on the occurrence of the problem (line 4). In a similar vein, after the physician finishes asking questions about two specific aspects of the fever symptoms, it is the physician who poses additional questions on the patient's sore throat and coughing symptoms (lines 10 and 12, respectively). Thus, this shows that in the history-taking phase, it is the physician who normally drives the activity.

A departure from this physician-driven question–answer pattern is observed at line 7. While the physician acknowledges the receipt of the mother's answer to her question and registers the question–answer sequence as complete, the mother offers additional information on the patient's symptoms as an increment (Schegloff et al. 1977) (line 7). Despite the information provided by the mother being not solicited by the physician, the information is closely related to the physician's prior question about the child's fever symptoms. Thus, this demonstrates that the mother understands her contributions as constrained by the topical agenda of the physician's questions; the trajectory of the history-taking phase is driven by the physician. In sum, the history-taking phase is characterized by the physician's control over activity progressivity, which leaves little opportunity for patients' active participation. Across the corpus, the history-taking questioning phase is always initiated by the physician (187 of 187 visits).

11.3.4 *Physical Examination*

The primary goal of this phase is for the physician to gather information about the patient's symptoms through physical examination. This phase typically follows the verbal examination of the patient's problems and foreshadows a diagnosis. Observations and findings that arise during verbal and physical examinations form the foundations of illness treatment (Heath 2006).

In Robinson (2003), the physical examination and history-taking phases are combined as a phase for "gathering additional information." Given that modes of sequence organization for these two activities are remarkably distinct and, thereby, have different implications for patient participation, I distinguish between these two phases and discuss them separately. Specifically, unlike what is observed in the history-taking phase, during which the physician's questions make relevant a verbal answer from the patient under constraints of the adjacency pair sequence (Sacks and Schegloff 1973), in the physical examination phase, no verbal contributions from the patient or caregiver are required. The fact that patients are not held accountable for making specific verbal contributions creates an opportunity for the patient or caregiver to bring up information that they consider to be relevant to the consultation. This point is illustrated in Example 4.

Example 4
D: Doctor, M: Mother

1	D	咳嗽 吧？ kesou ba cough PRT *Does he cough?*
2	M	咳． 就是 昨天 晚上 就是 - 有点 咳嗽 了． ke jiushi zuotian wanshang jiushi youdian kesou le cough just yesterday evening just a-little cough PRT *He coughed just last night. He coughed a little.*
3	D	有点 咳嗽，是 吧？鼻子 塞 吧？ 来 听 听， youdian kesou shi ba bizi sai ba lai ting ting a-little cough is PRT nose congested PRT come listen listen *He coughed a little. Is his nose congested? Come, let me listen.*
4		**((听诊))** **((Using the stethoscope))**
5	D	原来 没有 哮喘 这些 吧？ yuanlai meiyou xiaochuan zhexie ba originally no asthma these PRT *He didn't have asthma before?*
6	M	以前 有 过 那个 喘 的． yiqian you guo nage chuan de Before have PRT that asthma PRT *He used to have asthma.*
7		**((听诊))** **((Using the stethoscope))**
8	D	暂时 不 喘， 哦． 但是 有 痰 了． zanshi bu chuan o danshi you tan le temporarily not asthmatic PRT but have phlegm PRT *He's not asthmatic at the moment. Ok. But, he has phlegm.*
9		**((检查咽喉))** **((Examining the patient's throat))**
10	M	他 会 不 会 是 咽炎 啊？ ta hui bu hui shi yanyan a he will not will is pharyngitis PRT *Is it possible that he has pharyngitis?*

In this example, history-taking and physical examination involve back and forth engagement. From line 1 to line 2, the physician records a history of the patient's coughing symptoms, and the mother responds to questions posed in the next phase. On line 3, the physician initiates a physical examination of the patient's lungs by directly reaching toward the patient and starting to perform the examination. While the physician is conducting the examination, she poses a new history-taking question about the patient's asthmatic symptoms (line 5), to which the mother responds on line 6. As the physician completes the stethoscope examination (line 7), she makes a comment on her physical examination of the patient's lungs (line 8). Following this, she initiates another physical examination of the patient as demonstrated on line 9. In this setting, in which no verbal exchange is initiated or required from the patient, the mother takes the initiative to ask about the diagnosis of the patient's problems (line 10).

Other than asking about the diagnosis of the patient's problem, caregivers can provide various types of information in such an interactional environment that is either backward-looking (e.g., asking the patient's history of symptoms) or forward-looking (e.g., providing treatment plans for the patient's condition). In sum, Example 4 shows that, while the physician and patient view the phase of physical examination as not requiring a verbal response from the patient, the interactional environment involved in this phase provides the patient with opportunities to contribute information without sequential constraints, such as those present in the problem presentation phase. Across the corpus, all 187 visits involve one or multiple physical examination(s) of patients. While in very few cases (n = 4) caregivers raised the expectation for the physician to examine the patient, the physical examination phase is mostly initiated by the physicians.

11.3.5 Diagnosis

In this phase, the primary goal is for the physician to deliver a diagnostic evaluation of the patient's condition. Upon gathering enough information through verbal or physical examinations of the patient's primary complaints, the physician can arrive at a diagnosis that provides an evidential basis for providing a treatment plan for the patient's condition as part of the next phase (Heath 1982; Robinson 2003). Example 5 presents an example of the diagnostic phase of a medical consultation for the Chinese pediatric context.

Example 5
D: Doctor, M: Mother

1		((检查 口腔)) ((Examining the patient's mouth))
2	**D**	**受 了 凉 了 哦.** shou le liang le o catch PRT cold PRT PRT ***He's got a cold, ok?***
3	M	睡觉 不 盖 被子 shuijiao bu gai beizi, sleep not cover quilt *He doesn't like to use a quilt while sleeping.*
4	D	嗯：, en yes *Yes.*

As is shown in the excerpt, the physician delivers a diagnostic evaluation of the patient's condition (line 2) immediately after physically examining the patient's throat (line 1). It should be noted that, while the turn design of the diagnosis involves a final particle *o*, which solicits the mother's confirmation of the diagnosis, the mother does not view an explicit confirmation as required. Rather than offering acknowledgment or acceptance, she responds by presenting a theory of the illness (line 3), treating the physician's delivery of the diagnosis as sufficient for progression to the next activity.

One stream of research considers physicians to assume a dominant role in this activity, arguing that the phase does not always occur or is usually very short in duration, lasting no more than two seconds (Byrne and Long 1976); even when this phase does occur, the patient's response to the doctor's diagnostic statements tends to be minimal, thus exhibiting a relinquishing or subordination of their knowledge and opinions concerning the illness (Health 1992). This is similarly observed in Chinese medical interactions; the diagnosis is either responded to with no uptake or with minimal signs of acknowledgment.

Moreover, although there is evidence that when providing a diagnosis, physicians also exhibit an accountability for the evidential basis of the diagnosis and thereby preserve a degree of mutual intelligibility of the diagnostic process (Peräkylä 2006), this phase is primarily initiated by the physician and is oriented toward as within the domain of the physician's professional expertise. Across the corpus, the discussion of a diagnosis is initiated by patient caregivers only 11.76% (n = 22) of the time. Furthermore, when caregivers initiate the discussion of a diagnosis, it is commonly designed in an interrogative format, registering the caregivers' epistemic status as lower than that of the physicians'. Example 6 serves as an illustrative example.

Example 6
D: Doctor, M: Mother

1	D	咳嗽 是 什么 时候 开始 的 啊？ kesou shi shenme shihou kaishi de a cough is what time begin PRT PRT *When did he start to cough?*
2	M	咳嗽：, 咳嗽 咳 的 有 两 天 了. kesou kesou ke de you liang tian le cough cough cough PRT have two day PRT *(He) has been coughing for two days.*
3		((听诊)) ((Using the stethoscope))
4		((医生电话打断)) ((Interrupted by a phone call))
5		((写 病历)) ((Physician writing medical records))
6	M	喉咙 是 发炎 了 是 吧？ houlong shi fayan le shi ba throat is inflame PRT is PRT *He's got a sore throat, right?*
7	D	嗯. en yeah *Yeah.*

On lines 1 and 2, the physician takes a history of the patient's coughing symptoms; following this, the physician performs a physical examination of the patient (line 3). After being interrupted by a phone call, the physician starts to work on medical records for the patient (line 5). In such an environment, the mother initiates a discussion of the diagnosis of the patient's problems by asking whether there is an infection in the patient's throat (line 6). Note that first, in an environment in which the physician does not deliver a diagnosis following the completion of the physical examination phase, the mother takes the initiative to discuss the diagnosis of the patient's condition, thereby displaying her understanding of the diagnosis as relevant. Second, although the diagnosis is initiated by the mother, it is delivered in an interrogative format; thus, the mother presents herself as deferring to the physician's professional authority. In sum, this example shows that diagnosis is regarded as normatively following the physical examination phase, and the primary goal of this phase is for the physician to establish a basis for developing a treatment plan for the patient's condition.

11.3.6 Treatment

The primary goal of the treatment phase is for the physician and patient to negotiate treatment for the patient's condition. In both pediatric and adult care settings in the USA and UK, while diagnoses are generally presented as not in need of affirmation from patients, treatment recommendations overwhelmingly require support and endorsement from patients (Heath 1992; Robinson 2003; Stivers 2007). This is similarly observed in Chinese pediatric consultations, as illustrated in Example 7, line 4.

Example 7
D: Doctor, F: Father, M: Mother

1 D 哦 : . 西 药 肯 吃 吧 ?
o xi yao ken chi ba
ok western medicine willing eat PRT
Ok. Is he willing to take western medicine?

2 F 肯 吃 呢 .
ken chi ne
willing eat PRT
Yes, he is.

3 D 这个 血象 不 一定 要 挂水 . 如果 抵抗力 不 好 就 要 挂 ,
zhege xuexiang bu yiding yao guashui ruguo dikangli bu hao jiu yao gua
this hemogram not necessary need drip if immunity not good just need drip
抵抗力 还 好 吃 药 就 可以 了 .
dikangli hai hao chi yao jiu keyi le
immunity still good eat medicine just ok PRT
This is hemogram; he doesn't need an IV drip.
If his immunity isn't good, he'll need an IV drip.
If his immunity is ok, it's fine for him to take oral medication.

4 **F** **哦 .** 要 吃 那个 阿奇 么 ?
o yao chi nage aqi me
ok need eat that Azith PRT
Ok. *Does he need to take Azith?*

5 D 阿奇 : , 每 次 都 吃 阿奇 的 啊 ?
aqi mei ci dou chi aqi de a
Azith every time all eat Azith PRT PRT
Azith? Does he take Azith all the time?

6 F 他 以前 : ,
ta yiqian
he before
Before then, he…

7 M 以前 会 咳 , 一 咳 就 会 喘 的 .
yiqian hui ke yi ke jiu hui chuan de
before will cough once cough just will wheeze PRT
he used to cough. Once he coughs, he gets a little asthmatic.

8 D 哦 . 这 次 呢 , 这个 血象 呢 , 他 反正 抵抗力 好 都 不 一定 ,
o zhe ci ne zhege xuexiang ne ta fanzheng dikangli hao dou bu yiding
ok this time PRT this hemogram PRT he anyway immunity good all not definitely
血象 稍微 高 一点 .
xuexiang shaowei gao yidian
hemogram slightly high a-little
Ok. This time, for this hemogram, his immunity is good,
so he doesn't necessarily (need an IV drip).
His hemogram is slightly higher.

9 F 哦 .
o
ok
Ok.

10 D 家里 还 有 什么 药 ?
jiali hai you shenme yao
home still have any medicine
Do you have any medicine at home?

11 F 家里 就 那个 感冒 药 ,
jiali jiu nage ganmao yao
home just that cold medicine
We only have that cold medicine at home.

12 D 感冒 冲剂 , 止咳 糖浆 , 加 一个 [消炎的 , 就 行 了 ,
ganmao chongji zhike tangjiang jia yige xiaoyande jiu xing le
cold granular suppressant syrup add one anti-inflammatory just ok PRT
A cold granular, a cough suppressant, and an antibiotic. That will be fine.

In this case, the physician recommends putting the patient on oral medication for his sore throat (lines 1–3). In receiving the treatment recommendation, the father accepts it explicitly in the first turn construction unit (TCU) of the turn on line 4—'*o*' (ok). Following this acceptance, the father moves on to inquire about whether a specific type of oral medicine is to be used for the patient. In doing so, the father exhibits his understanding that a decision on the treatment modality has been reached and shows that the interactants are ready to address other aspects of the treatment decision (i.e., which specific type of oral medicine is to be used).

In addition, as a unique feature of Chinese pediatric consultations for acute RTI conditions, the treatment phase usually involves the following two stages: (1) decision-making on the treatment modality (i.e., oral medication, an IV drip, hospitalization, or in some cases no treatment) and (2) decision-making on prescriptions (i.e., the type of medication to prescribe). In Example 7, the physician and father first engage in a discussion on whether the patient should be put on oral medications or given IV drip treatment (lines 1–4); upon accepting the physician's recommendation for oral medication treatment on line 4, the father immediately asks about whether a specific type of prescription medicine should be used (an antibiotic) (line 4). When the physician disconfirms the need to put the patient on antibiotic treatment, the physician and father engage in further discussion on which oral medication is to be used.

Across the corpus, the discussion of treatment is initiated by the physicians in 78.7% (n = 147) of the cases, whereas in the remaining 40 cases, the patient caregivers either ask about which treatment is recommended for the patient or take initiative to advocate for a particular type of treatment for the patient. This suggests that decisions made on treatment are culturally and socially regarded as part of the physician's professional territory, though a large proportion of caregiver-initiated treatment discussions also demonstrate that Chinese caregivers view themselves as holding shared rights in terms of treatment decision-making.

11.3.7 Addressing Additional Concerns

In this phase, the physician and caregiver discuss the caregiver's/patient's concerns outside of the primary complaint. This usually involves discussing issues related to child care or diet or lifestyle issues. Although this phase is not included as part of the systematic organization of physician–patient communication in US and UK primary care settings, I find that this phase recurrently occurs following the completion of the treatment phase in the Chinese pediatric setting; moreover, even though the physicians do not register it as a necessary component of a medical consultation, patient caregivers recognize it as a systematic opportunity to address concerns outside of the primary health complaint posed. An example is illustrated in Example 8.

In this example, the physician and father have reached a treatment decision to put the patient on oral medication for his coughing symptoms (not shown in the excerpt). While the physician is working on medical records, she discusses other features of the recommended medicine (i.e., its taste and effectiveness) (lines 1 and 3). At this point, the father asks the patient about her appetite (line 5), thereby initiating a new sequence focused on an additional concern.

Example 8
D: Doctor, M: Mother

1	D	感冒 颗粒 不 应该 太 苦 吧, 我 是 没 吃 过 就 是 了.
		ganmao keli bu yinggai tai ku ba wo shi mei chi guo jiu shi le
		cold granular not should too bitter PRT I is not eat PRT just is PRT
		The granular medicine for the cold shouldn't taste too bitter. I haven't tried it though.
2		((写 病历))
		((Writing medical records))
3	D	这个 药 也 不 贵, 效果 也 还 可以 的.
		zhege yao ye bu gui xiaoguo ye hai keyi de
		this medicine also not expensive effect also still ok PRT
		This medicine isn't expensive. It works pretty well too.
4		(1.0)
5	**F**	**你 是 不是 肚子 不 想 吃 东西 啊?**
		ni shi bu shi duzi bu xiang chi dongxi a
		you is not is stomach not want eat stuff PRT
		Is it that your stomach doesn't feel comfortable and you don't want to eat?
6	P	是 啊, 吃 的话, 就 感觉 一 吃 就 会 吐.
		shi a chi dehua jiu ganjue yi chi jiu hui tu
		is PRT eat case just feel once eat just will vomit
		Yes. When I eat, I feel like I'm going to vomit.
7	F	嗯.
		en
		yes
		Yes.
8	D	你 这 两 天 要 吃 清淡 一点.
		ni zhe liang tian yao chi qingdan yidian
		you these two day need eat light a-little
		You need to have some light food over these next two days.
9	F	清淡 一点.
		qingdan yidian
		light a-little
		Some light food.
10	D	嗯.
		en
		yes
		Yes.

In response to the father's initiation of the sequence on the patient's appetite (line 5), the patient initiates a discussion about her discomfort when having meals. After being presented with this additional concern, the physician suggests a light diet for the patient.

From the 187 acute visits included in my analysis, patient caregivers initiate discussion about additional concerns in 29.94% (n = 56) of the cases. In an interactional environment in which the trajectory of a consultation is primarily driven by the physician, the fact that patient caregivers actively influence the trajectory of the consultation in 30% of the cases represents a significant departure from the physician-dominated interactional pattern.

11.3.8 Closing

In this phase, the interaction is organized based on the primary goal of the physician and caregiver to end the consultation. This activity is commonly initiated by the physician summarizing a treatment plan or describing a prognosis and future plans and with patient caregivers receiving this information and showing appreciation to the physician. Example 9 presents an example. In this example, the physician and patient move past the treatment phase by discussing specific features of the prescription medicine recommended for the patient (line 1).

Example 9
D: Doctor, M: Mother

1 ((讨论药物使用细节))
((Discussing medication usage))
2 (5.0)
3 D 这 是 挂水, 一 天 挂 一 瓶 半, 这个 是 吃 的 药, 啊,
zhe shi guashui yi tian gua yi ping ban zhege shi chi de yao a
this is drip one day drip one bottle half this is eat PRT medicine PRT
还 有 你们 家里 的 止咳 糖浆, 就 行 了.
hai you nimen jiali de zhike tangjiang jiu xing le
still have you home PRT suppressant syrup just ok PRT
This is an IV drip. One bottle and a half a day. This is an oral medication. Ok? Together with the cough medicine at home, it should be fine.
4 M 嗯.
en
yes
Yes.
5 D 好 吧.
hao ba
ok PRT
Ok.
6 M 谢谢 啊.
xiexie a
thank PRT
Thanks.
7 D 嗯.
en
yes
Yes.
8 ((离开))
((Patient and caregiver leave))

After the physician and patient caregiver finish discussing the medication dosage, the physician works on medical records for five seconds before starting to summarize the treatment plan (line 3). This summary of the treatment plan is minimally acknowledged by the mother at line 4. Following this, the physician initiates the pre-closing sequence and seeks the mother's confirmation (line 5) to end the consultation (West 2006); this pre-closing sequence is followed by the mother by showing gratitude to the physician (line 6) as part of a normative form of closing sequence initiation found in service encounters (West 2006).

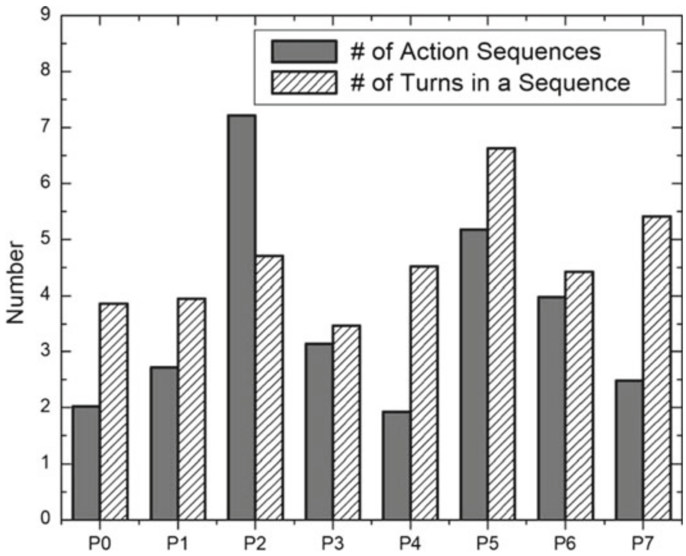

Fig. 11.2 Phases of medical consultation

11.3.9 Characteristics of the Overall Structural Organization of Medical Consultations

From an examination of internal features of component phases of medical consultations, it is found that the physician's treatment phase is the most expanded, involving 6.63 turns for completion on average; other phases are less expanded, and the physical examination phase involves the lowest number of turns at 3.52 turns on average. Figure 11.2 shows the average number of turns and action sequences involved in each phase of medical consultation.

In addition, the average number of turns of an action sequence is the greatest in the treatment phase (P5) of medical consultation. On average, a treatment recommendation action sequence takes 6.63 turns to complete; in comparison, other actions of a medical consultation are typically less expanded. For instance, a history-taking action sequence takes 4.70 turns, and a problem presentation action sequence takes 3.95 turns to complete on average. The long sequence observed suggests that the treatment phase is the phase in which communication problems (understanding or accepting the physician's recommendations) are most likely to occur. In observing the caregivers' responses to physicians' treatment recommendations, it is found that physicians' treatment recommendations are resisted by caregivers 41% of the time in Chinese pediatric consultations.

11.4 Discussion and Conclusion

In this paper, I investigate the overall structural organization of medical consultations held in Chinese acute pediatric contexts. Consistent with findings from American and British primary care settings, my results show that medical consultations held in Chinese acute pediatric settings are organized by a normative structure that involves the following eight ordered component phases: *(1) consultation opening, (2) problem presentation, (3) history-taking, (4) physical examination, (5) diagnosis, (6) treatment, (7) addressing the patient's additional concerns, and (8) consultation closing*.

The highly structured nature of physician–patient communication in Chinese pediatric primary care settings, on the one hand, might be attributed to physicians receiving training on standard procedures for conducting medical consultations in medical school and to patients being socialized with the procedure through repeated experience as observed from clinical contexts in western societies (Heritage and Maynard 2006); on the other hand, the pattern may be attributed to a functionalist perspective on the systematic structure of communication: to achieve the primary goal of seeking medical assistance for a patient's condition, the physician and patient must sequentially complete a series of activities to collect enough information to develop a sound diagnosis and rational treatment plan.

Although the overall structural organization of Chinese acute pediatric consultations does not differ significantly from that of American primary care consultations, I do observe variations specific to this particular professional setting of the Chinese pediatric acute care context. These variations are as follows:

First, as part of the overall structure of medical consultations, the opening phase plays a crucial role in fast-paced Chinese pediatric acute care settings. Unlike American healthcare settings, in which nurses or medical assistants direct the initial stages of medical encounters (e.g., confirming patients' identities or recording patients' physical features), in the Chinese pediatric context, physicians are responsible for confirming patients' identities and for initiating the encounter. Once this information is confirmed, physicians and patients address primary patient complaints.

Second, as an important feature of Chinese pediatric consultations, the diagnosis phase is rarely absent from consultations. Although seeking medical assistance and specifically treatment is viewed as the central goal of medical consultations, my results show that diagnosis delivery is treated as a relevant activity in medical consultations. This is particularly evident from the fact that when there is no direct commentary on the patient's condition, the patient initiates a discussion of the diagnosis and asks about the nature of his or her condition.

Third, while not documented in American primary care consultations, my data show that the treatment phase is not always initiated by physicians; instead, in 21.39% (n = 40) of cases, patients initiate a discussion of the treatment plan. A patient-initiated discussion of treatment usually occurs when the physician has just completed delivering diagnosis or while engaging in commentary while conducting a physical examination of the patient. These cases thus serve as evidence to show that patients view themselves as having shared rights in making treatment decisions regarding their health problems.

Forth, while not considered a normative component of the overall organization of American primary care visits, it is found that physicians and patients deal with additional concerns from the patient in a systematic way. Specifically, additional concerns from patients are recurrently presented after the completion of the treatment phase when the primary complaint from the patient is considered to have been addressed and when the treatment phase is thus considered complete. This is in line with findings from US and UK primary care settings, in which physicians and patients view a consultation as addressing only one primary complaint from the patient. However, in the fast-paced environment of Chinese pediatric consultations, physicians and patients are under greater time constraints than their American and British counterparts. In turn, patients and their caregivers raise their other concerns by addressing them before the consultation ends. This phase is thus treated as the last structural opportunity for caregivers to discuss their concerns in medical consultations.

In conclusion, in this study, I investigate the overall structural organization of medical conversations held during Chinese pediatric consultations. By demonstrating how participants support a normative order of overall organization in medical conversations, I show that conversations held in Chinese pediatric settings involve eight component phases and that their overall organization serves as an important interactional resource that interactants make use of and rely upon to accomplish their goals through social interaction. Findings from this study not only have implications for facilitating effective communication between physicians and patients in Chinese pediatric settings but also serve as valuable resources to teachers and learners of the Chinese language for navigating specific institutional settings of medical consultations.

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Chapter 12
Needs Analysis for a Chinese Course for Healthcare Professionals

Wei Lai

Abstract This chapter reports a needs analysis conducted to develop an elementary Chinese course for healthcare professionals. Given that Chinese immigrants became the largest group of new arrivals to the USA in 2013, the communication needs of the Chinese-speaking Limited English Proficiency (LEP) population in various healthcare settings have increased accordingly. A Chinese course for English-speaking healthcare professionals designed to foster their ability to deliver effective healthcare service and raise their intercultural awareness in regard to the target population is, therefore, called for. The study provides a detailed description of the needs analysis for the proposed course. Multiple sources and methods were used during the data-gathering process, which was followed by an analysis to identify the themes and objectives of the course. Ways in which the results can inform the syllabus design and pedagogical development are discussed, and future research directions relating to supporting healthcare professionals' use of Chinese to communicate effectively with their Chinese-speaking LEP patients are suggested.

12.1 Introduction

The critical role of effective and accurate communication in the delivery of high-quality healthcare services is well established. Communication in healthcare settings has been studied in several fields, such as nursing education, medical and health programs, and applied linguistics (e.g., Adolphs et al. 2004; Candlin and Candlin 2003; Candlin 2006; Xu and Davidhizar 2005). As healthcare communication requires a certain level of health literacy, which is technical in nature and thus difficult to master, all parties involved in a given communication task in this context should speak the same language. Yet, even when this is the case, communication discordance and breakdowns still occur. Further, language barriers

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between those participating in the conversation further undermine communication and have the potential to severely compromise the quality of the health care delivered. Several studies have shown that in the USA, people with Limited English Proficiency (LEP)—defined as a limited ability to speak, write, and/or understand English—receive healthcare service of poorer quality than fluent English speakers, and sometimes language barriers even adversely impact health status and treatment outcomes (Agency for Healthcare Research and Quality 2012; Jang et al. 1998; Ngo-Metzger et al. 2007; Ponce et al. 2006; Schyve 2007).

Researchers in several fields such as nursing education and public health have considered ways to ameliorate healthcare disparities caused by language barriers. Discussions involving healthcare educators and medical organizations to date have centered on long-term and global modification to current healthcare education and medical practices. Studies in nursing education point to the challenges presented by linguistic and cultural diversity in nursing student and patient populations and propose that nursing education should take intercultural communication and cultural competence into account in order to provide more effective healthcare services (Debrew et al. 2014; Xu and Davidhizar 2005). Physicians and medical organizations focus on identifying LEP patients' healthcare needs and have included a call for more qualified medical interpretation and translation services, which, however, require considerable funding and personnel training as well as systematic examination of established medical procedures (Flores 2006; Schyve 2007; Tang et al. 2011). These studies include statements highlighting the need to eliminate language barriers and enhance cultural understanding in health education and clinical settings. However, none provides a linguistic analysis of communication between patients and healthcare professionals, and no concrete pedagogical plans to improve healthcare professionals' linguistic knowledge and ability to communicate cross-culturally are presented.

On the other hand, studies on Language for Medical Purposes (LMP) cater to the linguistic needs of healthcare professionals and describe language curriculum design or pedagogical development in detail. Most of the LMP literature deals with the linguistic needs of English as a Second Language (ESL) healthcare professionals. For example, there are courses designed to help ESL nurses communicate with their English-speaking colleagues and patients and ESL courses for medical studies and professional development (Bosher and Smalkoski 2002; Cameron 1998; Duff et al. 2000; Lu 2018; Staples 2015). In the US context, some LMP-related studies investigate English-speaking medical professionals' linguistic needs in communicating with LEP patients and/or the communication problems of non-English-speaking patients. As the second most spoken language in the USA, Spanish is the focus of most of these LMP studies, and further, Spanish for Medical Purposes programs in the USA are fairly well developed (Altstaedter 2017; Frank 2000; Hardin 2015; Lear 2005; Lepetit and Cichocki 2002). However, LMP courses in languages other than English and Spanish are few and far between (Altstaedter 2017). According to the US Census Bureau, China was the top country of origin for new arrivals to the USA in 2013 and the Chinese language (including major dialects of Chinese) was the third most spoken language at home after English and Spanish in a 2016 survey by the US Census Bureau. Furthermore, an analysis from the Pew Research Center shows that Chinese population in the USA was 4,948,000 in 2015 but only 42% of the Chinese immigrant population was categorized as proficient in English. The communication needs of this fast-growing population in healthcare settings are already well established and will only grow as this population grows. Yet, there are few systematic and updated reports of the population's linguistic needs in the context of health care, and the literature on Chinese for medical or healthcare purposes is scant.

Flowerdew (2013) and West (1997) both note that a needs analysis is the first step in designing a Language for Specific Purposes (LSP) course and that the results of the analysis should guide the subsequent syllabus design, teaching materials, and assessment of students' performance. In order to build a Chinese for Healthcare Purposes (CHP) curriculum that reflects the immediate linguistic needs of the Chinese LEP population and the healthcare professionals who treat them, the present study reports a needs analysis for which data were collected and examined from multiple information sources comprising informants in healthcare practices and analyses in applied linguistic studies. The needs analysis will serve as a blueprint for the development of a CHP course designed to train healthcare professionals to provide basic and timely medical and healthcare services to the Chinese LEP population.

The target learners are students majoring in a health science program or nursing program at a community college who have some or little knowledge of the Chinese language. The purpose of the study is to address some theoretical and empirical gaps in the research on language barriers in healthcare settings. Although some Chinese courses for healthcare providers are offered by universities or through private online language-learning programs,[1] the extent to which these courses were developed based on learners' needs and stakeholders' opinions is unclear. From an applied linguistics perspective, the needs analysis provides a systematic examination of communication patterns in healthcare settings and presents the views of various key stakeholders. In addition, the field of Chinese for Medical Purposes (CMP) or CHP is relatively new such that there are few related studies. The needs analysis presented in this chapter, therefore, provides a much-needed reference for future research. From a healthcare practitioner perspective, the results of the needs analysis may provide a foundation for protocols and manuals for use in working environments.

[1]For example, the Mount Sinai School of Medicine and the SUNY College of Optometry have offered short-term intensive Mandarin courses for healthcare providers.

12.2 Literature Review

12.2.1 Needs Analysis

What distinguishes LSP courses from general language courses is that the former are highly customized—every LSP course is designed for a specialized field or a certain profession, for a specific population of learners, and often for a defined context. The pedagogical development and teaching sequences of an LSP course are, therefore, likely to differ from those of a general language course. That is to say, the selection of course materials is more likely to be determined in reference to the practical needs of a profession in order to satisfy the expectations of employers rather in reference to the relative language proficiency of learners. For example, a language course focused on tourism may prioritize speaking and listening skills rather than reading and writing skills. In order to design an LSP course, its learning objectives, teaching materials, assessment, and so forth, a well-thought-out needs analysis should be undertaken as the critical first step. The crux of needs analysis[2] is best explained in Brown's (1995) discussion of a foreign-language curriculum:

> The systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of particular institutions that influence the learning and teaching situation. (p. 36)

Brown notes the importance of collecting information from various sources and taking different perspectives into account in order to establish a testable curriculum. As the course designer has the responsibility of selecting information sources, if he/she were to consult a wide range of information sources and systematic analysis this could help avoid the course designer's subjectivity being reflected too strongly in the curriculum. According to Graves (2000, p. 98), "needs assessment is a systematic and ongoing process of gathering information about students' needs and preferences." That is, far from being a linear process, needs analysis should reflect the dynamics of the learning and teaching situation. Hyland (2006) expresses a similar view, arguing that needs analysis is a continuous process initially constructed on the holistic understanding of learners' language profiles and then repeatedly modified by the teaching–learning interaction to establish an effective course.

West (1997) emphasizes that a needs analysis is the basis of any LSP course and should be credible to all stakeholders. Extending the arguments stated above, he argues that a sound needs analysis includes opportunities for sponsors of the program to weigh in, account for, and offer ways to address needs related to target situations. In his view, a needs analysis also requires transparency among the major

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[2]In some research, the term *needs assessment* is used instead of *needs analysis*; however, in the present study, the latter term is used consistently unless in direct reference to cited works.

stakeholders; that is, the course designer and the learners and sponsors of the program should be able to understand and negotiate each other's needs (West 1997, pp. 73–74).

It is clear that to be considered complete, an LSP needs analysis must include subjective and objective data and it must be designed to accommodate the stakeholders' needs and the teaching setting. Further, and critically, it is subject to continuous revisions. In practice, however, few needs analyses meet all these requirements. Based on an examination of 32 needs analysis studies conducted for English for Specific Purposes (ESP) courses during the period of 1986–2014, Serafini et al. (2015) reported that across the majority of the studies there is no consistency in terms of data collection or methodology such that the validity and reliability of needs analysis in this context is undermined. Ten studies published during the first 15 years of the study period (1984–1999) considered by Serafini et al. (2015) provided limited or no information pertaining to how the questionnaires or interviews used to collect data were constructed or conducted. Seven of these ten studies triangulated data sources via the same method by, for instance, employing the same method (e.g., a questionnaire) for all information sources. According to the researchers, though, methodological improvements are evident in the studies conducted during 2000–2014. The majority of studies (15 out of 22) in this time period relied on a mixed-methods design to triangulate the data, and most used both qualitative and quantitative methods and provided detailed information about the needs analysis procedures. Similarities found in the studies across time are a tendency to triangulate the sources or methods and a tendency to consult with domain experts (p. 16). However, although most needs analysis studies surveyed by Serafini et al. (2015) did triangulate data to some extent, the researchers propose that in order to ensure the validity and credibility of needs analysis, multiple sources, and methods should be employed. Ideally, all sources should be examined by multiple methods. The authors also point out that in all the studies included in their report, domain experts, and learners were consulted, although outsiders (LSP teachers and/or applied linguists) were consulted in less than half the studies. Further, Serafini et al. assert that compared with domain experts, outsiders can provide better analyses of the language used in the target tasks.

It should be noted that as needs analysis for LSP courses usually involve more information sources than general language courses do, as Chambers (1980) states, "whoever determines needs largely determines which needs are determined," decisions regarding who should be consulted and which sources are most influential are critical when conducting needs analysis for LSP courses. Belcher (2009) indicates that ESP specialists are responsible for identifying learners' needs through collecting and examining various genres such as audio recordings, blogs, and memos to help learners achieve their goals. Long (2005) suggests that although learners are a necessary source of information and in-service learners might be a more reliable source than pre-service learners, neither of these kinds of learners may be able to adequately articulate their language needs. Other readily accessible sources such as graduates of a program, experienced teachers, employers, and work-related documents should, therefore, be consulted.

12.2.2 Language for Healthcare Purposes Courses

There is an abundant literature on communication in medical and healthcare settings. In recent decades, the research most relevant to the present study includes work by Candlin and Candlin (2003), Candlin (2006) and Staples (2015), all of which focus on analyzing the discourses between nurses and patients although the research methods used across the studies vary. Bosher and Stocker (2015), Lear (2005) and Lu (2018) investigated nurses' and/or other healthcare professionals' communication difficulties experienced in relation to foreign languages at work. Although the studies differ in terms of perspective and focus, all share the goal of reducing communication discordance and improving efficiency in the workplace. EMP or EHP courses are developed to serve this goal; however, discussions of these tend to focus almost entirely on curriculum development and/or course content (Shi 2009). Ferguson (2012) remarked that compared with the significant body of EMP research, analyses, or evaluations of EMP practices are much less abundant (p. 258).

A few needs analysis studies on LHP courses have reported on pre-service learners in health programs or in-service healthcare professionals' needs. Bosher and Smalkoski (2002) conducted a needs analysis for ESL students enrolled in an associate of science (AS) degree nursing program in the USA. The students' English proficiency level ranged from low-intermediate to advanced. Through interviews with nursing faculty and students, questionnaires administered to the students, and observations of performance tests and clinical trainings, the researchers found that students identify the greatest difficulty they face in clinical setting is that of communication with clients and colleagues. Based on the findings of the needs analysis, a course was developed that included ways to respond to the objective, subjective, and learning needs of the students in the program as identified by the faculty and via the students' self-reported needs and wants. The course had four major units: assertiveness skills, therapeutic communication, information-gathering techniques, and the role of culture in healthcare communication (p. 69). The first three units were concerned with pragmatic aspects, which are admittedly difficult for even intermediate or advanced foreign-language learners to master. Lepetit and Cichocki (2002) carried out a questionnaire survey with English-speaking healthcare majors at a university in South Carolina with the purpose of determining their expectations for foreign-language courses in their specialized fields. The most important needs identified by the health majors were the oral aspect (listening and speaking skills) and a place for them to practice with speakers of the target language. In general, the students agreed that knowledge of a foreign language would benefit their careers, and the most desired language was Spanish (about 90% of the respondents regarded Spanish as the most practical choice). The authors commented that the language choice related to the language needs in South Carolina. In an earlier study, Cameron (1998) investigated the English-language needs for academic and work purposes of international nursing graduate students at the University of Pennsylvania. The students' language proficiency ranged from low to moderate, according to the assessment results of a spoken test administered by the university. The data were gathered in two stages: In the first stage, the chairpersons of several health programs in the School of Nursing were interviewed in order to collect information regarding criteria and strategies for evaluating students' performance at school and clinics; in the second stage, ethnographic observation reports and transcripts of recordings at four different clinical sites were compiled. Based on the data, Cameron presented five needs statements, each of which focused on a specific aspect to address as instructional notes for future courses for healthcare professionals: (1) speech production accuracy, (2) academic performance, (3) clinical performance, (4) cultural variation, and (5) inferencing skills. Although the pre-service healthcare professionals or nursing students who participated in the needs analysis studies reported in this paragraph represented a wide range of proficiency levels, two common needs were addressed. The first is communication skills, which involve using paralinguistic features as a way to overcome the deficits of insufficient linguistic knowledge and other skills to gather and relay information to patients. The second is to enhance healthcare professionals' understanding of patients' diversified cultural backgrounds.

In a needs analysis study the distinct needs of working medical professionals in the Midwest region of the USA were explored (Lear 2005). Using qualitative methods to analyze data from observation field notes, interviews with healthcare professionals (nurses, midwives, and a nutritionist) at perinatal clinics, and document analysis, Lear (2005) found that the working professionals, who had all taken Spanish at high school for a few years, were able to produce commonly used words and expressions in Spanish, but encountered difficulty in understanding Spanish-speaking patients. Analysis of the data suggested four linguistic needs: pronunciation, written resources, a sense of grammar, and listening. Of these, pronunciation and written resources concern productive skills, whereas grammar and listening concern receptive skills. It takes considerable time to develop the skills to be proficient in each of the four categories, especially for receptive skills. The interviewees indicated that although they did have grammar books and/or a dictionary to help them translate, it was not possible for them to look things up during their work time. Another difficulty was that even though the healthcare professionals could produce short and simple words or expressions in an effort to communicate with their patients, a lack of familiarity with the target language made comprehending the patients' language in terms of tense, sentence structure, and accents a very challenging task. Given that it is very difficult for working professionals to find the time to attend regular language programs and given the urgent need to communicate effectively in the workplace, Lear recommended written resources formatted for use in the workplace (e.g., interview and information sheets for the patients, expressions for reception strategies) and called for pedagogical models for non-classroom learning environments.

Unlike the needs analysis research referenced in the present study to this point in which learners (healthcare professionals or students) are regarded as the major information source such that patients' voices are often absent, Frank (2000) used questionnaires, small-group interviews, and on-site observations to hear both sides of the story. A needs analysis study was carried out at a university in Illinois, and the respondents were international student patients and the staff at the student health program, which provides basic medical and counseling services to all students on campus. The study goal was to determine the language and communication problems between the English-speaking staff and the ESL students and to develop ESL courses for the students and an in-service training agenda for the staff based on the results. According to the results, both groups agreed that medical vocabulary and pragmatics are problematic areas and intercultural awareness is the key to some of the problems. The pedagogical implications included increasing the students' knowledge of medical vocabulary and enhancing awareness of pragmatics in medical settings. Health program staff were advised to slow down their speaking pace, to take cultural sensitivity training, and to check for patients' comprehension during a communication task.

The needs analysis studies discussed to this point were intended to provide a foundation for the development of foreign-language courses for healthcare professionals. Although across these studies different research methods are used and various types of informants are interviewed, the results show that cultural competence and communication skills (not necessarily linguistic knowledge) are the two most important factors to consider in developing an LHP course.

12.2.3 Healthcare Communication with LEP Patients

Smith (2009) demonstrated that there is a significant difference between English-speaking and LEP patients in regard to access to health care and preventive screenings. She suggested strategies including providing interpretation services and training in communication skills and cultural awareness for healthcare providers as ways to improve healthcare delivery to this population. In fact, the US government requires that medical interpretation or document translation services be provided to LEP patients (US Department of Health and Human Services). However, good-quality interpretation/translation services are not always available due to time, personnel, and financial constraints. In practice, according to some research, interpretation services may not be as reliable as expected by the government or healthcare professionals.

Hsieh (2006) reported that in some studies it has been found that interpreter services may deprive patients of opportunities to communicate with their physicians and that when an interpreter is present some comments from patients tend to be ignored by the interpreter. Moreover, using nonprofessional interpreters (e.g., family members or a random staff member at the healthcare setting) may render the communication vulnerable to errors. Rosenberg et al. (2007) found another hidden risk associated with employing an interpretation service. Physicians reported that delays in the process of translation affect their train of thought during the diagnosis process and that when their attention is turned to the verbal translation, non-verbal hints given by the patients might be overlooked. On the other hand, physicians with foreign-language skills who use them in their practice can protect their patients' privacy, build rapport with their patients, and deliver care more efficiently (Schenker et al. 2008). From the patients' perspective, findings reported by Ngo-Metzger et al. (2007) based on a survey of LEP Asian American (Vietnamese and Chinese) patients suggest that language congruence between the health service provider and the patient is optimal as patients report greater satisfaction when the provider communicates directly with them.

Other studies further showed that the Chinese LEP population's health status is adversely affected by language barriers. Aroian et al. (2005) found that Chinese elders could not fully utilize health services due to many factors, with language barriers as the principal one. On a similar note, Jang et al. (1998) indicated that the population's access to and use of health care were influenced by limited English skills and cultural beliefs and practices.

12.3 Current Study

12.3.1 Goal of the Study

Based on a review of the existing research, a needs analysis study was undertaken to develop an elementary Chinese course for future healthcare professionals. Information was collected from several sources, although the major sources were domain experts and related documents, such as a nursing textbook, LHP courses syllabi and needs analysis studies for LHP or LMP courses. Multiple methods were employed to cross-check the information sources. The primary goal of the study is to understand the needs of major stakeholders so that learning objectives and curriculum design can be determined. However, the findings will also be further developed in future research to create questionnaires for in-service healthcare professionals, patients, and students enrolled in healthcare programs for the purpose of quantitative analysis in order to realize a more comprehensive picture of the needs of the two target populations, i.e., Chinese LEP patients and the professionals who provide their health care.

12.3.2 Context of the Study

The proposed course is designed for health science and nursing majors at a two-year college, Queensborough Community College (QCC), in Queens, New York. Queens County has the largest number of foreign-born residents among the five counties in New York City and nearly half of the population in the vicinity of the college is of Asian descent. Clinics and other health organizations in the community are constantly recruiting bilingual healthcare professionals who can communicate in

English and Mandarin Chinese, and those who can speak English and other Chinese dialects or Korean are also in demand.

The Health Academy at the college has a well-established nursing program and offers several health programs, including public health, health science, and massage therapy. Possible careers for the graduates include occupational therapist, physician's assistant, nurse, nursing assistant, and medical office assistant. The nursing program has a full schedule and does not require a foreign-language course. However, students can take a foreign-language course as an elective. Other health programs require students to take a foreign-language course over one semester. The target learners for the course are students enrolled in the Health Academy who have some or very little knowledge of Chinese.

12.3.3 Sources and Data Collection

Information sources play a fundamental role in determining the credibility of a needs analysis study for LSP courses, and ideally, information from insiders (e.g., in-service learners, experienced domain experts, and employers) and outsiders (e.g., language instructors and applied linguists) is included in order to establish a balanced information base. Long (2005, p. 20) indicates that pre-service learners know little about the content of the work or the functional language used at work and in-service learners know the content but do not have the ability to identify language needs. For this reason, learners' opinions are not emphasized in the present study. The selection of information sources is complex in the case of LHP for two reasons. First, due to the laws governing confidentiality and due to practical concerns such as the possibility of intruding on the caregiving, conducting on-site observations or taking field notes in a medical or healthcare setting is not an easy undertaking. To compensate for these shortcomings, class observations and interviews with domain experts were used in place of on-site observations. Second, the procedures for delivering health care are highly standardized and predictable; therefore, documents such as textbooks, simulation scenarios for training nursing students, and procedure manuals for healthcare professionals may provide more efficient and clearer clues for identifying language tasks than would surveys or unstructured interviews for informants. On this basis, the following information sources were chosen for the present needs analysis study:

(1) Class observations
(2) Interviews with domain experts
(3) Interviews with caregivers
(4) Interviews with patients' family members
(5) Questions on medical translation collected from students
(6) Related documents and literature.

During the Fall 2017 semester, I observed NU 101 (Safe & Effective Nursing Care Level 1) at Queensborough Community College. This is the first in a series of five courses that introduce nursing care to the students majoring in nursing, and as the most elementary course, NU 101 covers the basic routines and guidelines associated with nursing procedures and healthcare concepts. The first half of the course consists of class lectures and labs, whereas the second half is conducted in healthcare settings. Due to the constraints specified earlier, I had permission to observe only classes taught on campus. Over a span of two weeks, I observed and took notes on 12 hours of labs and eight hours of lectures. The lectures focused on explaining healthcare concepts and certain syndromes, and the accompanying lab sessions gave the students' opportunities to practice the medical procedures of taking care of patients with the syndromes and of interacting with patient simulators. During the labs, the professor first explained the adequate and required conversations with the patients, such as making a self-introduction to a patient, asking questions to check the patient's condition, and collecting dietary data from patients. The students then would practice the required procedures and the conversations were recorded.

The second information source consists of two domain experts, both are experienced nurses. The first domain expert is a native speaker of English and a nursing professor with extensive experience of working in hospital settings as a registered nurse. The second expert is a native speaker of Chinese and a near-native speaker of English. She is an applied linguist experienced in teaching foreign languages, syllabus design, and translation services. Most importantly, she is also a former nurse. Unstructured, open-ended interviews were conducted with both respondents, although both were asked to provide accounts of the general procedures followed in delivering health care, to identify any language needs or difficulties they had encountered or envisioned during the procedures, and to specify the situations in which translation service are most needed. The respondents were encouraged to ask any questions they had during their interviews and to add any points they thought should be included in the course.

Information from the third and fourth sources focused on interactions between patients and caregivers in-home care or nursing home care settings. A trained nursing assistant provided the training package used in this context, which detailed the ways in which nursing assistant can assist with patients, and recalled conversations she had participated in with the patients. It should be noted that legally, unlike registered nurses, nursing assistants are not qualified to perform any medical procedures. For this reason, interactions between nursing assistants and patients are very limited in nature. Conversations between the patients and the nursing assistants are mostly in the form of simple questions and directives. Often, people who need in-home care or nursing home care lose their ability to communicate freely such that their family members are the main conversation partners of the nursing assistants. Two family members of patients were interviewed to find out about their communication with their non-Chinese-speaking in-home caregivers in Taiwan. According to the family members, the in-home caregivers had very limited listening ability in Chinese and could only answer in phrases or words in Chinese.

The fifth information source is the most representative need for the proposed course. In recent years, given my role as the instructor of an elementary heritage

Chinese course, students from nursing or health science programs who work as medical office assistants or clinic receptionists have asked me to help translate medical instructions, notices, and terminology in oral and written forms. The oral proficiency of the students varies from low to intermediate, but even the most fluent students still encounter difficulties in translating medical instructions and advising patients orally. In terms of grammatical difficulty, the students have asked me a wide range of questions and shown me numerous texts, all of which need to be translated are formulated. Examples of simple questions asked by clinic receptionists include “What procedure are you here for today?” “Who is your primary doctor?” and “Did anyone accompany you today?” Complicated texts usually require oral and written translations. For example, instructions provided to patients preparing for an abdominal examination are given below:

> Eat your regular diet the day before the examination. Swallow the tablets between 6 and 8 PM the night before the exam. No solid food after midnight. You may have one glass of water between midnight and the examination the next day. No breakfast or fluids on the morning of your exam except for the one allowed glass of water.

I compiled the questions asked by the students in regard to medical instructions and terminology for further analysis. It is interesting to note that when the students were asked to identify the situations or tasks at work with which they struggled with languages, none could explicitly articulate the situations or tasks. This observation is in line with Long’s (2005) claim that in-service learners might not be able to identify language needs despite being familiar with the work.

The last information source documents pertaining to healthcare services per se and language for medical or healthcare purposes. I referred to nursing textbooks, protocols, syllabi, and the content of LHP courses and surveyed previous studies on linguistic needs in healthcare settings.

12.3.4 Methods

Multiple methods such as interviews with stakeholders, class observation notes, and document analyses were used to examine the data in order to establish its validity. Due to limited time, institutional constraints, and practical concerns relating principally to patients’ safety and privacy, not every information source could be examined. However, unstructured interviews were conducted with four informant groups: the domain experts, the caregiver, the patients’ family members, and the in-service target learners. The information provided by these groups described the situations and patterns of communication at the macro-level. The main points identified in their interviews were cross-checked across the groups to determine whether there were any major discrepancies in the language use reported and the care delivery procedures. Observation notes were used to record necessary conversations initiated by nurses (such as self-introductions, directives, instructions, and questions for patients) at the micro-level.

Many researchers have argued that input from outsiders (e.g., applied linguists, ESP instructors, and course designers) might be too intuition-driven and may not be based on sufficient relevant content knowledge (Jasso-Aguilar 1999). Fortunately, among the domain experts interviewed, one was an experienced ESL teacher, a Chinese–English translator, and a licensed nurse. After the major communication patterns and tasks in the workplace were identified, this domain expert worked with me to examine current language needs and predict future needs in this regard.

Studies of LMP or LHP in languages other than Chinese were adopted to examine whether the questions brought up by the nursing and health science majors were cross-linguistic or unique to the Chinese language. As there are only a few studies or courses related to Chinese used in medical and healthcare contexts, a backward checking method was applied. Frank (2000) conducted a questionnaire with international students focused on their communication difficulties in medical settings in which most of the respondents indicated that other than their unfamiliarity with the US medical system, what they found most difficult was understanding the medical terms. Frank's study showed that it is necessary to translate medical terms even for intermediate to advanced speakers of English. In addition, conversations reported by the nursing assistant in the nursing home was checked in reference to two studies on the English-language needs of nurses' in Taiwan (Bosher and Stocker 2015; Lu 2018). According to the studies, although they work in a Chinese-speaking environment, nurses in Taiwan must communicate with foreign caregivers in English in order to relay caring and medical information—a task that the nurses often found daunting. Further, as reported in the studies, the content and models of communication are similar to those reported by the nursing assistant in the USA.

The syllabus from each of a few online Mandarin courses for healthcare professionals offered by private language institutions and a course packet (Essential Medical Mandarin for Health Care Providers) developed by the Mount Sinai School of Medicine were screened to pinpoint learning units and teaching materials for the proposed LHP course. The learning units identified were checked against the information provided by the domain experts and the class observation notes to determine whether the results are in agreement or whether any of the units under consideration would be redundant.

12.4 Findings and Discussion

12.4.1 Findings

The findings from the analyses of the information sources fall into two categories: (1) the linguistic features of communications that take place in healthcare settings and (2) the target situations at the workplace.

According to the linguistic features, the accounts given by in-service working professionals, the class observation notes, and the linguistic analysis of healthcare communication (Candlin and Candlin 2003; Staples 2015) can be summarized as follows. First, conversations initiated by healthcare service providers are highly functional and the purposes of these conversations are very clear. The most common statements made by healthcare professionals are declarative, interrogative, imperative, and instructive. Declarative sentences are often used at the very beginning of the healthcare delivery process and include the professional introducing him/herself to the patient (mandated in almost all healthcare settings), briefing the patient on the procedures to be followed for the present visit to the care facility, and informing the patient of instances when he/she will be temporarily absent from the scene and the reasons for this. Interrogative statements are mostly yes-no or wh-questions, and open-ended questions are rarely asked. Examples are "Who is your primary doctor?" "What is your name?" "What is your date of birth?" and "Are you allergic to any medications?" Imperative statements are used in situations where it is necessary to determine the patient's identity and condition. Examples are "Please confirm your name and date of birth," "Take a deep breath," and "maintain in the sitting position." Declarative, interrogative, and imperative statements are mostly delivered orally. However, instructive statements, especially when they are long and complicated, are also conveyed in written form. Examples are educational notes on medication and caring or guides for patients preparing for a health check-up. Shorter instructive statements are often expressed orally. For instance, "Take the medicine three times a day, after meals, and/or before you go to bed." Second, most conversations between patients and healthcare service providers are one-directional, which is demonstrated by the linguistic examples of functional statements. In circumstances in which conversational exchanges are short, unexpected linguistic needs are reduced. Third, as medical or healthcare delivery procedures follow strict protocols, the phrases and terminology used and the questions asked by healthcare professionals are often prescribed in an effort to avoid ambiguity. As the words and sentence types are predictable, an inventory of terminology and sentence patterns can be prepared in advance.

Based on the interviews conducted with domain experts for this study and the nursing textbook *Fundamentals of Nursing* (2015), the target situations involve interactions between patients and healthcare service providers in healthcare settings are identified as follows:

(1) Introduction: Self-introduction to the patient and introduction of the caregiving procedures
(2) Assessment of the patient's condition
(3) Assistance with the physician's diagnostic process
(4) Delivery of care process
(5) Instructions on medication, dietary needs, etc.
(6) Document preparation: Written record of the patient's health history, consent forms, insurance claims, etc.

The first five situations involve functional statements, as explained earlier. Although the last two target situations are significantly more complicated than the others in terms of grammatical difficulty, the information can be accessed in pre-formatted written forms. With sufficient and clear translation and guidance, LEP patients can fill out the forms or understand the instructions.

An interesting finding is not related to language barriers, but to the medical language per se. The nursing professor commented that even for native speakers of the working language (in this discussion, English), training on oral communication is needed. Nursing students are not used to the formulaic questions and expressions used in the healthcare setting at first such that they may provide instructions on medication, explain procedures, or introduce themselves in an unacceptable or even in an incomprehensible way.

12.4.2 Curriculum Design and Pedagogical Implications

The results of the needs analysis depict the general view of course objectives and desired learning outcomes of the proposed course. Since backward instructional design underscores the importance of the desired results of a course and what learners can do after receiving instruction, backward instructional design may be the most compatible instructional model with LSP courses. The planning of backward design starts with the expected learning outcomes. The course objectives and learning outcomes have to be identified at the first stage, and what evidence can be used to evaluate learners' performance and an accompanying assessment plan are decided at the second stage. The last stage is the development and installation of lesson plans and teaching activities based on the conclusions of the first two stages (Wiggins and McTighe 2001).

In terms of course objectives, the learners are expected to increase their understanding of the target culture, acquire basic Chinese linguistic knowledge and necessary linguistic skills to understand the patients, and engage in simple and effective communication with the patients. Based on the course objectives and take the target learners' language proficiency into account, the expected learning outcomes are suggested as follows: The learners should be able to (1) understand and perceive cultural taboos and customs, social, and religious beliefs of the target culture, (2) convey oral messages clearly by using formulaic expressions and questions, acquired vocabulary and practiced scripts, (3) understand high-frequency medical and healthcare vocabulary in Mandarin, and (4) employ communication strategies to ensure correct and effective communication. To evaluate if the learners have achieved the can-do statements, acceptable evidences may include written tests and/or reflection notes on the target culture, performance tasks such as presenting, explaining, and introducing information on familiar topics to the patients, interviewing or asking the patients formulaic questions and understanding the answers by recognizing the predictable vocabulary, maintaining a conversation by applying communication strategies such as visual cues, written resources, facial expressions, repetition and confirmation of messages, and gestures. It is recommended that healthcare professionals weigh in on the development of assessment plan to ensure the validity.

Lesson plans and teaching activities are developed to enable learners to successfully execute the performance descriptors listed above. Since the goal of the course is to train beginning learners of Chinese to be capable of responding to the LEP patients' immediate linguistic needs, the instruction is meaning-focused rather than form-focused. Possible teaching activities are lectures and group discussions on the target culture, listening skill practices, speaking drills, preparing scripts for conducting simple conversations and interviews with simulated patients, collecting medical vocabulary, preparing formatted written texts in Chinese for reference, and role-play in simulated clinical environments or healthcare settings. From the linguistic perspective, the lesson plan must take into account the linguistic features of Chinese that beginning learners of the language most need to master and the linguistic skills required to perform the identified tasks at healthcare settings. Given that this is a course for beginning learners, it is necessary to build on basic language skills training with an emphasis on speaking and listening skills. For example, the learners do not have to be fluent in speaking but must be able to pronounce and distinguish the sounds of *zh*, *ch*, *sh*, *j*, *x*, *q*, which are generally considered most challenging to speakers of English and Spanish. While acknowledging the fact that the four tones of Mandarin are difficult for Chinese learners, the learners will be trained to be at least familiar with the intonation and accents of various speakers of Mandarin by listening to authentic audio texts. Following the basic language skills training is the communicative tasks that healthcare providers must carry out most frequently with pedagogical modifications to simplify the linguistic difficulty of the tasks for students to practice.

From the interviews and literature review, the most frequent speech patterns between caregiver and patient are in the form of simple questions or commands. These functional statements can be organized into sentence skeletons and memorized by elementary-level learners. A list of common syndromes, other medical vocabulary, and expressions can be taught and practiced in a course setting. Productive needs, which focus on speaking skills (e.g., pronunciation, intonation), and receptive needs, which focus on listening skills, are both important in communicating with patients. However, as cultivating listening skills requires a longer period of time than speaking skill and the expected answers (to yes-no and simple wh-questions) from patients are often short and straightforward, the initial emphasis should be on helping learners to develop speaking skills. It is highly suggested that the learners can identify or recognize some high-frequency medical vocabulary in Chinese, in case the oral communication fails. Given that most of the target learners in this one-semester course will have limited knowledge of Chinese and writing Chinese characters require lots of practices, formatted written resources are highly recommended. For example, index cards can be prepared for the patients to answer questions asked by the healthcare professionals, with a translation for the healthcare professionals. Rehearsal skills are adopted in teaching activities in nursing classes to familiarize the students with a number of scenarios. With full preparation relating to vocabulary, simulated scenarios, and speech patterns, this teaching technique can be applied to conversation drills.

12.5 Conclusion

In the present study, the needs analysis studies and developments in LMP and LHP courses across languages are reviewed and a step-by-step process for conducting a needs analysis for an LHP course in Chinese provided. Compared with LMP or LHP courses in other languages, there are relatively few LMP or LHP courses in Chinese and most online LHP courses in Chinese were developed based principally if not entirely on the intuition, background, and experiences of the language instructors teaching them. Although LHP courses all share some common aspects, the needs analysis of any given LHP course (and LSP courses in general) should take the needs of a unique group of stakeholders into account; accommodate the specific teaching, learning, and working environment; and include protocols for ongoing revision to the course itself in response to changes in the profession, the availability of new relevant technology, and research on both how students learn and optimum teaching practices. To the best of my knowledge, the present study is the first to focus on needs analysis for LHP courses in Chinese. I anticipate, therefore, that this study will be important in better serving the needs of healthcare professionals and Chinese LEP populations in healthcare settings. Although the study was undertaken in an English-speaking environment, the results can also be useful in regard to improving healthcare delivery in other Chinese-speaking areas where there are caregivers with no or limited knowledge of the Chinese language. In the studies of Taiwanese nurses' communication needs in English with foreign caregivers discussed earlier, the language barriers are more difficult to overcome since English is not the first language of any of the interlocutors. The results of the study can be adapted for training non-English-speaking caregivers who work in Chinese-speaking environments so at least one part can communicate in their first language to increase efficiency and avoid adverse outcomes at healthcare settings.

It should be noted that although studies across disciplines support the importance often including cultural components in professional and foreign-language curricula for medical and healthcare staff, none of the respondents in the present study made any reference to the concept of cultural awareness. A possible reason for the absence of this concept is that some of the informants are from the target cultural background (heritage speakers and native speakers of Chinese) and other informants did not have extensive contact with the Chinese LEP population or were unaware of the cultural differences between the English-speaking population and the Chinese population.

As with all research, the present study has limitations that should be taken into account in any consideration of the findings reported. For this study, the principal limitations are its lack of quantitative data and information from Chinese LEP patients. As the literature to date does not include an exemplary questionnaire or previous studies focused on the difficulties that healthcare professionals must overcome when communicating with Chinese LEP patients, in the present study, I began by designing and administering an unstructured interview and open-ended questions for domain experts and collected accounts from working healthcare professionals who had frequent contact with Chinese LEP patients. The information sources were triangulated and methods were carefully selected to ensure validity. In addition, the data will be further analyzed and developed into questionnaires or surveys for healthcare professionals for the same reason. However, an important element missing from the information sources is the voices of Chinese LEP patients. The best way to determine the needs of LEP patients is through on-site observations, but due to legal and time constraints, it is not an easy matter to secure permission to do this. Frank (2000) may have provided an alternative; however; he noted that international students' (who are not considered LEP patients) understanding of healthcare communication is undermined by their lack of familiarity with the US medical and healthcare system. A flowchart depicting general medical practices and procedures might help Chinese LEP patients to identify their most urgent linguistic needs such that in future research a more thorough NA study could be completed.

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Chapter 13
Focusing on Doctor–Patient Conversations: A Curriculum for Medical Chinese

Meng Yeh and Liang Fu

Abstract This paper presents an innovative curriculum of spoken communication for the course *Chinese for Medical Professions*. The design targets students at the intermediate-high level, who are on the pre-med career path and interested in medical topics. The curriculum aims to develop students' interactional competence in doctor–patient conversations. The pedagogical design is based on research findings from Conversation Analysis and incorporates naturally occurring conversations in primary-care visits. The objectives focus on guiding students to notice and analyze the interactional features and organization of the co-constructed conversations between doctors and patients. The paper also presents the instruction, activities, and assessment developed for students to practice and, ultimately, to use the linguistic resources and interactional strategies in simulated medical encounters.

13.1 Introduction

Chinese for Medical Purposes (CMP) curriculums connect learning Chinese in the classroom to using it in medical and healthcare settings. Currently, very few courses or studies on CMP exist (Trace et al. 2015). To fill the void, this paper presents a curriculum for medical Chinese, focusing on spoken communication, in which the pedagogical approach is designed on the basis of the findings from Conversation Analysis and uses authentic doctor–patient conversations in medical settings as teaching materials. This paper starts with an overview of courses of CMP offered in China and in the USA, as well as the results of the needs analysis for the presented CMP course. Section 13.3 briefly reviews the development of the research field of conversational analysis and the main interactional features in medical encounters

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that have been studied. Based on the research findings, along with students' needs, their proficiency level, and the available authentic data, Sect. 13.4 discusses the interactional and communicative objectives (i.e., student learning outcomes) targeted in the present curriculum. A lesson plan including classroom instruction, activities, and assessment is presented in Sect. 13.5. The last section concludes this paper and discusses the improvement of the current curriculum and future directions for CMP courses.

13.2 Chinese for Medical Purposes

As Trace et al. (2015: 13) emphasize, the content and objectives of language for specific purposes are more locally sensitive than general language courses. This characteristic is reflected in the curriculum of CMP courses offered in China and in the USA. In China, most CMP courses and materials are developed for foreign students who plan to study medicine in college (Li 2011; Qiang 2018). The common model offers 4 years of CMP preparatory courses, from beginning to advanced, and the 5th-year courses focus on clinical practices. Due to the locally specific objectives, the current available CMP textbooks published in China center on written texts and medical knowledge/terminology (Cheng and Zhu 2008).

In contrast, the CMP courses in the USA are designed for learners who are interested in medical professions and would like to develop the language skills to communicate with Chinese-speaking patients in their future careers. So far, we have found only two published papers in the USA discussing CMP courses. Lai (2015) proposed a CMP course for beginning students who major in nursing at Queensborough Community College (QCC) in Queens, New York. The planning of this course addressed the needs of local Mandarin-speaking patients. The instruction was designed to help students in medical settings conduct simple conversations, read and translate simple written medical instructions, check in patients, and acquire basic information from patients. With respect to teaching materials, Lai planned to gather information from the professors at the Nursing Department at QCC and real-life linguistic samples from field observations. Lai did not specify where or how the samples would be collected.

Fu (2018), one of the co-authors for the current paper, implemented and presented a teaching unit for the course *Chinese for Medical Professions* offered at the authors' university. The offering of this course was based on an informal needs analysis, taking into consideration students' language-learning goals and the regional context. The survey showed that our intermediate-high students prefer Chinese courses on medicine to business, due to the fact that a large student population at our university is interested in pre-health professions (40% of incoming students each year, based on the data from the Office of Pre-Health Professions at our university). The students also expressed that their main goal for taking a CMP course was to be able to understand and communicate with Chinese-speaking patients. In terms of the regional context, the Texas Medical

Center is adjacent to our university, and many of our pre-med students have the opportunity to shadow medical professionals at the Center, where they encounter a large number of Chinese-speaking patients. Houston has the 9th largest Chinese American community in the country (American Community Survey, 2011–2015, https://www.census.gov/acs/www/data/data-tables-and-tools/). Furthermore, in the past few years, the number of patients coming from China for cancer treatment at the Texas Medical Center has increased substantially (Zhu 2016).

To address the students' needs, Fu's teaching unit focused on spoken language data. The unit used authentic doctor–patient conversations and guided students to analyze and use interactional features to display recipient's interest, attention, and understanding of the immediately preceding turn in co-constructed interactions. Based on research findings from Clancy et al. (1996), Fu (2018) developed instruction and classroom activities to bring students to notice and use reactive tokens, such as *o* "oh," *dui dui dui* "yes yes yes," and repetition. Fu emphasized the need to incorporate authentic doctor–patient conversations, because the dialogues included in the currently available CMP textbooks (all published in China) lack crucial interactional features such as backchanneling, repetition, hesitation, and pauses, which are ubiquitous in natural conversation.

Fu taught the unit in the course *Chinese for Medical Professions* for the past two years with positive feedback from students, especially regarding spoken communication in medical settings. Thus, the current curriculum is designed to expand the goal of developing students' interactional competence via learning the conversational strategies and patterns that are specific to medical encounters between doctors and patients. The next section presents a brief introduction of the research field of Conversation Analysis, and the main study findings of doctor–patient conversations from this field that helped in designing the present CMP curriculum.

13.3 Conversation Analysis in Medical Encounters

Conversation is a process of co-constructed social interaction. Interactional competence (IC) is an ability to use various interactional resources and practices to achieve mutual understanding, producing their turns to fit properly with a prior turn and shaping subsequent talk (Hall and Pekarek Doehler 2011; He and Young 1998). The research of IC is largely conducted within the framework of Conversation Analysis (CA; Hall et al. 2011; Kasper and Wagner 2011). CA is a methodology that analyzes, illustrates, and explains interactional resources and practices employed by participants to interact with each other in naturally occurring conversations (Schegloff 2007). CA grew out of ethnomethodology in the field of sociology, an approach asserting the primary role of conversation in human social interaction (Garfinkel 1967). CA has also further developed the concept of "language as action," initially conceived by Austin (1962) and Searle (1969) as speech acts. The interactional resources, linguistic and extra-linguistic, used in conversation are the forms with which social actions are enacted. CA research is concerned with analyzing the actions formulated by interlocutors as talk unfolds from turn to turn: How do they display understanding, anticipate, and interpret their co-participants' action, and produce their own action in response? This back-and-forth turn-taking in conversation is not random, but contextualized, systematic, and sequentially ordered interaction (Sacks 1992; Schegloff 1990; Atkinson and Heritage 1984). CA-informed insights on language and interaction have been applied to general second language courses in English (Barraja-Rohan 2011; Carroll 2011), German (Huth and Taleghani-Nikazm 2006; Betz and Huth 2014), and Chinese (Kunitz and Yeh, 2019; Yeh 2018a, b).

The conversational analytic approach has been also used to investigate medical interactions related to management of the social interactions between patients and physicians (see Gill and Roberts 2013 for a review). Research done over the past 30 years has revealed the recurrent and recognizable interactional features in medical encounters: (1) the overall organization of six different phases; (2) the organization of activities within each phase; (3) the sequences of action through which the activities are achieved; and (4) the construction of the turns of talk within these sequences (Heritage and Maynard 2006). These CA-based research findings have contributed to the improvement of doctor–patient consultations in the field of medical and healthcare-related communication (Heritage et al. 2007; Robinson and Heritage 2014; Jenkins et al. 2015, among others).

However, as Ferguson (2013: 243) pointed out in his review of *English for Medical Purposes* (EMP) courses, the above research findings from CA have primarily contributed to improving doctors' communication skills in clinical practices and have rarely been incorporated in EMP courses to improve the English skills of language learners who are or plan to become health professionals. We find that the conversational analytic studies offer a wealth of resources for pedagogical design to improve L2 students' interactional competence in medical settings. The current CMP curriculum establishes learning objectives and develops instruction based on the CA findings and the students' need to communicate with Chinese-speaking patients. We believe that similar endeavor can be extended to EMP and other languages for medical purposes. In the next section, we will discuss the targeted student learning objectives in the present curriculum, which are decided based on a number of specific CA findings.

13.4 Targeted Objectives in Medical Encounters: Six Phases

The learning objectives for the current curriculum were determined on the basis of findings from CA, students' need to improve communication skills in medical settings, students' proficiency level (intermediate-high), and the available naturally occurring conversations in clinical encounters. The main goal of the curriculum is to develop students' interactional competence in medical conversations. By the end of the course, students should be able to identify, analyze, and use the targeted interactional patterns and sequential organizations throughout the six phases of doctor–patient consultations. In this section, we explain the targeted objectives using the authentic conversation data we collected. In Sect. 13.5, a unit plan is presented to demonstrate the pedagogical approach that helps students to accomplish the targeted learning objectives.

The doctor–patient conversation data used in this paper were collected by the authors in a primary-care clinic in the Chinatown neighborhood of Houston: 15 audio clips, totaling 2 h and 40 min. The doctor in the clinic was originally from Shanxi and had lived in the USA for almost 20 years at the time of data collection. The patients included Chinese-speaking immigrants and visitors from China, Taiwan, and Hong Kong. The medical concerns of the visits included allergy, ear infection, coughing, dizziness, gout, diarrhea, headache, high-blood pressure, insomnia, excessive phlegm, and shortness of breath.

All of the conversations were audio-recorded by one of the co-authors in the doctor's room. Both the doctor and patients signed the consented forms and were aware that their exchanges were being recorded. The conversations were later transcribed. We selected excerpts from the conversations as teaching materials to focus on spoken communication. The current curriculum on spoken communication between doctors and patients amounts to 30% of the CMP course. For the rest of the course, lessons from *Chinese for Western Medicine-Reading and Writing* (Wang 2013) are used to reinforce students' reading skills and to teach medical knowledge and terminology, including medical news and pamphlets, medicine advertisements, the symptoms of various illnesses, and prescriptions.

We analyzed the overall structure of the medical encounters in primary care in the data we collected in Houston according to the findings from CA scholars that have investigated similar settings of communication in English (Robinson 2003; Heritage and Maynard 2006).[1] Based on their findings, it appears that physician–patient interactions during medical visits consist of six phases: (1) *opening*, (2) *problem presentation*, (3) *information-gathering*, (4) *diagnosis*, (5) *treatment*, and (6) *closing*. Each of these phases, as well as a transition from one phase to the next, involves co-constructed and recurrent interactional patterns between doctors and patients. We describe the targeted sequences and practices that we include in our curriculum in alignment with each phase described above.

13.4.1 Phase 1: Opening

The most important interactional feature in the *opening* phase is the opening question initiated by doctors. We draw students' attention to the opening questions

[1]Please see Byrne and Long (1976) and White et al. (1994) for slightly different categorizations of the phases in medical visits.

formulated by doctors, which differentially shape and constrain patients' answers. The purpose of the opening question is to solicit patients' medical problems (Gafaranga and Britten 2005; Robinson 2006). See Excerpt (1). The conversation excerpts in this paper are presented with simplified CA transcription conventions (Jefferson 2004; see Appendix 1).

Excerpt (1) Headache

1	医生:	今天怎么啦? 哪里不舒服啊?
	Doctor:	*What is not right today? Where is not feeling well?*
2	病人:	°头有点痛°
	Patient:	*°My head hurts a bit.°*
3	医生:	头痛(.) 疼了几天啦?
	Doctor:	*Headache (.) How many days have you had the headache?*

In line 1, the doctor initiates the opening question, "What is not right today? Where is not feeling well?" In response to the question, the patient expresses her medical concern "My head hurts a bit" (line 2). The doctor's question in line 3 "How many days have you had the headache?" moves into the phase of *information-gathering*, checking the symptoms, and gathering the history of the patient. Excerpt (1) demonstrates a recurrent sequence in an opening phase; that is, the phase initiated by the doctor's inquiry about the patient's visit and terminated by history-taking questions, proceeding to the next phase, *information-gathering* (Heritage and Robinson 2006a).

The doctor in our data used various opening questions, such as *Ni jintian weisheme lai a?* "Why are you here today?"; *Nali buhao a?* "Where does it hurt?"; *Ni jintian shi zenme la?* "What is not right with you today?"; *Ni zuijin zenmeyang a? Hao ma?* "How have you been recently? How are you?" Among those, *Nali bu shufu a?* "Where is not feeling well?" in Excerpt (1) is the question used most frequently in our data. In contrast, the most frequent opening questions by American doctors are, *How can I help you? What can I do for you?* (Heritage and Robinson 2006a). The difference shows students that they have to learn the specific opening questions in Chinese used by doctors.

Robinson (2006: 40) pointed out that different opening questions may lead to various interactional trajectories. For example, *How are you?* regularly functions as a request for an evaluation of a recipient's current and general state of being and is usually responded to with *I'm fine* (Jefferson 1980). When *How are you* type of questions are used by doctors as opening questions, patients may fail to recognize that the question is to solicit medical concerns. Here is an example.

Excerpt (2) Coughing

1	→	医生:	好吗？
		Doctor:	*How are you?*
2	→	病人:	呃::还ok(.)刚出差(.)呃:回来
		Patient:	*Uh::not bad(.) just came back (.) uh:from a business trip*
3		医生:	去::哪里？
		Doctor:	*Where did you go::?*
4		病人:	呃:墨西哥
		Patient:	*Uh:Mexico*
5		医生:	好啊↑[去]
		Doctor:	*Great [went]*
6		病人:	[在那里差不多有::三个半礼拜]
		Patient:	*[stayed there for about::three and a half weeks]*
7	→	医生:	三个半礼拜哦↓ 那::你今天是::怎么不好呢？
		Doctor:	*Three and a half weeks o↓So::what is::not well with you today?*
8	→	病人:	呃:我在那里的时候. 就::开始生病. 然后(.)有点痰，然后有一点点发烧
		Patient:	*Uh:when I was there, then::started getting sick. And then(.)a bit of mucus, and a little fever*

In response to the doctor's question *hao ma?* "How are you?" the patient produces "not bad" in line 2, displaying his understanding of the question as a solicitation of his current and general state of well-being as in mundane conversations. And the patient continues to provide information about his current situation as just coming back from a business trip in line 2. Then, the doctor and the patient talk about the trip in lines 3–7. The patient finally describes his medical problem (line 8) after the doctor asks another opening question, *Ni jintian shi zenme bu hao ne?* "So:: what is not well with you today?" (line 7). Excerpt (2) shows that the patient produces different types of responses in line 2 and 8 to the doctor's opening questions in lines 1 and 7. Thus, it is important for students to notice that the opening question's formats perform different social actions which may project different interaction trajectories.

13.4.2 Phase 2: Problem Presentation

The phase of *problem presentation* is the opportunity for patients to describe their symptoms and medical concerns before doctors proceed to the phase of *information-gathering*. We guide students to analyze two interactional features of doctor–patient interviews at this stage: (1) the relevance of current symptoms (2) justifying medical visits.

13.4.2.1 The Relevance of Current Symptoms

In this phase, when doctors and patients recognize and negotiate the completion of problem presentation, they "mutually orient to current symptoms—that is, concrete symptoms presented as somehow being experienced in the here-and-now—as a locus of transition between *problem presentation* and *information-gathering*" (Robinson and Heritage 2005: 482). Physicians frequently treat patients' descriptions of current symptoms as the action of completing *problem presentation* and immediately shift into *information-gathering*. This is shown in Excerpt (1), repeated below.

Excerpt (1) Headache

1 医生: 今天怎么啦? 哪里不舒服啊?
Doctor: What is not right today? Where is not feeling well?
2 病人: °头有点痛°
Patient: °My head hurts a bit°
3 医生: 头痛(.) 疼了几天啦?
Doctor: Headache (.) How many days have you had the headache?

In response to the patient's description "My head hurts a bit" (line 2), the doctor first repeats "headache," a commonly used practice in Chinese to acknowledge the prior talk (Clancy et al. 1996; Fu 2018), which displays his understanding of the description constituting a concrete current symptom. Then, in line 3, the doctor's question "How long have you had the headache?" moves into the phase of *information-gathering* immediately after the current-symptom description.

However, physicians may start *information-gathering* too early, prior to patients' presentation of current symptoms. In such a case, patients may treat the doctor's action as premature or interruptive (Robinson and Heritage 2005). For instance, see Excerpt (3).

Excerpt (3) Allergy

1 病人: 昨天就开始头痛(.)我现在只要一睁开眼睛就头痛(.)我一定要躺下来
Patient: I started having headache(.)Now once I open my eyes, my head aches(.)I have to lie down
然后::可能我前天晚上刚好吃了海鲜(.)然后没有消化得很好
then::probably I ate some seafood the day before yesterday(.)and it was not digested well
昨天(.)就一直吐(.) >吐一整天<
Yesterday(.)I just vomited constantly(.) >vomiting all day long<
2 → 医生: [吐了↑]
Doctor: [Vomited for↑]
3 → 病人: [吃什么都吐(.)喝水都吐]
Patient: [I vomited whatever I ate(.) even vomiting when drinking water]
4 医生: 哦::↓
Doctor: Oh:: ↓
5 → 病人: 然后我刚刚起来 >我到现在都没有吃东西<我就:: [吃
Patient: And then, I just got up >I have not eaten anything up to now< I just::[ate]
6 → 医生: [有没有发烧呢?
Doctor: [Do you have a fever?]

The patient describes her dizziness and vomiting symptoms which started yesterday (line 1). In line 2, the doctor seems to assume that the patient has completed her description of current symptoms and plans to shift out of *problem presentation* into *information-gathering*, by asking about her history and questions about the steps that led to vomiting. But, the doctor's turn is interrupted by the patient's description of additional symptoms. In line 3, the patient interrupts the doctor's question, competing for the floor to describe her current state. After the doctor's display of his understanding with "oh" (line 4), the patient provides more information "I have not eaten anything up to now" in line 5. Before she can complete it, the doctor interrupts her and moves on to the stage of *information-gathering*, asking her if she has had a fever or not (line 6).

By analyzing Excerpt (3), students are guided to notice that the completion of *problem presentation* is co-constructed, negotiated, and not always smooth. During *problem presentation*, patients are obligated to produce current symptoms, and doctors may ask history-taking questions prematurely, as shown in line 2, or take steps to curtail expansive presentations as demonstrated in line 6. Once the current symptoms are completed, doctors shift into *information-gathering*. Sometimes, doctors may fail to do that, and in that case, patients frequently have to indicate their completion (Robinson and Heritage 2005: 488). We will see this case in Excerpt (4).

13.4.2.2 Justifying Medical Visits

Patients in *problem presentation* are sometimes preoccupied with presenting their concerns as "doctorable," justifying that their medical problems are worthy of medical attention (Heritage and Robinson 2006b: 58). We guide students to analyze two practices used by patients to legitimize their visits: (1) trouble-resistance; (2) self-diagnosis claims.

(1) ***Trouble-Resistance Claims***

To justify their medical visits, patients can make trouble-resistance claims to convey the reasonableness of bringing their problems to doctors. Trouble-resistance claims may indicate that patients are not excessively attentive to the symptom, or they have waited for a while before seeking medical assistance (Heritage and Robinson 2006b). Here is an example in Excerpt (4).

Excerpt (4) Excessive Phlegm

7 病人: 就有点痰(.)我就吃那个西瓜霜hh 用中药
Patient: Just a bit of phlegm(.)I just took xigua-powder hh taking Chinese medicine
8 医生: 嗯哼嗯哼
Doctor: Uh-huh uh-huh
9 病人: 因为那时候(.)痰::是白:的(.)我就没来
Patient: Because at that time(.)the phlegm::was white: (.) so I did not come
10 我就自己口含点:这样(.)就就拖过去了
I just took some:xigua-powder. So(.) it has been like this for a while.
11 今天早上忽然(.)就(.)咳出的痰(.)是黄:脓:色
Suddenly (.)this morning the phlegm I coughed was thick:yellow:color
12 医生: 哦↓
Doctor: oh↓
13 病人: 那个(.)先生(.)我都不知道怎么回事儿(.)
Patient: About this(.)doctor(.)I do not know what is wrong(.)
14 反正(.)老得我出去买菜啊↑什么的
Anyway(.)I constantly have to go out to buy grocery↑stuff like that
15 第二方面，我又怕我们家那个空调hh出问题(.)
On the other hand, I am afraid that the AC hh in my house may have problem(.)
16 已经(.)多少年没有再消过毒了
It has not been cleaned for many years
17 我不知道(.)是不是因为我睡觉那个(.)那个冷气直接吹我还是怎么(.)
I don't know(.) Is it because that (.) the AC directly blows at me, while I'm sleeping or what?
18 不知道
I don't know
19 医生: 那::你要不要(.)请那个弄空调的人去 [看一下吧↓]
Doctor: So::do you want (.)to ask an AC technician to [check it ↓]
20 病人: [是啊::↑我那个是要做]
Patient: [Right::↑I am going to do that]
21 不过::我得根据您的药来↑
but::I would like to take the medicine you prescribe ↑
22 医生: 嗯↓
Doctor: Uhm↓
23 病人: 因为那个西瓜霜就不管事了hh 出了浓痰
Patient: Because that xigua-powder does not work anymore hh I have thick phlegm
24 医生: 有没有发烧啊?
Doctor: Do you have a fever?

To present the medical problem, the patient in line 7 first describes how she has dealt with the problem of phlegm herself for a while using the Chinese medicine *xigua*-powder "watermelon powder," since the phlegm was *baide* "white" at the beginning (line 9). In line 11, she discovers the change of the phlegm color which today is *huang::nong::* "yellow and thick" by stressing the word *huran* "suddenly" and prolonging out the adjectives "yellow" and "thick." She states she "does not know what is wrong" and suggests that "go out a lot" may be a cause (lines 13–14). In lines 15–17, she offers another possible cause, the AC at her house which blows the cold air directly on her while she is sleeping and repeats *bu zhidao* "(I) don't know" in line 18.

The patient in Excerpt (4) justifies her medical visit as a reasonable solution in three ways. First, she indicates that the initial problem was not serious ("just a bit of phlegm") and she dealt with the problem on her own (taking the Chinese medicine) before visiting the doctor. Second, she stresses the color of the phlegm (from "white" to "yellow and thick") as an indication that it is getting progressively worse. Third, she frames the problem as unknown and unrecognizable (repeating "I don't know"), hence she needs medical assistance. The formulation of the above narrative is frequently used by patients to display that it is a "doctorable" problem which warrants their visits (Heritage and Robinson 2006b).

Now, let us turn to the doctor's responses. In line 19, the doctor considers that the AC may be a possible cause of the phlegm problem and suggests that the patient "ask an AC technician to check it." The patient immediately agrees with the suggestion (line 20), but she wants to have the doctor's prescription (lines 20–21). The doctor acknowledges her needs with *en* "uhm" (line 22) and starts *information-gathering* by asking the first history-taking question in line 23. The doctor's first history-taking question "Do you have a fever?" validates the patient's belief that the concern is worthy of medical attention.

Notice that the doctor fails to perform the action of moving into *information-gathering* when the patient completes her problem presentation in line 18. Instead, he makes a non-medical suggestion to check the AC. As Robinson and Heritage (2005: 488) observed, "when physicians do not initiate information-gathering upon patients' presentations of current symptoms…, patients frequently utilize practices for communicating their completion." We see in Excerpt (4) that, when the doctor does not recognize the completion of *problem presentation*, the patient indicates that her current symptoms are completed by saying that she needs the prescription for her problem, because the Chinese medicine is not effective (lines 21, 23). In line 24, the doctor shifts to the next phase.

(2) ***Self-Diagnosis Claim***

In addition to trouble-resistance claims, patients make self-diagnosis to justify their medical visits. Heritage and Robinson (2006b: 68) suggested that making self-diagnoses is "a trump card" in claiming doctorability and in expediting the move toward the physical examination and treatment. They also found that patients frequently self-diagnose via their one's previous experiences as the basis for their conclusion. Sometime, their self-diagnosis may suggest possible treatment (Stivers 2002). These practices can be seen in Excerpt (5), below. The patient in Excerpt (5) had gout and came to visit the doctor a month ago.

<u>Excerpt (5) Gout</u>

1 病人: 我起先啊::一个月以前(.)在这边肿
Patient: I first::It was swollen here a month ago.
2 医生: 嗯哼
doctor: uh-huh
3 病人: 脚踝这个地方肿，你看，现在还是有一点肿
Patient: It was swollen here at the ankle. Look, it is still a bit swollen.
4 医生: 嗯哼，对啊↑［就是就是］
Doctor: Uh-huh yeah↑ [That is that is]
5 病人: ［那这个，我一直以为是痛风嘛］
Patient: [So for this, I always thought it is gout, you know]
6 医生: 对啊↑
Doctor: Yeah↑
7 病人: 痛风的话呢，那我就(.)我就吃痛风药，
Patient: If it was gout, then I just (.) took the gout medicine
8 医生: 嗯
Doctor: Uhm
9 病人: 痛风药(.)好像又好了一点，
Patient: With the gout medicine (.) it seemed to get a bit better
10 医生: 嗯
Doctor: Uhm
11 病人: 好了一点呢，可是又跑到这儿来了
Patient: So it was a bit better, but the swelling has moved to here
12 医生: 对啊↑
Doctor: Yeah↑
13 病人: 跑到这儿来，痛风药吃了，好像不管用诶 (0.1)，
Patient: For the swelling here, I took the gout medicine, but it does not work anymore (0.1),
14 然后这边都发黑，我就觉得(.)发黑，怎么了
then it became black. I am wondering(.)becoming black. What is going on?
15 医生: 来我看看
Doctor: Let me take a look
16 ((The doctor examines the patient's foot))
17 病人: 发黑的地方特别痛
Patient: It is very painful in this black area
18 医生: 对啊↑[你这个]
Doctor: Yeah↑ [You this]
19 病人: [是不是鼓脓了？开刀开掉，可不可以？]
Patient: [Is it the case it is filled with pus? Can you open it and get rid of the pus?
20 医生: <u>没有</u>脓啊
Doctor: <u>No</u> pus
21 病人: 啊↑
Patient: Really↑
22 医生: 没有浓啊↑
Doctor: No pus↑
23 病人: 没有浓啊↓
Patient: No pus↓
24 医生: 嗯啊
Doctor: Uh-huh
25 病人: 那可是(0.1)我觉得(.)为什么这么痛，然后肿成那个样子，而且肿得发黑呢↑
Patient: So, but (0.1)how come I feel so painful, and it is so swollen, also it is swollen with black color↑
26 医生: 你是不是::最近吃得太好啦
Doctor: Is it the case that:: you have had too much good food recently?

The patient describes the symptom of his swollen ankle, which happened a month ago (lines 1, 3). The doctor agrees, saying “uh-huh” and trying to comment (line 4), but is interrupted by the patient who says that he “thought it was gout” (line 5). The doctor responds “yeah” to confirm that it is gout (line 6). The patient comments that the gout medicine seemed to work (lines 7, 9, 11), but the swelling moved to the other part of the foot (line 11). The patient complains that the gout medicine does not help the new swelling, which is partly black in color and wonders what is going on (lines 13–14). After the doctor examines the new swollen part and is ready to state his diagnosis (line 18), the patient interrupts him by asking if it is swelling with pus and suggesting that it could be removed (line 19). The question *shi bu shi gunong le?* “Is it the case that it is swelling with pus?” implies the patient’s presupposition that the swelling is filled with pus. In line 20, the doctor disagrees and states with stress, “There is no pus.” The patient displays his surprise using the final particle *a* with a rising tone, since it does not confirm his presupposition. The doctor reassures the patient and repeats “no pus” in line 22. The patient also restates “no pus” to show his understanding (line 23), but he still has doubts and reiterates the unknown symptoms in line 25. In line 26, the doctor recognizes the completion of current symptoms and shifts to *information-gathering*, asking “Is it the case that::you have had too much good food recently?”.

In *problem presentation*, the patient in Excerpt (5) justifies his medical visit by volunteering his self-diagnosis, which claims that it is not gout that he is experiencing now. He employs the strategies of citing previous experience and highlighting the unknown symptoms (black color, pus). Since the diagnosis is to be done by physicians, when patients offer self-diagnoses, they frequently frame it as a delicate action either by downgrading their claims or by offering them speculatively (Gill 1998; Stivers 2002). For example, in Excerpt (5), the patient uses various linguistic resources to mitigate his claims and stress their speculative nature, such as *wo yiwei* “I thought”; *haoxiang* “seems”; *zenme le* “What is wrong?”; and *shi bu shi* “Is it the case?”.

In summary, in *problem presentation*, students are guided to analyze how a patient’s presentation of medical concerns is initiated by doctors’ opening question and terminated by doctors’ history-taking questions. Doctors and patients orient to the completion of presenting current symptoms as the moment to shift to *information-gathering*. In this phase, patients often justify their medical visits using the strategy of trouble-resistance or voluntarily disclosing their self-diagnosis to make the claim of doctorability.

13.4.3 Phase 3: Information-Gathering

The goal of *information-gathering* is for physicians to collect all relevant information about the patient’s problem and its history in order to arrive at a diagnosis. History-taking in medical interaction is governed and driven by physicians’ expertise and medical agenda (Boyd and Heritage 2006; Stivers and Majid 2007).

In this phase, we draw students' attention to the types of questions employed by doctors to solicit information and display their understanding of the patient's prior turns.

Deppermann and Spranz-Fogasy (2011) have examined three syntactic question formats frequently used by doctors in *Information-gathering*: (1) wh-questions; (2) yes/no questions; and (3) declarative questions. Wh-questions such as *What is the color of your mucus?* ask patients to provide some missing elements. Yes/no questions such as *Is your nose stuffy?* seek specific answers by providing possible options. Declarative questions are syntactically in a sentence format, not marked as questions. In doctor–patient interactions, declarative sentences, often initiated by doctors to clarify the information mentioned in prior turns, are subsequently treated by patients as questions (Heritage and Clayman 2010). A declarative question presents a strong preference for confirmation. Deppermann and Spranz-Fogasy (2011) suggest that these three types of questions occur at different stages in *information-gathering* and imply different levels of understanding and presupposition. We will use Excerpts (6) and (7) to discuss the presupposed knowledge embodied in these questions.

In Excerpt (6), the patient, in *problem presentation*, reports that he has bad cough with mucus. The doctor shifts to *information-gathering*, asking the first history-taking question (line 9) below.

Excerpt (6) Coughing

9 医生: (.)痰是什么颜色的？
Doctor: (.) What is the color of mucus?
10 病人: 呃呃黄色、绿色
Patient: Uh uh yellow, green
11 医生: 黄色、绿色。都是::白天咳还是晚上咳(.)>还是整天都咳<
Doctor: Yellow, green. Usually::do you cough during the day or at night(.) >or cough all day<
12 病人: 整天都有。
Patient: All day
13 医生: 整天都咳。
Doctor: All day coughing
14 病人: 嗯
Patient: Uhm
15 医生: 嗯哼(.)鼻子塞吗？
Doctor: Uh-huh(.) Is your nose stuffy?
16 病人: 呃:::有时候。
Patient: uh:::sometimes
17 → 医生: 有时候
Doctor: Sometimes
18 → 病人: 对(.)>没有没有< 没有很塞。
Patient: Yes(.) >not not< not very stuffy
19 → 医生: 没有很塞
Doctor: Not very stuffy
20 → 病人: 对，但是就是会一直咳。
doctor: Yes, but just coughing all the time

After the patient describes the symptom, that he coughs with lots of mucus, the doctor uses a wh-question, "What is the color of the mucus?" (line 9). In line 11, the doctor formulates an alternative question, using *haishi* "or" to find out if the patient coughs all day or just at a certain time. Based on the understanding that the patient is coughing all day, the doctor asks a yes/no question "Is your nose stuffy?" (line 15).

Wh-questions embody less presupposed knowledge than yes/no questions (Deppermann and Spranz-Fogasy 2011). With the question "What is the color of the mucus?" (line 9), the doctor shows his understanding of patient's problem in producing mucus with the cough but asks him to be more specific about the mucus color. With the yes/no question "Is your nose stuffy?" (line 15), the doctor implicitly claims, based on his understanding of the symptoms (cough, color of mucus), that he knows that stuffy nose may be a concern too. He uses the yes/no question to confirm or to change his assumption. Thus, the yes/no question "Is your nose stuffy?" implies more presupposed knowledge than the wh-question in line 9.

In lines 17 and 19, the doctor repeats "sometimes" and "not very stuffy" from the patient's prior turns, respectively. Deppermann and Spranz-Fogasy (2011) suggest that repeating (or partially repeating) the patients' prior turn is a practice of declarative questioning to confirm a shared understanding and to elicit elaboration. In lines 18 and 20, the patient treats the repetition of "sometimes" and "not very stuffy" by the doctor as an invitation to provide more details. Therefore, he responses by confirming with "yes" that his nose is not very stuffy, but stresses that he has been coughing continuously. Declarative questions embody an even higher degree of understanding and presupposition than wh- and yes/no questions. Unlike yes/no questions, they do not seek to verify a proposition, but they ask patients to ratify what has been mentioned in the previous turns.

In addition to the repeating type of declarative questions, another practice is to paraphrase patients' turns to confirm and summarize the medical problems (Deppermann and Spranz-Fogasy 2011). Here is an example of paraphrasing declarative questions in Excerpt (7).

Excerpt (7) Allergy

18 病人: 昨天早上开始，一起来就(.)头晕目眩
Patient: It started in the morning yesterday. As soon as I got up, then (.) having a dizzy spell
19 → 医生: 就是好像房子在转
Doctor: Just like the house is spinning
20 病人: 嗯，一直到现在都这样，就是我一定要躺下来
Patient: Uhm, continuously dizzy till now. So, I have to lie down
21 医生: 嗯哼(.)OK(.)你上次发::是去年七月份
Doctor: Uh-huh(.) OK(.) You had this symptom:: in July last year
22 病人: 对，我知道(.)但是::上次跟这次情形又不一样，上次感觉是::
Patient: Yeah, I know(.), but::This time is different from last time. The feeling I had last time was::
23 (0.2)上次我还有自己开车来，都没事。这次我连开车，我都不敢开。
(0.2) I still drove here last time, no problem, but this time I was even afraid of driving here
24 → 医生: 所以，这次比上次更严重。
Doctor: So, this time is much more severe than last time.
25 病人: 对, 就是一直是晕。
Patient: Yes, just dizzy all the time

The patient reports her dizziness using a Chinese four-word idiom meaning "a dizzy spell" (line 18). The doctor replaces the patient's idiom with a more vivid description "just like the house is spinning" (line 19). The patient confirms and provides more details in line 20. The doctor uses a declarative question "You had this symptom::in July last year" (line 21), to double-check the history of the illness. The patient confirms and elaborates how this time differs from last time. Again, the doctor paraphrases the patient's turn by summarizing the patient's account "So, this time is much more severe than last time" (line 24), with which the patient agrees in line 25. In Excerpt (7), we see how the doctor employs paraphrasing and declarative questions (lines 19 and 24) to solicit elaboration and capture the gist of the medical problems.

Deppermann and Spranz-Fogasy (2011: 114) show that declarative questions, in terms of distribution, are the most common types of questions used in *information-gathering* (55%), followed by yes/no questions (27%) and wh-questions (18%). Their study also demonstrates that not only do the three types of questions present an increasing presumption of knowledge and understanding, they also occur in consecutive order in doctor–patient interactions in *information-gathering*. Namely, the history-taking sequence starts with wh- or yes/no questions and ends with declarative questions. We can see a similar order in Excerpt (6). The doctor uses the three types of questions to gradually delimit the range of the coughing problem and constrain the scope of the patient's possible answers. Thus, it is critical for students to be familiar with the function of different types of questions to gather information from patients. Also, they should be aware of the order from wh- and yes/no questions to declarative questions used by doctors to show their increasing understanding and knowledge over the course of *information-gathering* and finally to arrive at a diagnostic hypothesis in the next phase.

13.4.4 Phase 4: Diagnosis

The diagnostic statement is commonly delivered right after the physical examination. In the medical domain, diagnostic reasoning is doctors' exclusive property; that is, doctors adopt a highly authoritarian position when delivering diagnosis (Byrne and Long 1976). Patients usually respond to doctors' diagnostic statements with minimal acknowledgment, relinquishing their knowledge and opinion concerning the illness (Heath 1992). However, Perkyälä (2006: 215) found that doctors frequently deliver diagnoses on medical evidential basis and by incorporating patients' understanding of the ailments. In other words, in the *diagnosis* phase, the participants jointly "find ways to accommodate the doctor's authority with his accountability and the patient's knowledgeability." Perkyälä also pointed out that the design of doctors' diagnostic statements might affect patients' responses. When diagnosis is stated as a plain assertion, patients tend to respond with minimal acknowledgment, such as *uhm*, *okay*. When doctors deliver uncertain diagnoses, patients frequently offer extended responses.

In this phase, our teaching objective is to raise students' awareness of the two interactional trajectories shaped by the formulation of doctors' delivery of diagnosis, plain or uncertain, based on the availability of medical evidence and the patients' responses claiming what they know. Excerpt (8) below is an example of plain assertion of diagnosis.

<u>Excerpt (8) Coughing</u>

25 医生: ((examining the patient's throat)) 嗯，对，你喉咙有发炎哦↑
Doctor: Uhm,, yeah, your throat is infected↑
26 病人: 嗯
Patient: uhm

In line 25, the doctor presents the diagnosis in a way that implicates his claim of knowledge as an unproblematic, taken-for-granted matter. The plain assertion seems to conform to the authoritative relationship between the doctor and the patient. However, notice that the diagnosis is delivered right after the doctor examines the patient's throat. Thus, the doctor shows his accountability via the action, establishing an observable and inferable link between examination and diagnostic statement. The patient recognizes the link and responds with the minimal acknowledgment "uhm" (line 26). Plain assertion with evidential basis is the most common format to deliver a diagnosis (Perkyälä 2006).

In the context when a doctor's expertise is undermined by the uncertainty of diagnosis, he/she uses turn designs other than plain assertion to indicate the reasons for the proposed diagnosis. Excerpt (9) presents a case of uncertain diagnosis. The patient experienced dizziness and vomiting this morning but does not have either symptom at the moment. Through the steps of history-taking and physical examination, the doctor does not find other symptoms (fever, coughing, and stuffy nose, etc.). Moreover, the patient reveals that she has been trying to get pregnant. She did the pregnancy test this morning, but the result was negative.

Excerpt (9) Dizziness

21 医生: 两个可能。一个呢↑，你怀孕了，还太早，测不出来。
Doctor: Two possibilities. One is ↑that you are pregnant, and it is too early to be detected.
22 还有一个可能，就是管平衡的神经发炎了，
The other possibility is that the inner ear nerve maintaining the balance is infected
23 所以你晕，然后想吐。
so you are dizzy, and want to vomit
24 病人: 我感觉不大可能怀孕，因为°早上测了°
Patient: I think it is unlikely that I am pregnant, because °I did the test this morning°
25 医生: 早上测了
Doctor: You tested this morning
26 病人: 对 没有怀孕
Patient: Yes, not pregnant
27 医生: 有可能，
Doctor: Probably
28 但是就是说如果你明天早上不发了，
but, I suggest that if you do not feel dizzy tomorrow morning,
29 你就不用吃药，
no need to take the medicine.
30 病人: 好
Patient: Okay
31 医生: 但是你假如明天早上你发了
Doctor: But if you feel dizzy tomorrow morning
32 我给你开个处方药，你就明天早上吃。
33 *I prescribe this medicine and you take it tomorrow morning*
34 病人: 好。
Patient: Okay

The doctor's diagnosis includes two possible reasons that could cause her dizziness. The uncertainty of the delivered diagnosis is marked by the word "possibility" (line 21). The patient mildly challenges the first cause, using the adverb "unlikely" and stating the reason "did the test" in a very soft voice. Even though the doctor suggests that it is too early to detect pregnancy, he aligns with the patient's knowledge saying "probably" (in line 27). In lines 28–29 and 31–32, the doctor solely focuses on the second cause and recommends treatment in the extended responses.

Notice that the uncertainty of the doctor's diagnosis leads to a follow-up response from the patient in lines 24 and 26. The patient disagrees with the doctor's diagnosis and incorporates her claims of knowledgeability about "not being pregnant" in the response. While doing this, the patient still displays her orientation to the doctor's authority by uttering the disagreement in a low, soft voice. The doctor acknowledges her response by agreeing that being pregnant probably is not the cause. Hence, in the phase of *diagnosis*, we use Excerpt (9) to lead students to observe that the doctor and the patient cooperatively "maintain a balance between an orientation to the patient's knowledgeability concerning the diagnosis and an orientation to the doctor's authority" (Perkyälä 2006: 234).

13.4.5 Phase 5: Treatment

Doctors recommend treatment after delivering diagnostic statements. Even though both phases involve doctors' conveying their knowledge to patients, the structural sequences are different. In *diagnosis*, patients usually accept doctors' diagnostic statements with acknowledgment. In contrast, both doctors and patients orient to the negotiation of the final treatment (Stivers 2006). For this phase, students are guided to analyze the interactional actions displayed by patients to implicitly reject recommended treatments, and the actions by doctors to pursue patients' acceptance. We will discuss the treatment sequences in the following two excerpts.

Recall the patient in Excerpt (4) who describes her coughing with yellow, thick phlegm during the phase of *problem presentation*. After the history-taking, physical examination, and delivering the diagnosis, the doctor recommends a treatment to her in Excerpt (10).

Excerpt (10) Excessive Phlegm

58 医生: 行，我给你(.)我给你开一个那个化痰的药，再开一个消炎药。
Doctor: Okay, I prescribe a medicine to reduce the phlegm, and also an anti-inflammatory drug
59 病人: (1.0) °化痰的药 (.)我我有中药° hhh 有那个::叫什么来着(.)那个::枇杷露。
Patient: (0.1) °For phlegm (.) I I have the Chinese medicine° hhh I have that: what is called(.) that::pipalu
60 医生： 枇杷露(.)那:你吃一点西药(.)看看能不能(.)效果会不会更好一点
doctor: Pipalu (.) Well then:take some western medicine, see if it can be more effective
61 病人: 好
Patient: Okay

The doctor recommends some medicine to reduce phlegm and inflammation (line 58). In line 59, the patient waits for one second, which is a noticeable silence, and then informs the doctor quietly that she is taking the Chinese medicine (*pipalu* "loquat-liquid") to dissolve the phlegm. The patient uses the action of silence and almost inaudible speech to display her reluctance to accept the treatment. Encountering the patient's withholding of her acceptance, the doctor encourages her to try some Western medicine. Notice that the doctor does not react negatively about the use of the Chinese medicine, but only suggests that western medicine may be more effective. This affirmative action by doctors is found to be more effective in securing patients' acceptance of certain treatments for their children (Stivers 2006: 303). "Patients are more likely to accept positive announcements of treatment recommendations; resistance is more likely to be engendered by a recommendation against a particular treatment." In line 61, the patient accepts the recommendation of the Western medicine.

Stivers (2006: 301) also observed that patients may view the recommended treatments as "insufficient" and resist them. We found similar cases in which the Chinese patients request additional treatments other than those recommended by the doctors. See the example in Excerpt (11).

Excerpt (11) Shortness of Breath

18 医生: 这个也是过敏引起的。所以呢(.)给你开点儿过敏药
Doctor: This is also caused by allergy. So(.)I prescribe you some allergy medicine
19 病人: °会不会打针快一点？°
Patient: °Will it be faster if I get a shot?°
20 医生: hhh 不会(.)打针不会快，可以给你加一个喷鼻子的药
Doctor: hhh no(.) It is not faster by a shot. I can add another medicine for your nose.
21 病人: 好好好
Patient: Good good good

In the previous diagnosis phase, this patient mentions that she took some allergy medicine prescribed by another doctor. Hearing that the doctor is going to prescribe some allergy medicine again, the patient does not reject the recommendation, but asks for an alternative treatment in a very soft voice, "Will it be faster if I get a shot?" in line 19. The doctor's treatment of allergy medicine is not oriented as sufficient by the patient, since she already took some. Her question about a different treatment displays her reluctance to accept the recommendation. To respond, the doctor laughs and informs her that it will not be faster and also adds another treatment recommendation. The patient accepts the nose spray eagerly by repeating the acknowledgment token *hao* "good" three times. In line 20, we see two actions produced by the doctor to reduce the patient's resistance. First, he uses the resource of laughter to lesson his disagreement with the treatment of getting a shot suggested by the patient. The employment of laugher by medical providers to overcome patients' resistance is also found in the study of Zayts and Schnurr (2011). Second, the doctor recommends an additional treatment other than the allergy medicine. The doctor's additional treatment of a nose spray minimizes her resistance. Hence, we use the excerpts such as (10) and (11) to demonstrate to students how the final treatment is negotiated between doctors and patients.

13.4.6 Phase 6: Closing

Closings in medical visits generally are initiated by doctors and the patients rarely brought up new complaints during the final moments of a visit (Heath 1986). The medical closings follow the systematic patterns of closure in mundane conversations, which consist of two sequences: pre-closing and closing (Schegloff and Sacks 1973), as shown below.

Excerpt (12) [Schegloff & Sacks, 1973, p. 307]

1 A: Okay bye
2 B: Okay
3 A: Bye bye.
4 B: Good night.

Okay in lines 1–2 serves as a pre-closing sequence followed by the terminal exchanges *Bye bye* and *Good night*. In medical settings, the "thank-you" type is also part of terminal exchanges, which displays the doctor–patient relationship as beneficiaries and providers (West 2006). West also found that the most common pre-closing sequence initiated by doctors is to make arrangements, such as seeing the patient at a later time, or to recommend other medical visits. In our data, the Chinese doctor always initiates a pre-closing by asking about patients' preferred pharmacies. See Excerpt (13).

Excerpt (13) Excessive Phlegm

69 医生: 你现在还是去那个 Walmart 拿药吗？
Doctor: Do you still get the medicine from that Walmart?
70 病人: 对。
Patient: Yes
71 医生: 那我直接把药开过去了。
Doctor: Then I will send the prescription there directly.
((typing on the computer and sending the prescription))
72 好了，药已经开到那个 Walmart 去了，你过去拿就行了
Okay. The prescription was sent to that Walmart. You can go there to get it.
73 病人: 好，谢谢您啊
Patient: Ok, Thank you
74 医生: 不客气，再见啊
Doctor: You're welcome. Bye
75 病人: 再见。
Patient: Good-bye
76 医生: 再见，再见。
doctor: Bye bye

The pre-closing (lines 69–72) is initiated by the doctor's question confirming that the patient still uses the same pharmacy. For new patients, he asks which pharmacy they go to. The statement of "The prescription was sent to that Walmart" (line 72) is a signal to move to the final closing sequence–terminal exchanges, expressing thanks and saying good-bye (lines 73–76). In this phase, students are guided to compare the similarities and differences of closing between everyday conversations and medical visits.

In Sect. 13.4, we have presented the targeted learning objectives aiming to develop students' interactional competence in doctor–patient communication. The objectives, based on the CA research findings, guide the design of our instruction to lead students to notice and analyze the overall structure (six phases) and recurrent interactional sequences/practices in each phase.

13.5 CA-Informed Pedagogical Approach

For the current curriculum, we have designed five units. Each unit focuses on certain phase(s): (1) overall structure; (2) opening and problem presentation; (3) information-gathering; (4) diagnosis; (5) treatment and closing. In this section, we demonstrate the model of a CA-informed pedagogical approach by presenting the lesson plan of Unit 3 centering on the phase of *information-gathering*. The central components of the approach are: (1) use naturally occurring doctor–patient conversation; (2) guide students to notice and analyze the interactional practices in the conversations; and (3) assess students' learning outcomes through open-ended peer role-plays. The lesson plan below presents the learning objectives, teaching materials, instruction, classroom activities, and assessment. It takes two 50-minute classes to complete.

13.5.1 Learning Objectives and Teaching Materials

The learning objectives in Unit 3 for students are: be able to identify, analyze, and use the interactional patterns in the *information-gathering* phase, in particular, the three types of questions initiated by doctors and patients' responses (wh-questions, yes/no questions, and declarative questions). For teaching materials, in addition to the selected excerpts from the authentic doctor–patient conversation we collected from a Chinese clinic, we also use authentic doctor–patient conversations in English, either from research data or online videos. The purpose of the latter is to help students to reflect on practices from their L1 language and compare it to similar examples in Chinese.

13.5.2 Instruction and Classroom Activities

The activities for each unit include 4 steps: (1) pre-instruction tasks; (2) comprehension of the conversation; (3) analysis of the conversation; and (4) practice and production. Representative teaching samples for Unit 3 are provided in Appendix 2.

Step 1: Pre-Instruction Tasks

Students are assigned two pre-instruction tasks. First, they are provided a medical scenario, relevant to the topic of Unit 3, based on which they conduct a doctor–patient role-play with a peer. They are requested to switch the roles and do the role-play twice, so each student has the opportunity to play the doctor's part. The role-play conversation is videotaped and uploaded onto the course management site for later use. Second, they are assigned to read an authentic doctor–patient conversation in English during the phase of *information-gathering* and complete a set of questions that draw their attention to the questions asked by the doctor and the patient's responses (see Sample 1 in Appendix 2).

Step 2: Comprehension of the Conversation

The authentic conversation data are not only used to study the interactional structure of medical encounters, but also to increase students' linguistic resources in terms of vocabulary and grammar. Thus, before listening to the conversation excerpts, the students learn and practice the new words, medical terminology, and grammatical structures in the excerpt. Once students become familiar with the new words and sentence structures, they are assigned, as homework, to listen to the excerpt, and complete listening comprehension questions.

Step 3: Analysis of the Conversation

The goal of this step is to guide students to analyze the sequence and patterns of the *information-gathering* phase. The analysis focuses on the question types the doctor uses and explores how the question types reflect the levels of understanding on the doctor's part. First, students briefly discuss the English conversation assigned before class. They are guided to notice the question types the doctor uses and when they are used. Second, students study the data in Chinese from Excerpt (14), below. The 1-min excerpt is selected from the conversation *Headache*. The patient is from China, having recently come the USA to visit her sister and help take care of her sister's young children. In the phase of *problem presentation*, the patient describes her headache and mentions that she does not sleep much. The excerpt starts with the *information-gathering* phase initiated by the doctor. In the worksheet, students are only provided with the conversation lines and questions in Chinese, without the English translation.

Excerpt (14) Headache (a worksheet for students)

1	医生：	那你睡不着觉是有多久啦? 只是最近才这样，还是一直是这样
	Doctor:	*So, how long have you not been able to fall asleep? Just recently or it has been like this for a while?*
2	病人：	到美国这里我好像都要很迟才睡觉，都要十二点多，都睡不着。
	Patient:	*After coming to the U.S., I seem to always sleep late, did not sleep till after 12 pm, unable to fall sleep*
3	医生：	那你能睡到几点钟呢。
	Doctor:	*So, until what time can you sleep?*
4	病人：	都到六点多，然后起来一下，到七点钟再睡一下。
	Patient:	*Around 6 am, then get up for a while, sleep a bit around 7 am.*
5	医生：	那你白天睡觉吗？
	Doctor:	*Then do you sleep during the day?*
6	病人：	白天都没睡。
	Patient:	*No sleep during the day.*
7	医生：	那你睡得不多啊。
	Doctor:	*So, you do not sleep much.*
8	病人：	睡几个小时。
	Patient:	*Sleep a few hours.*
9	医生：	睡几个小时。你原来在中国的时候睡几个小时啊？
	Doctor:	*Sleep for a few hours. How many hours did you sleep when you were in China?*
10	病人：	在中国，我老公说我像睡猪一样，都十点钟就睡了，睡到早上都六点七点才起来。
	Patient:	*In China, my husband said that I sleep like a big, always sleep at 10 pm, and get up at 6 or 7 am.*
11	医生：	是吧，那所以可能你到美国来了，你觉得压力比较大
	Doctor:	*Yeah? Then, so, probably after you came to the U.S., you are more stressed.*
12	病人：	嗯 压力比较大
	Patient:	*Uhm, more stressed*

First, students are asked to circle the questions asked by the doctor and to identify the type of question. Students can identify wh- and yes/no questions, but they need guidance to notice the use of declarative questions. So, we draw their attention to lines 7–8 and 11–12, to discuss the interactional actions enacted by the doctor's questions and the patient's responses. For instance, the doctor's statement "So you do not sleep much" (line 7) is treated as a declarative question by the patient, who provides an answer "sleep a few hours" in line 8. Students work in pairs for this step. Lastly, students in small groups discuss how the declarative questions (lines 7, 11) differs from the wh-questions (lines 1, 3) and yes/no questions (line 5). The declarative questions (lines 7, 11), appearing later in the course of information-gathering phase, are designed by the doctor based on previously obtained information from wh- and yes/no questions. Thus, by comparing wh- or yes/no questions with declarative questions in context, students gain awareness that declarative questions initiated by doctors embody a higher level of understanding and knowledge regarding the patient's symptoms.

Step 4: Practice and Production

The above step raises students' awareness of the interactional patterns. This next step provides students with writing and speaking activities for students to incorporate the reviewed language interactional patterns into their repertoire. In **Activity 1**, in pairs students are provided with another doctor–patient excerpt (Excerpt 6) along with a worksheet. Students work together to analyze the interactional features in the excerpt following the procedure in Step 3. **Activity 2** is designed to strengthen the skill in employing the three types of questions used by doctors and providing appropriate responses as patients. Students are given an excerpt related to the phase of *information-gathering*. First, they fill in their turns as doctor and patient. Then, they listen to the recording of the excerpt and fill in the doctor's questions and patient's responses. Third, students in pair compare their answers with those in the authentic data, identifying different question types and discussing the contexts for the choices of the questions (see Sample 2 in Appendix 2). **Activity 3** is to practice speaking communication skills. Students in pairs review and improve their role-play performed before instruction (in Step 1). Each pair records their improved conversation and uploads it to the course management site for the teacher to grade.

13.5.3 Assessment

We design open-ended, peer role-plays to assess speaking communication skills in medical visits in this curriculum. The importance and effectiveness of employing role-plays of doctor–patient encounters as assessment have been well documented in medical education studies (McIlvried et al. 2008, among others). Peer role-plays enable students to experience the perspectives of both the physician and the patient (Bosse et al. 2010; Rasasingam et al. 2017). To elicit interactional practices, instead of closed role-plays, we develop open-ended role-plays that allow students "to negotiate during interaction without fixed interactional outcomes" (Youn 2015: 202). In other words, students in open role-play assessment do not know the detailed information in each other's cards and have to cope with unexpected situations (see Sample 3).

A formative assessment is used at the end of each unit. For Unit 3, the role-play assesses students' ability to gathering information from patients and respond to doctors' questions. The summative assessment is given at the end of the five units. The scenario of the role-play requires each pair to engage in a doctor–patient conversation including the six phases: *opening*, *problem presentation*, *information-gathering*, *diagnosis*, *treatment*, and *closing*. The summative assessment also requires students to review their recorded conversations and write a reflective analysis in which they discuss both the well-performed and problematic interactions and to substantiate their opinions with evidences from their conversations. Their conversations are graded based on a rubric that reflects the learning objectives stated earlier.

13.6 Discussion and Conclusion

The current CMP curriculum aims to develop students' interactional competence in doctor–patient communication. The targeted learning objectives are based on research findings from CA and students' need to advance their spoken communication skills in actual medical settings. The critical component is to use naturally occurring doctor–patient conversations as teaching materials. The instruction, a conversation analytic approach, leads students to notice, analyze, and use recurrent and systematic interactions in medical consultations.

We suggest three areas to improve and expand the present curriculum and the field of CMP. First, explore the interactional patterns in medical encounters impacted by cultural differences. For instance, the Chinese immigrant patients in our data often expressed discomfort with Western doctors or medicine and suggested Chinese medicines as possible treatment. The Chinese doctor, during the phase of *information-gathering*, frequently asked the immigrant patients questions regarding their life style and health back in China, Taiwan, or Hong Kong. Second, incorporate the doctor–patient data from China. Our preliminary study of medical-encounter data collected from China reveals some differences from the data collected in Houston, which is limited to the consultations from one single Chinese American doctor. For instance, the doctors in China tend to offer more options and lifestyle advice during the phase of *treatment*. The patients seem to respond to doctors with more reverence through language use, such as *Gei nin tian mafan le a* "Giving you so much trouble" after accepting the treatment. Third, develop a curriculum for advanced students. The targeted learning objectives in this curriculum are set for intermediate-high students. There are interactional practices studied by CA researchers that can be used with students at the advanced level, such as doctor's delivery of "bad news" in the *diagnosis* phase (Maynard and Frankel 2006) or the interactional processes through which treatment recommendations are presented, justified, negotiated, accepted, and rejected (Stivers 2007).

The design for *Chinese for Specific Purposes* courses is at the beginning stage of development. We hope that the current curriculum will inspire further pedagogical discussion and innovations in the field of CMP. Lastly, we also need more data and research on doctor–patient conversations in Mandarin to inform and guide the designs of future CMP courses.

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Appendix 1: Transcription Keys

[word]	simultaneous or overlapping speech
hh	(series of h's) aspiration or laughter
(.)	(period in parentheses) micro-pause: 0.2 s or less
(0.4)	(number in parentheses) length of a silence in tenths of a second
::	(colon(s)) prolonging of sound
(())	nonverbal action
word	(underlining) stress
°word°	(degree symbols) quiet speech
↑word	(upward arrow) raised pitch
↓word	(downward arrow) lowered pitch
>word<	(more than and less than) quicker speech

Appendix 2: Teaching Samples

Sample (1): Pre-Instruction Task

English doctor–patient conversation (The instruction and questions on the worksheet for students are in Chinese).

Here is an excerpt from an after-hours call to a doctor's office, in which the caller who claims to be pregnant is experiencing a medical problem and the doctor inquiries about the pregnancy test. Read the excerpt and answer the following questions.

1) How does the doctor design her questions?
2) What types of questions are used in this excerpt?
3) How does the patient respond?

(from Heritage & Clayman (2010, pp.141-142, modified)

1	Doctor:	When did you actually have your: (.) uh: pregnancy test?
2	Patient:	uh: last Thurs- Thursday, just gone
3	Doctor:	The doctor did that, [or:
4	Patient:	[No, I ha- took a: a sample
5		uh the pharmacy and they did it.
6	Doctor:	hhh ri:ght(.) ehm: (.) and they-it was definitely positive then.
7	Patient:	yeah yeah 'cause the doctor didn't want me to do another one
8		and said they're not wrong when they're positive.
9		It's only when they're negative that it <u>can</u> be wrong

Sample (2): Activity 2 in Step 4 Practice and Production

Students' tasks (pair-work):

1. Fill in the doctor's questions and the patient's responses in the following excerpt.
2. Listen to the authentic doctor–patient conversation and write down the doctor's questions and the patient's responses.
3. Compare your answers with those in the authentic conversation and discuss the differences and similarities.
4. Identify the question types you fill in (wh-, yes/no, or declarative questions) and explain how the questions you write fit in the context.

The excerpt with blanks for students

1	医生:	哪里不舒服啊?
2	病人:	嗯，我觉得头很晕很晕。
3	医生:	____________________?
4	病人:	嗯，早上大概四五点醒过来的时候就天旋地转，很不舒服
5	医生:	____________________?
6	病人:	吐得蛮厉害的
7	医生:	____________________。
8	病人:	对，可是没有拉肚子，就是晕和吐
9	医生:	然后，现在呢?
10	病人:	____________________。
11	医生:	后来喉咙痛了
12	病人:	____________________。
13	医生:	不是很痛，那么，____________________?
14	病人:	现在不会
15	医生:	____________________ ?
16	病人:	都没有
17	医生:	____________________
18	病人:	我这个月比较奇怪一点，我一般都非常正常。 然后我这个周期好像提早了
19	医生:	你是准备要怀孕
20	病人:	是，我是在准备

The excerpt

1	医生:	哪里不舒服啊?
2	病人:	嗯，我觉得头很晕很晕。
3	医生:	哦，头晕，什么时候开始的?
4	病人:	嗯，早上大概四五点醒过来的时候就天旋地转，很不舒服
5	医生:	有没有想吐啊?
6	病人:	吐得蛮厉害的
7	医生:	哦，吐得很厉害
8	病人:	对，可是没有拉肚子，就是晕和吐
9	医生:	然后，现在呢?
10	病人:	今天早上四、五点的事情，然后睡到 11 点就好一点了，现在就是喉咙痛。
11	医生:	后来喉咙痛了
12	病人:	不过只是一点点而已
13	医生:	不是很痛，那么，现在还晕吗?
14	病人:	现在不会
15	医生:	前几天有没有 发烧啊，鼻子塞啊，打喷嚏这些症状?
16	病人:	都没有
17	医生:	没有怀孕
18	病人:	我这个月比较奇怪一点，我一般都非常正常。 然后我这个周期好像提早了
19	医生:	你是准备要怀孕
20	病人:	是，我是在准备

Sample (3): Summative Assessment

Students in pairs are assigned a doctor's and a patient's role. They are given 1 min to read the card silently and then act out the scenario. Their conversation is filmed.

Patient's role-play card

Personal information:
You are a 30-year-old female elementary school teacher. You've been feeling fatigued for the last two weeks, accompanied by shortness of breath and irregular heartbeat.

Problem presentation:

1. Describe the initial symptoms and explain that you thought you would get better soon, so you haven't tried any medicines yet.
2. Explain how the symptoms have been getting worse and interrupted your daily activities. Finally, you made an appointment with your doctor.

Self-diagnosis
You suggest that it may be anemia due to your heavy menstrual bleeding every month.

Negotiate treatment
You took iron pills before, but they made you so nauseated that you ended up throwing up several times.

Doctor's role-play card

Ms. Li, a 30-year-old female elementary school teacher, came to see you for low energy levels, shortness of breath, and irregular heartbeats for the last 2 weeks.

Information gathering
Obtain the history of her medical problem(s).

Diagnosis
You suspect it is iron-deficiency anemia. Order a blood test that is done next door to your office immediately. The result confirms your diagnosis.

Treatment
You prescribe iron pills, and order another blood test for the patient to take in 3 months.

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Part IV
Chinese for Other Services and Industries

Chapter 14
Chinese for Diplomats

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Abstract The linguistic skill set required by diplomats depends on their position and may require familiarity with the political, economic, commercial, consular, legal, educational, and cultural fields, so multiple varieties of Chinese for Professional Purposes are involved. However, almost all diplomats need to be able to speak appropriately in a social context, elicit information, request that an action be taken, make a point, persuade a listener, advocate a position, raise a concern, deliver public remarks, follow a conversation in which they are not a participant, understand the broadcast media, read articles from the print media, recognize documents, interpret, and translate. This chapter discusses the design and delivery of language training for imparting such skills, including topics such as the trainees, the trainers, needs analysis, curriculum, and materials preparation.

14.1 Introduction

"Chinese for diplomats" refers to Chinese language training for those who are learning Chinese as a second or foreign language for use in their current or future careers as diplomats or diplomatic support staff. This would include ambassadors, deputy chiefs of mission, consul generals, and the various other ranks of foreign service officers (such as political, economic, consular, public affairs, and management officers) and foreign service specialists (such as secretaries, communicators, and security personnel) who need to know Chinese in order to perform their job responsibilities at Chinese language posts in Asia.

Aside from what might be termed "Chinese for theological purposes", as recorded in the bilingual dictionaries, grammars, and textbooks that Christian missionaries have been compiling since the sixteenth century, Chinese for diplomats is one of the oldest and most established varieties of Chinese for Specific Purposes, having been taught and learned for well over a century in China, the

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USA, and other countries. In terms of the number of diplomatic personnel trained and the amount of resources expended, the US government has since the end of World War II been engaged in the training of Chinese for diplomats on a scale unmatched by any other government. For this reason and because of the limitations of the author's knowledge and experience, the discussion in this article will focus on Chinese for diplomats in the American context only.[1]

14.1.1 Chinese for Diplomats in the USA

In the USA, Chinese for diplomats is taught primarily at the Department of State's Foreign Service Institute (FSI) in Arlington, Virginia. This is a large, government training facility offering instruction in about 70 foreign languages and cultures as well as in various professional subjects. Each year several hundred government employees receive instruction in Chinese language from several dozen full-time Chinese language and culture instructors and supervisors, the exact number of which fluctuates depending on the numbers of students in training at any given time. Both Standard Chinese and Cantonese are offered, with courses ranging from 8-week short courses to 24- and 44-week intensive courses as well as individualized refresher training, part-time language maintenance, and Distance Language Learning. On a contract with the American Institute in Taiwan, FSI also operates a field school for advanced Chinese in Taipei and runs another, smaller advanced program on contract with a commercial language school in Beijing. From time to time, Chinese for diplomats is also taught under contract with the US government at one of several private language schools in the Washington, D.C. area.

The training of American diplomats in Chinese language was actually begun even before the founding of the Foreign Service Institute. A Chinese language training program had been founded by the US government at 三官庙 San Guan Miao in the Tongzhou District of Beijing in the early 1900s. After the founding of the Foreign Service Institute (FSI) in 1947, this program was renamed the Foreign Service Institute Chinese School. The former Beijing program closed in 1949 when the Communists took over the school building and reopened in Taichung, Taiwan in 1955, relocating in 1979 to Taipei, where it continues to operate today (Cunningham 2011).

[1]From 1980 to 1991, the author was directly or indirectly responsible for Standard Chinese, Cantonese, and Taiwanese language training for American foreign service officers and foreign service specialists at the U.S. Department of State's Foreign Service Institute (FSI) in Arlington, Virginia and its advanced field school operated under contract with the American Institute in Taiwan in Taipei, Taiwan. The description of U.S. government Chinese language training contained in this article does not necessarily represent the current policies or practices of the Foreign Service Institute.

14.1.2 State Department Policies Concerning Language Training

The policies of the State Department regarding the language proficiency of its employees are based on the premise that "foreign language skills are vital to the conduct of foreign affairs".[2] The Foreign Service Act of 1946, as amended several times in the years since, stipulates that "to the maximum extent practicable", chiefs of mission and foreign service officers "shall have, among their qualifications, a useful knowledge of the principal language of the country in which they serve and an understanding of its culture." The Foreign Service Institute was founded in 1947 in order to provide such language and culture training; its official objective is "the provision of language training which develops language use competence appropriate to the job needs of US government employees serving abroad".[3]

In 1960, amendments to the Foreign Service Act provided that positions at overseas posts known to require language competence should be designated as "Language Designated Positions" (LDPs) at a specified proficiency level and be filled by officers with the required proficiencies. The State Department's *Foreign Affairs Manual* states that "It is an objective of the Department…that each officer be able to fulfill the language requirements of each position to which he or she is assigned and, before reaching the senior level, be able to use two foreign languages at a minimum professional level of proficiency of S-3/R-3."[4] Moreover, "it is a responsibility of the Department…to provide suitable opportunities for Foreign Service personnel to acquire foreign language proficiency in preparation for new assignments as their careers develop."[5]

14.1.3 Post Language Programs

A central belief at the Foreign Service Institute is that language instruction is most effectively accomplished through full-time, intensive training. Besides allowing students to devote all their time and energies to language learning, intensive training has the advantage that the government can in this way more quickly begin benefitting from the higher proficiency of its employees. However, in addition to intensive training programs in Chinese language in Washington, Taipei, and Beijing, the State Department also offers part-time, on-the-job training through

[2]*Foreign Affairs Manual* (3 FAM 871).

[3]Foreign Service Institute policy paper of January 28, 1981 (unpublished document, U.S. Department of State).

[4]ILR S-3/R-3 is the equivalent of ACTFL Superior. For the ILR Language Proficiency Skill Level Descriptions and scale, cf. www.govtilr.org/Skills/ For the ACTFL Proficiency Guidelines, cf. www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012.

[5]*Foreign Affairs Manual* (3 FAM 871.2-1).

so-called Post Language Programs (PLPs) at the Chinese language posts in Asia, that is, the embassy in Beijing; the consulate generals in Shanghai, Guangzhou, Chengdu, and Shenyang; the consulate in Wuhan; the consulate general in Hong Kong; and the American Institute in Taiwan offices in Taipei and Kaohsiung.

The Post Language Programs, under the supervision of a Post Language Officer, typically consist of several full-time or part-time language instructors who teach a combination of small group and individual classes to American employees and, in some cases, dependents. The primary purposes of the Post Language Programs are to assist personnel occupying Language Designated Positions who have not yet attained job-level proficiency in attaining it; assist junior officers on language probation in achieving the qualifying level; assist other personnel in attaining a "courtesy" level of proficiency; and, to the extent that funds permit, assist adult family members of eligible employees in attaining sufficient proficiency to enable them to participate in community and representational activities.

14.2 The Trainees

In planning any educational enterprise, the first question that must be asked is: "Who are the learners?" Thus, in this section, we shall try to describe the typical learner in American government-run programs in Chinese for diplomats.

14.2.1 Characteristics of Foreign Service Officers Who Learn Chinese

Foreign service officers assigned to Chinese language training are considerably older than typical university students, the majority being in their early to mid-thirties, with a few as young as their mid-twenties and yet others as old as their forties and even early fifties. The main reason for most of these learners' being somewhat older is that the US government, unlike some foreign governments such as the British or Australians, is unwilling to make the investment of time and funding to send officers to long-term language training until after they have received tenure in the Foreign Service.[6]

Most officers assigned to Chinese language training have no prior background in Chinese. To be sure, there are some officers who do possess prior proficiency in

[6]Tenure in the U.S. Foreign Service is rather different from tenure in academia. Based on yearly performance evaluations, a tenure decision is made for junior officers after an initial period of four to five years. Candidates not recommended for tenure by the end of the fifth year are separated from the Foreign Service. Successful candidates are commissioned as foreign service officers and are granted 27 years from the date of entry into the Foreign Service to be promoted into the Senior Foreign Service; if they are not promoted within this time, they face mandatory retirement.

Chinese—in some cases learned at the university and in other cases acquired at home or from residence overseas, but they are the exception. It should be stressed that junior officers are recruited primarily based on results on the written and oral Foreign Service examination, which normally does not take foreign language proficiency into account. On the other hand, those tenured officers sent for long-term language training often have prior experience in studying other foreign languages, so they tend to be familiar with the intensive language study environment and aware of efficient language learning strategies.

Aptitude for learning foreign languages is an important consideration in assigning officers to long-term language training. Prior to being assigned to language training, officers must take the Modern Language Aptitude Test (MLAT). According to the *Foreign Affairs Manual* (3 FAM 877.2), "Scores on the MLAT of 60 or better are usually evidence that an employee is capable of doing acceptable work in a Category-B language".[7] The *Foreign Affairs Manual* also states that "A person with a low MLAT score and no previous success in language learning is a doubtful prospect."

Other characteristics of State Department Chinese language trainees include that they have received a good general education, with all holding at least a B.A. degree and many having an M.A. or professional degree. Trainees also tend to be highly articulate in English and skilled at delivering short talks or extemporaneous briefings; indeed, such skills are assessed on the Foreign Service examination and honed on the job. In the author's experience, for most trainees, there tends to be a direct transfer of such skills to the foreign languages they study, so that generally speaking, trainees articulate in English tend to be relatively articulate in Chinese.

14.2.2 Motivation Matters

In a 1986 State Department report on training in the hard languages, Ambassador Monteagle Stearns identified motivation as one of the four key criteria of a strong language learner.[8] Some writers have made a useful distinction between two major types of learner motivation, namely instrumental motivation and integrative motivation (Gardner and Lambert 1972). For example, instrumental motivation would include the desire to learn Chinese so one can accomplish one's job and receive a promotion or earn a higher salary, while integrative motivation would include genuine admiration of Chinese culture and, at least to some extent, the desire to

[7]Category-B languages include Chinese and contrast with Category-A languages, which include most Western European languages.

[8]"Report on Hard Language Proficiency in the Foreign Service" by Ambassador Monteagle Stearns (unpublished document, U.S. Department of State, 1986), p. 2.

"become Chinese." Though there are certainly individual exceptions, it is clear that the majority of foreign service officers are instrumentally motivated to study Chinese.

Now, instrumental motivation may be sufficient for learners to attain levels S-2/R-2 and S-3/R-3 in Chinese; however, to attain level S-4/R-4, it would seem that learners would ordinarily also require at least a modicum of integrative motivation. This seems to be so not only because of the much greater effort required to attain Level 4, but also because proficiency at Level 4 seems to require an insider's familiarity with and sensitivity to Chinese culture and society. In fact, it may well be that whereas the instrumentally motivated learner at levels 2 and 3 is essentially limited to cross-cultural communication, the Level 4 learner is, at least some of the time, moving in the direction of same-culture communication (Kubler 2007).

The US State Department uses multiple means to give students' strong instrumental motivation for excelling in their language studies and on the all-important language proficiency exam. These include: (1) newly appointed officers are on so-called "language probation" and may receive no more than one promotion before attaining S-3/R-3 in a "world language" or S-2 in a "super-hard" language like Chinese; (2) before being promoted to the senior level, each officer is to test at S-3/R-3 in two languages; (3) proficiency at designated levels in Mandarin or Cantonese is required for many positions in East Asia and if officers do not possess the required proficiency and are unwilling to enroll in language training, they may not bid for the position; (4) there are two types of financial bonuses for proficiency in "incentive languages" such as Mandarin and Cantonese, including a three-step salary increase for achieving S-3/R-3 and a biweekly bonus of 10% (for S-3/R-3) or 15% (for S-4/R-4) while serving in a Language Designated Position; and (5) language proficiency is taken into consideration by promotion panels.

14.3 The Trainers

Of distinctly lesser importance than the trainees—who must always be the focus of the training—but nonetheless of obvious importance are the trainers, who are the planners and facilitators of the training.

A basic challenge in organizing training programs in Chinese for diplomats is that the typical Chinese language instructor has expertise and experience in teaching the language but knows little or nothing about the professional life and language needs of a diplomat. To be maximally helpful to trainees and render the training as relevant as possible, the trainers need to understand the future language needs of their students in as much detail as possible. Therefore, there must be "training for trainers" on how diplomats use, or would like to or need to be able to use, Chinese language skills on the job.

14.3.1 Pedagogy Experts and Domain Experts

As with other varieties of Chinese for Specific Purposes, there is a need to have on the faculty not only experts in Chinese language pedagogy but also discipline or domain experts who possess knowledge of the technical vocabulary, functions, and strategies that diplomats must be able to employ. Newly hired faculty with non-traditional backgrounds can be given supplemental training in language pedagogy as needed. To give a concrete example, of a faculty of about 20 instructors that I supervised at a Chinese language school for diplomats for which I was responsible in Taipei in the 1980s, roughly half possessed the expected backgrounds in Chinese, English, or other foreign languages; but the other half were hired mainly for their academic backgrounds and/or practical experience in diplomacy, political science, economics, or law. The domain experts typically taught courses in Chinese for specific purposes and advanced tutorials. The two different types of instructors were often paired for materials development projects and occasionally for the teaching of certain classes.

14.3.2 Native Speakers and Non-native Speakers

A related question is the role of non-native-speaking instructors vis-à-vis native-speaking instructors. In general, programs stand to benefit from having representatives of both types of instructors on the instructional team. Though the majority of instructors will normally consist of highly qualified native instructors, it is beneficial to have represented on the faculty a smaller number of highly qualified non-native speakers who possess high-level Chinese language proficiency, background in diplomacy or another relevant field, and/or experience living in Chinese society. These instructors, who are from personal experience familiar with the challenges of learning Chinese and living and working in Chinese society *as a foreigner*, can help make training more relevant and, in addition, may serve as role models for the trainees.

14.4 Needs Analysis

In devising the curriculum, developing pedagogical materials, and implementing training programs for Chinese for Specific Purposes, language needs analysis of the positions the trainees will fill after training must be a central focus. In order to be able to offer trainees the most relevant and useful training possible, it is essential to gain as complete an understanding as possible of their future job needs. Consequently, to help the trainers better understand the work their students will be doing, the Foreign Service Institute periodically sends language use surveys to the various embassies and consulates with detailed questions about the language needs of the personnel serving there.

When resources permit, the Foreign Service Institute may also send trainers out to posts to observe officers' language use on the job, for example, to sit in on visa interviews, accompany officers to the airport to send off or meet delegations, participate in business lunches and dinners, and take part in receptions. Moreover, foreign service officers who return to Washington on temporary duty or at the conclusion of their assignments frequently meet with language training staff and supervisors to report formally or informally on their own experience, or that of their employees, in using Chinese on the job. All of this frequent input from the field is useful in keeping the curriculum relatively up-to-date and making the training as relevant as possible.

Below is a sample list of questions from the language use surveys, based on several actual post questionnaires. These questions were compiled over a number of years by Foreign Service Institute staff and personnel in the field based on the actual experiences of foreign service officers serving at Chinese language posts. The list is rather long but may be helpful in giving readers who are unfamiliar with the diplomatic profession insights into the kinds of language-related work that American diplomats serving at Chinese language posts need to be able to perform.

14.4.1 Post Chinese Language Use Survey

Respondent's background information
Name:
Date:
Post:
Position in the embassy/consulate:
Latest tested scores in (circle) Standard Chinese/Cantonese: S- /R- ; Date of test:
How long have you served at post?
History of language training in Chinese and other foreign languages:

General questions
What are your major activities at post?
Is Chinese essential to your work or do you use it primarily to show cultural sensitivity?
What proportion of your activities are done in Chinese?
Do you have a hobby or avocation which brings you into frequent contact with host country nationals? If so, is this helpful in developing your language proficiency?
Do you enjoy using the language or is it a duty or a matter of convenience?
If you are married, has your spouse studied the language?
Do you speak Chinese with Foreign Service Nationals at post?

Are Host Country Nationals willing to use Chinese with you? Is there a language "threshold" which must be reached before they will converse freely with you in the language?
What aspects of Chinese language use did you have to learn at post, which you didn't learn at FSI? What aspects could you have learned before leaving FSI but didn't?
Are you aware of any social or cultural taboos which might offend host country nationals were they to be committed by a foreigner? If so, what are they? Were they discussed in your training?
What are the factors concerning your assignment which contribute to your progress in the language? What factors inhibit your progress?
If you participate in your post's Post Language Program, does it meet your job-related language needs? If not, what suggestions would you make to improve it?

Indicate the importance to you of the following communication skills in Chinese (1 = critical, 2 = useful, 3 = not needed):
___Dealing with inquiries, requests, and questions
___Interviewing people: getting factual data, getting informed opinion
___Speechmaking: addressing a group, conducting briefings, making extemporaneous remarks
___Interpreting and translation
___Explaining and defending a policy, position, opinion, or regulation
___Negotiating
___Making requests for action, persuading
___Dealing with hostility, calming people
___Expressing personal needs and wishes
___Giving orders
___Directing Host Country National workers
___Raising objections, protesting something, or making a demarche
___Following conversations among native speakers
___Participating in conversations among native speakers
___Detecting irony, humor, rhetoric, and sarcasm in spoken language
___Telephone use and message taking
___Debating bilateral issues
___Understanding public lectures and speeches
___Using slang, idioms, and colloquial speech
___Making requests for action, persuading
___Hosting an official function
___Defending or explaining American values, policies, and institutions
___Attending to household needs
___Watching TV, listening to the radio
___Skimming written matter in order to select items for close reading
___Reading rapidly for gist
___Reading analytically for details and style

___Reading official documents
___Deciphering handwriting
___Reading email and text messages
___Writing email and text messages
___Drafting documents

In what kinds of settings do you use Chinese? (circle)

visits to government offices; in courtrooms; with visitors in my office; on the telephone; with local work crews; at official gatherings and receptions; in taxis; on public transportation; in restaurants, markets, shops, stores; at cultural and sports events; in local homes; at home with visitors; with service personnel; with servants.

What specialized vocabulary do you need? (circle)

arms control; bilateral relations; modern Chinese history; Communism and Communist ideology; American foreign policy; Chinese foreign policy; foreign policy of third countries; government or party structure and practice; legal and judiciary system; the military; security organs; economic system; trade; technology, science, energy, and the environment; industry; agriculture, rural society; price and wage structure; popular culture; traditional values; role of the media; folklore; music and the fine arts; popular culture; literature, theater, and cinema; religion; sports; educational system; social structure, class; entrepreneurs; family unit; health delivery; welfare system; retirement system; daily life; role and status of women; human rights, dissent, and emigration; demographic trends; nationalities and minorities issues.

With which government offices do you have extensive contact? (circle)

Chief of State, Foreign Ministry, Ministry of Defense, Ministry of Justice, Ministry of Finance, Ministry of Commerce, Ministry of Tourism, Ministry of Agriculture, Ministry of Culture, Ministry of Education.

With which segments of society do you have extensive contact? (circle)

policy officials, customs officials, military and security forces; regional officials such as governors and mayors; doctors, lawyers, educators, scientists, artists and performers; students; travel agents, building contractors, shipping agents, morticians; bankers, investors, exporters, importers; union officials, labor leaders; manual laborers, shopkeepers, farmers, restaurateurs, hosteliers, craftsmen; media representatives; athletes, entertainers; domestic servants; the clergy; chauffeurs, bus, and taxi drivers.

Which of these kinds of emergencies could you handle in Chinese? (circle)

illness or injury at home; fire; security problem at post or at home; minor automobile accident.

Which of these elements of your Chinese language ability are important in your work? (circle)

pronunciation, tones, intonation, grammar, vocabulary, fluency, reading ability, writing ability (electronically), writing ability (by hand).

14.5 Language Skills Needed by Diplomats

The focus of a diplomat's work is on using language to complete tasks and resolve problems. Since the majority of most diplomats' careers is spent in countries where a foreign language is spoken, foreign languages are key to successful job performance. As Ambassador Stearns has written, "If there is one skill that epitomizes the Foreign Service as a profession, it is the ability to understand and negotiate in a foreign culture. Fundamentally, this means the ability to comprehend and speak foreign languages. It is this skill that not only distinguishes the Foreign Service from other professions, but without which there would be no need for a Foreign Service at all."[9]

Inevitably, the details concerning the knowledge and skill sets required by a diplomat will depend on the details of her or his particular assignment. Depending on "cone",[10] the daily work of a diplomat might involve domestic or international politics, domestic or international economic and commercial issues, contacts with the local press, educational and cultural exchange, issuance of visas to foreign citizens, US citizen services, military transfers, agricultural assistance, science support, or one of numerous other kinds of duties. So, it can truthfully be said that Chinese for diplomats actually involves multiple varieties of Chinese for Specific Purposes.

14.5.1 Speaking Needs that Almost All Diplomats Have in Common

The above notwithstanding, there are a number of language-related skills that almost any diplomat will need, and it is these that should receive the bulk of the attention in language training for diplomats. One of these is the ability to formulate

[9]"Report on Hard Language Proficiency in the Foreign Service" by Ambassador Monteagle Stearns (unpublished document, U.S. Department of State, 1986), p. 1.

[10]In the American Foreign Service, the term "cone" refers to a foreign service officer's area of specialization, for example, political, economic, commercial, consular, public affairs, cultural and educational, management, etc.

questions aimed at eliciting useful information of a professional nature. This is a communication task that encompasses the needs of many different foreign service officers, such as a consular officer conducting a visa interview("May I see some evidence that your family will support you while you are studying in the U.S.?"); a political officer seeking information from a regional official ("In view of the popular support for your programs, might you be considering running for national office next year?"); a labor attaché drawing out a union official about rumors of a strike ("I don't suppose these rumors of a transportation strike should be taken too seriously?"); an economic officer asking an entrepreneur what she thinks of a proposed tariff on imported goods; a military attaché trying to gain information about troop deployments; or an agricultural attaché looking for projections on crop yields.[11]

Also important for foreign affairs work is the ability politely but firmly to raise a concern or objection, express disagreement with an action or position, or make a point or persuade a listener. For example, a consul may need to protest to prison officials the mistreatment of an American prisoner; a commercial attaché might try to convince a potential investor to "buy American"; the press attaché may, on behalf of the ambassador, take umbrage at a misrepresentation in the opposition press of a US position on some issue; the deputy chief of mission may wish to communicate to the Foreign Ministry that the local record of human rights violations could lead to the curtailment of economic aid; the cultural attaché may wish to convince a leading author to make an exchange visit to US universities; a military attaché may inquire why a region of the country has been declared off limits to US personnel; or an Agency for International Development technician may wish to convince local farmers of the need for a better irrigation system.

Another language-related skill that diplomats need is the ability to formulate a request that an action be taken. For example, a consular officer might need to say to the local coroner: "I realize an autopsy isn't required in a case like this, but the family and employer of the deceased would like one done for insurance purposes. Might you be able to help us with this?" Or the regional security officer might say to the local chief of police: "In view of the recent demonstrations, I believe it's necessary to increase the guard around the ambassador's residence. Could you assign an extra man to this detail?" Or the US narcotics official might say to a local security officer: "Would you please check on the status of our extradition request concerning this man and inform us whether we need to submit any further paperwork?"

As Ambassador Chas Freeman has put it, the function of diplomats is "to carry out the implementation of policy and diplomacy in the field, to cause foreigners to see things and do things our way rather than their way" (Freeman 1998: 365). Consequently, the ability to explain or advocate a US position, action, policy, point

[11]This paragraph and the paragraphs that follow are based closely on "Functional Language Needs of the Foreign Affairs Community" by Doug Jones of the Foreign Service Institute (unpublished document, U.S. Department of State, 1981).

of law, or national value is important. For example, a consular officer speaking to a visa applicant might need to point out: "Under US law, your past affiliation with the Communist Party renders you ineligible for a regular tourist visa. However, there are waiver procedures that may be invoked. Here's what you need to do." Or a political officer might explain to a student group: "I know this is an important issue between our countries, but I don't think we can expect a decision as early as you suggest. Let me explain how our treaty ratification process works." Or the ambassador's secretary, speaking on the telephone, might need to say: "I'm sorry, we can't accept a collect call. Please tell the general we'll return his call."

Another important skill is the ability to speak appropriately in a social context based upon cross-cultural awareness. For example, a consular officer might say to the local district attorney: "The behavior of these two tourists is, of course, deplorable, but unfortunately it's not uncommon for our young people to take foreign flags as souvenirs of their travels without considering the implications. This is certainly not something we'd tolerate at home. I think, however, that if we can avoid prosecution, full restitution and an apology will be made."

The ability to deliver prepared or extemporaneous public remarks is also very important for many foreign service officers (cf. the section on public speaking later in this chapter). Some officers need to be able to function as interpreter. For example, the ambassador or deputy chief of mission may wish to take a language-qualified officer along to a professional meeting because he or she does not wish to rely on local interpreters, or an officer may be asked to interpret for a congressional delegation or other visiting US dignitaries or their dependents.

14.5.2 Aural Comprehension, Reading, and Writing

Also very important is aural comprehension. This includes both interactive comprehension, such as a conversation in which one is participating, and noninteractive comprehension, such as the ability to understand a political rally, a trial, the broadcast media, or just to eavesdrop on other people's conversations at a cocktail party. Related to this is the need to be able to understand speech heard with a host of different background noises, or to comprehend Mandarin pronounced with different local accents, for example, Mandarin as spoken by natives of Shanghai, Sichuan, Shandong, Hong Kong, and Taipei.

The above examples all concern the oral skills. As regards reading, the ability to read newspapers, whether print or online, is key. As Doug Jones has put it, diplomats "need to have at least skimmed the headlines and spotted articles of interest before ever settling down to work for the day. Being caught unaware at the ambassador's morning staff meeting can be acutely embarrassing."[12] The ability to

[12]Doug Jones, "Functional Language Needs of the Foreign Affairs Community" (unpublished document, U.S. Department of State, 1981).

recognize and read documents of an official nature is also important. On the other hand, as we shall discuss in the next section, the ability to write has only limited relevance to Foreign Service professional needs and is at best an optional objective.

14.6 Curriculum

In discussing the curriculum for Chinese for diplomats, we need to keep in mind that time will typically be of the essence, it not being possible to include in the curriculum everything that would be desirable. The reason that time is limited is that officers are needed at post to do important work. Since funding for training programs usually derives from the US taxpayer, there is an obligation not to waste money. In this regard, it should be pointed out that training expenses in government language training programs include not only the typical instructor and staff salaries, building rents, and utilities, but also the salaries of the trainees and, in many cases, other trainee-related expenses such as housing and educational allowances for children, all of which can in some cases total several hundred thousand dollars per year per trainee. Therefore, the curriculum can include only that which is essential for the particular job a trainee will be performing at post. As a Foreign Service Institute policy paper puts it, "Training is, after all, for an assignment, not for a lifelong relationship with the language, and there is neither time nor a real need to teach everything."[13]

Above all else, training in a Chinese for diplomats program must be job-related, relevant, and practical. As Ambassador Chas Freeman has put it, "the requirement for diplomats in the Foreign Service is not theoretical knowledge of the sort that scholars require about foreign languages and societies, it is the ability to apply that knowledge" (Freeman 1998: 36). The same policy paper cited in the previous paragraph states: "It is management's intention to pursue a pragmatic, professionally relevant course in training which emphasizes language use over an encyclopedic, theoretical knowledge of the language… It is essential to make task completion and problem resolution an integral part of job-related language study, and to carry classroom activities to some logical conclusion, even if it involves nothing more than making a telephone call to set up an appointment or doing a memcon from a video-taped speech. Something should be achieved which makes sense in the professional realm but is not so specific as to limit its relevance to a class of diverse students."[14]

[13]Foreign Service Institute document titled "Program Concepts" (unpublished document, U.S. Department of State, 1981).

[14]A "memcon" is a written memorandum of a conversation one has had with someone, for example, a call on an official at the Foreign Ministry. Normally, this would be "live". The reason for the reference to a "video-taped speech" is that this is here for training purposes in the language classroom.

14.6.1 Who Should Design the Curriculum?

One question we will raise at the outset is this: Who should be responsible for designing the curriculum for Chinese for diplomats? We believe the curriculum should be designed by a combination of pedagogical experts and domain experts. Management (school director or dean, department chair, supervisors) should also have a role, so as to insure job relevance and consistency across language programs. In addition, it can be valuable to include the trainees—past and present—in the design of the curriculum since, unlike K-12 or undergraduate language learners, trainees in a Chinese for diplomats program typically know a great deal about what they need to learn, certainly more than the average instructor knows, and can offer invaluable input. For the same reason, it is important at periodic intervals to discuss the curriculum and training program with current students for necessary fine-tuning and adjustment.

14.6.2 When Should Chinese for Diplomats Be Introduced?

Another key question to ask is this: At what point in the curriculum should Chinese for diplomats be introduced? It is vitally important for trainees to establish a solid foundation in general Chinese before beginning job-specific language training. Ideally, serious training in Chinese for diplomats would begin about the time when learners have attained what we will call the intermediate level (ILR S-2/R-2 or ACTFL "Advanced"). Learners should have mastered Mandarin pronunciation, Pinyin, several dozen common grammar patterns, a general vocabulary of 1500–2000 words, the basics of Chinese cross-cultural communication, and approximately 1000 Chinese characters and common reading strategies. Moreover, before they begin the study of higher-level Chinese for diplomats, learners should have studied the basics of 书面语 *shumianyu* "written-style Chinese" as typically represented in newspapers, for example, vocabulary items such as 此 "this" and 将 "will, take" or grammatical patterns such as 基于 "based on", 以……为主 "with… being the most important", and 加以…… followed by a two-syllable verb.

In designing curricula for Chinese for diplomats, a useful progression is as follows: general Chinese, general diplomatic Chinese of the kind relevant to all (or almost all) diplomats, and finally individualized, probably tutorial, training tailored to the specific position a trainee will fill. The type of language taught in the first few months of intensive training is general language, not substantially different from that taught in most university language courses except for greater emphasis on personal and place names and the introduction of a few dozen "diplomatic" vocabulary items fairly early on, such as the names of major US government agencies and key positions in embassies and consulates; and correspondingly less emphasis than in the typical K-12 or college Chinese curriculum on the language of the classroom, campus talk, boyfriends, girlfriends, and so forth.

14.6.3 The Chinese Curriculum at the Foreign Service Institute

The first-year intensive Chinese curriculum at the Foreign Service Institute consists largely of training in general Chinese. However, during the years I served there, there were a number of two- to three-day professionally oriented language use exercises known as "bridges" that were interspersed throughout the course. These were designed to help "bridge" the gap between the study of language in the classroom and its use on the job. Bridges have a purpose and result and must "count for something", not merely involve speaking for the sake of speaking. Bridges are selective, limited, functional, task-focused, and designed to develop skills. Uncertainty of the outcome is an important feature of bridges since uncertainty is characteristic of authentic communication.[15]

One major challenge in developing curricula for Chinese for diplomats in the US State Department is that the trainees come not only from several different cones within the Foreign Service but also from numerous US government foreign affairs agencies besides the State Department, so it would be impossible to design training materials and offer separate classes for each individual job specialty. Since financial constraints prevent tutorial training for everyone and group classes cannot be avoided, similarities and generalities must be found. For example, a bridge could involve performing market research to determine the feasibility of increasing the import of US consumer goods to the host country. Tasks might include background readings in the press (authentic or adapted newspaper and journal articles), interviews with "informed sources" (played by instructors or students), and videos of authentic television interviews and briefings. The following common functions might be involved: introductions and pleasantries, stating one's business, eliciting a response, dealing with an objection, agreeing on next steps, exchanging pleasantries, and leave-taking. Other bridges might involve a disaster relief mission, a local salary survey, or a negotiation. One advantage of bridges is that they can be worked on by trainees at various levels of language proficiency.

The complete curriculum in Chinese at the Foreign Service Institute is two years in length, involving 4–6 hours a day of classes in small groups of 3–5 students and another 2–4 hours of homework, with very few breaks in the year. This brings students from ILR S-0/R-0 to S-3/R-3 or from ACTFL Novice to ACTFL Superior in speaking, listening, and reading. This is similar to the other "super-hard" languages (Japanese, Korean, and Arabic) but four times as long as the so-called "world" languages such as Spanish and French, where only six months of training are needed to bring trainees to the same level.

At the higher levels, the training program involves even smaller group classes and more tutorial training. The curriculum typically includes general and

[15]Much of the material in this section is a summary of "Developments in SLS Curriculum: Background on Bridges", a Foreign Service Institute policy paper by Doug Jones written in 1981 (unpublished document, U.S. Department of State).

specialized conversation, public speaking, newspaper reading and discussion, and job-related training. There are sometimes special courses in listening comprehension of television news, listening comprehension of accented Chinese,[16] and listening comprehension of conversations on a variety of topics by two instructors, with the objective being to follow a conversation in which trainees are not a participant. There may also be available electives such as interpreting, Classical Chinese, cursive script, and Cantonese or Taiwanese.

In the Foreign Service Institute Chinese curriculum, attention is paid to maintaining a balance between the informal register that students learn in the first half of the program and the more formal register they learn in the second year. To cite one example, a very senior officer once explained to me how a diplomatic démarche is delivered: the American diplomat and her or his Chinese counterpart first chat in colloquial Chinese about everyday matters such as the weather, family, or their latest golf game; then the diplomat takes a note out of her or his pocket and, in much more formal language, communicates the contents to the Chinese counterpart. After some discussion, the meeting concludes, once again, with informal chitchat. Thus, *both informal and formal register are vitally important*, it being essential to prevent the phenomenon sometimes described as "being a 3 without being a 1", that is, for advanced students to be good at formal usage (e.g., 阁下, 我想向您请教一个问题 "Your excellency, I would like to ask you a question") but to have forgotten everyday usage (e.g., 厕所在哪里?"Where's the bathroom?").

During the second half of the Foreign Service Institute's two-year Chinese curriculum, some students have the opportunity to work on "field tasks" for half days, several weeks at a time. These tasks may include assisting with visa interviews, performing market research, or engaging in other language-related activities. An instructor is sometimes assigned to assist with preparation, observe during the task, and debrief and critique students afterward. Local internships can also be arranged and it is sometimes possible for students to audit Chinese university classes, which has proven to be helpful for improving listening comprehension and making friends but less useful for developing high-level speaking skills.

Reading is a very important skill for trainees in the two-year program. For these students, who are expected to be able to recognize both simplified and traditional characters, the ability to read newspapers fluently is a major goal. The normal sequence is short international news items, then short domestic news items, then

[16]At the higher levels, the ILR proficiency descriptions call for increased ability to comprehend "dialects" and non-standard speech. When I directed the Foreign Service Institute's advanced field school in Taipei in the 1980s, I implemented a "Mandarin Dialect Familiarization Course" consisting of a number of units on the major Chinese "dialects" and the different varieties of non-standard Mandarin typically spoken by their speakers. The course was based on the hypothesis that the most effective way to improve one's comprehension of a given variety of non-standard Mandarin is first to analyze the differences from standard Mandarin and then to study recorded speech samples with transcriptions and notes (Kubler 2003). After being preoccupied for many years by other projects and duties, I am currently in the process of refining this material into a book and accompanying multimedia.

longer domestic news items, and finally editorials and commentaries, which are considered by far the most difficult due to the large amount of Classical Chinese-influenced vocabulary and grammar, the many four-character phrases and cultural references, and the need to be able to “read between the lines”. Newspaper articles are chosen to mirror the cones of the trainees, i.e., political, diplomatic, economic, commercial, consular, cultural, educational, military, and so on. At the higher levels, there is also some practice in reading documentary Chinese (notarial certificates, diplomatic notes, agreements, memoranda of understanding, communiques) and handwritten documents.

14.6.4 Training in How Many Skills?

In language training, we often speak of the so-called four skills, that is, speaking, listening, reading, and writing. Conventional language training typically assumes that training in all four of these skills should be included. However, in government language training, where time and funding are often extremely limited, the question must be asked: Should training include all four skills, only three skills (speaking, listening, reading), only two skills (speaking and listening), or even only one skill (listening or reading)?[17] Since it is the taxpayers who are footing the bill and the post is waiting anxiously for the officer’s arrival, there is great time pressure. The key is determining which skills are the most needed and then training only in those skills.

As we discussed earlier, junior officers who are being trained to do visa interviews need training in speaking and listening only; training them in reading and writing would be an unnecessary luxury. The fact is that American diplomats in China normally send all their messages to the Chinese government in English and the Chinese government replies in Chinese; it is standard diplomatic protocol for each government to reply in its own language. American diplomats in China almost never have occasion to write in Chinese and, on the rare occasions when they do, they have both American and local Chinese secretaries at their disposal. They would typically dictate in English or Chinese what they need to have written and then check for accuracy before sending it out.

Thus, an argument can be made that since writing is the hardest of the four skills to learn but, ironically, the least useful for most foreign professionals in China, why bother? Given that writing is considered not to be relevant to the work of foreign

[17]Some U.S. government agencies are interested primarily in the monitoring of foreign radio broadcasts, that is, in listening comprehension; and other agencies may be interested mainly in the reading and analysis of open source or closed source written materials. For diplomats in the American Foreign Service, the skills of listening, speaking, and reading are the most important; when training time is limited, some officers may be trained in listening and speaking only.

service officers and is not tested on the end-of-training proficiency test, there is no formal training in composition, nor are learners required to know how to handwrite characters from memory.[18] Moreover, with the exception of training beyond the S-3+/R-3+ level, the reading curriculum for Chinese for diplomats includes almost no literature or history, which are much more difficult to read but less relevant to the work of foreign service officers than newspapers or reports.[19]

14.6.5 Where Should the Training Take Place?

We would be remiss to end this section without adding a few words on the location of the training. Chinese language training is best begun in the learner's home country. This is, first of all, because instructors in the home country tend to be more familiar with the challenges facing beginners. Moreover, if learners have a common native language and culture, instruction is more efficient. On the other hand, if learners learn in situ before attaining the intermediate level, they will initially be unable to take advantage of the chief benefit of residence abroad, i.e., interacting with local people in Chinese, and may establish relationships with local people in English (Kubler 2002).

However, there is no question that the intermediate-to-advanced portion of the curriculum is best delivered overseas in a Chinese-speaking environment. Once learners have reached the intermediate level and can use Chinese for most daily needs and truly take advantage of study abroad, living and learning in the target language environment will lead to the fastest possible progress (Kubler 1987). In this way, experiential learning can supplement the academic learning students have focused on up to this point. As Ambassador Stearns puts it, "There is no substitute in language learning for immersion in the environment of the country where the language is spoken."[20] Of course, simply living in a Chinese-speaking environment for a period of time is by itself not sufficient; learners must attend a well-organized, rigorous language program and live and study in close, frequent interaction with native speakers in both informal and formal settings.

[18]During the years that I supervised training, we sometimes did ask learners to learn how to handwrite the first few hundred characters from memory, but this was not for the purpose of writing per se but rather for the pay-off in stronger reading skills. Though most trainees cooperated, a few did not, since they were well aware that writing is not tested on the official end-of-training proficiency test.

[19]The reasons history and literature are harder include the enormity of the vocabulary and the fact that the vocabulary is less repetitive than newspaper style.

[20]"Report on Hard Language Proficiency in the Foreign Service" by Ambassador Monteagle Stearns (unpublished document, U.S. Department of State, 1986), p. 12.

14.7 Public Speaking

The ability to speak publicly in fluent and persuasive Chinese, whether this consists of carefully prepared remarks or extemporaneous comments, is very important for foreign diplomats in China. Examples of the kinds of public speaking that foreign diplomats serving in China may need to engage in include: toasts at banquets hosted by either the American or the Chinese side (which can range from five seconds to several minutes); speeches thanking Chinese hosts when conducting VIP visits to government offices, universities, or factories; welcoming remarks at the opening of American businesses, cultural and sports events, or international conferences; introductory remarks at the opening of exhibitions or concerts by American artists; remarks made at the airport when sending off or meeting delegations; remarks at ceremonies commemorating an event; remarks at sister city signings; and much more.

14.7.1 The "Five-Minute Lecture"

Producing connected discourse in a foreign language is obviously much more challenging than answering a question. A method that I have used extensively in training diplomats in public speaking is what I call the "five-minute lecture" (Kubler 1985). In brief, students in a tutorial or two-person class prepare outside of class a brief talk on a topic they have chosen or which may have been assigned to them by their instructor. They may bring to class at most an index card with an outline or some notes to jog their memory. At the beginning of class, a student presents the talk while the instructor makes an audio or video recording and takes notes. After the talk is finished, student and instructor go over the recording of the talk with a fine-toothed comb, identifying and correcting all errors in pronunciation, tones, intonation, grammar, and vocabulary. Moreover, instructors are asked to "push students up to the next level," that is, urge them to use higher-level, more sophisticated grammar and vocabulary to present their talk, even if the simpler language they have used is completely correct. Student and instructor then drill and practice the corrections, which will easily take one hour for a three- to five-minute talk. After class, the student prepares and practices a revised version of the talk, which he or she presents in class the next day.

Various variations on this routine are possible. For example, should the talk be prepared in advance or presented in class extemporaneously? Should the class be a tutorial or a two-person class, in which case the other student can serve as audience and ask questions? Should the talk be written out, before or after? Besides preparing learners to give talks on common topics, this kind of exercise also provides an excellent opportunity for correcting fossilized errors, fine polishing, word study, and vocabulary expansion (including the learning of synonyms, near synonyms, antonyms, and different registers).

Examples of topics for “five-minute lectures” at lower levels (S-1+ to S-2+) include: 自我介绍 “Self-introduction”, 我的家庭 “My Family”, 我的家乡 “My Hometown”, 我的爱好 “My Hobbies”, 我心目中最敬佩的人 “The Person I Most Admire”, 我最难忘的一次经验 “My Most Unforgettable Experience”, 我的工作经验 “My Work Experience”, and 我为什么决定做外交官 “Why I Decided to Become a Diplomat”.

Examples of topics at higher levels (S-2+ to S-3+) include: 美国国务院的组织 “Organization of the US Department of State”, 美国国会的运作 “Functions of the US Congress”, 美国选举的过程 “The American Electoral Process”, 海峡两岸的关系 “Relations Across the Taiwan Straits”, 朝鲜半岛的未来 “Future of the Korean Peninsula”, 美国的中东政策 “U.S. Policy Toward the Mideast”, 中国的经济开放政策 “China’s Policy of Opening the Economy”, 自由贸易与保护主义 “Free Trade and Protectionism”, 美国的环境保护政策 “US Environmental Policy”, 人权问题 “Human Rights Issues”, 美国的移民法 “US Immigration Law”, 世界贸易组织的规定 “World Trade Organization Rules”, 美国的种族歧视问题 “Problems of Racial Prejudice in the USA”, and 知识财产权的问题 “Issues Involving Intellectual Property Rights”.

14.7.2 Discourse Structure

In developing students’ ability in public speaking, special attention should be paid to common opening phrases, concluding phrases, and other cohesive devices for strengthening and clarifying discourse structure. Learners need to practice useful openers and lead-in phrases like 大家好!我今天想跟大家谈的题目是…… “Hello, everyone! The topic I’d like to speak to you about today is…”, 今天我要向各位报告…… “Today I want to report to you on…”, 我的报告由三部分组成…… “My report consists of three parts…”, 这个问题可以分三点来说…… “This issue can be divided into three main points…”, and 我首先要谈……, 然后再谈……, 最后讨论…… “First I’d like to talk about…, then I’ll talk about…, and finally I’ll discuss…”.

For the body of the briefing or report, trainees should practice the use of introductory phrases like 大家都知道, 由于…… “As everyone knows, because…”, 我想说的第一点是…… “The first point I’d like to make is…”, 有人曾经说过…… “It has been said that…”, 举个例子来说明我的意思…… “To give an example of what I mean…”, 从某种意义上来说…… “In a certain sense…”, 由于多种原因…… “For many reasons…”, 与此同时…… “At the same time…”, 换句话说…… “In other words…”, 由此可见…… “It can be seen from this that…”, 同时呢, 还有一方面, 就是…… “At the same time, there is another aspect to this, which is that…”, 特别值得一提的是…… “What is especially worth mentioning is that…”, 据统计…… “According to statistics…”, 从这些数字不难看出…… “From these figures, it’s not hard to see that…”, 正如我刚才所说…… “As I said a moment ago…”, and 噢, 对了, 我忘了提到一点, 就是…… “Oh, yes, I forgot to mention one point, namely…”.

The final section of a briefing or report is the wrap-up or conclusion. Useful phrases for this section that learners would do well to practice include 总而言之…… "To sum up…", 我的报告就到此结束, 请多指教 "This concludes my report, thank you!", and 如果哪一位有什么问题的话, 欢迎提出来 "If anyone should have any questions, please feel free to ask."

14.8 Public Affairs

In diplomatic work, there are numerous specialized areas or cones, one of which is public affairs, which shall serve as our first example of Chinese language-related diplomacy. It should be noted that the description of public affairs language and functions in this section is in no way intended to be complete; these are merely examples of the type of language with which public affairs officers working in Chinese-speaking societies need to be familiar.

14.8.1 Specialized Vocabulary for Public Affairs

Public affairs work requires the mastery of a great deal of specialized vocabulary from various areas such as:

Broadcast media and press relations:

接受采访 "give an interview", 私下的谈话 "off the record conversation", 不允许引述……的话 "it's not permitted to quote…", 发言人 "spokesperson", 记者证 "press card", 上广播节目 "be on the radio", 现场直播 "live telecast", 数位影像电视会议 "digital video conference", 耳机 "headset", 调整音量 "adjust the volume"

Cultural and educational exchange:

文化交流 "cultural exchange", 文化表演 "cultural performance", 策划一个项目 "organize a program", 计划预算 "project budget", 发放资助金 "issue a grant", 美国教育部 "US Department of Education", 国际访问学者项目 "international visitor program", 富布莱特交换学者 "Fulbright exchange scholar", 托福考试 "TOEFL"

Topics specifically related to America:

黑人历史月 "Black History Month", 国会 "Congress", 马丁路德金日 "Martin Luther King Day", 美国之音 "Voice of America", 白宫 "White House"

14.8.2 Sentences Relating to Public Affairs

Whenever possible, vocabulary and grammar for public affairs work are presented in practical, high-frequency dialogs, paragraphs, or sentences designed to be practiced through role-playing or, sometimes, interpreting. Textbooks or hand-outs present this material accompanied by Chinese characters (simplified and traditional), Pinyin romanization, vocabulary lists, grammar explanations, and audio recordings. Here is a sampling of the types of expressions that public affairs officers need to learn:

我非常荣幸能被派到中国来。
"I'm very pleased to be assigned to China."

部长先生, 我祝贺您荣任新职并祝您事事成功!
"Mr. Minister, I congratulate you on your new appointment and wish you every success!"

我们的总统要我表达他对中国人民最诚挚的问候。
"Our president sends his warmest regards to the Chinese people."

我们对两国之间的友好关系和相互合作表示欢迎。
"We welcome the friendly relations and cooperation between our two nations."

有一点儿事想跟您谈谈……
"There is something I'd like to talk to you about…"

贵国政府对这个提案能审慎考虑, 我们深表感谢。
"We appreciate very much your government's careful consideration of this proposal."

我得将您的提案转交我们的政府。
"I'll have to refer your proposal to my government."

这件事, 在目前我无可奉告。
"I have nothing to say to the press on this matter at the present time."

14.8.3 Speeches Relating to Public Affairs

Public affairs officers are often called on to speak at a wide variety of events. Examples include: hosting a function and thanking people for coming; being invited to an event and thanking the host; introducing the ambassador, consul general, or a guest from Washington; giving a speech congratulating someone or announcing awards; and addressing an audience as the master of ceremonies for some event.

Below is an example of what a Public Affairs Officer may need to say when introducing someone who is about to give a speech or lecture:

Simplified characters: 现在我要为大家介绍我们今晚的贵宾___先生/女士。___先生/女士目前在___服务。___先生/女士对___有深入的了解与研究。今天我们非常高兴邀请到他/她来为我们就___发表演说。现在请大家以热烈的掌声欢迎___先生/女士!
Traditional characters: 現在我要爲大家介紹我們今晚的貴賓___先生/女士。___先生/女士目前在___服務。___先生/女士對___有深入的了解與研究。今天我們非常高興邀請到他/她來爲我們就___發表演說。現在請大家以熱烈的掌聲歡迎___先生/女士!

Pinyin Romanization: **Xiànzài wǒ yào wèi dàjiā jièshao wǒmen jīnwǎnde guìbīn ___xiānsheng/nǚshì. ___xiānsheng/nǚshì mùqián zài___fúwù. ___xiānsheng/nǚshì duì___ yǒu shēnrùde liǎojiě yǔ yánjiū. Jīntiān wǒmen fēicháng gāoxìng yāoqǐngdào tā lái wèi wǒmen jiù___fābiǎo yǎnshuō. Xiànzài qǐng dàjiā yǐ rèliède zhǎngshēng huānyíng___ xiānsheng/nǚshì!**

English translation: "Now I'd like to introduce our distinguished guest this evening, Mr./Ms.___. Mr./Ms.___ is currently serving at___. Mr./Ms.___ is a specialist in ___. Today we're very happy to have been able to invite him/her to speak to us on the subject of___. Now let's give a warm welcome to Mr./Ms.___!"

In the above speech sample, notice the format: simplified characters, traditional characters, Pinyin romanization, and English translation. The reason for this format is so as to provide maximum flexibility in training since foreign service officers who use these materials will be at different proficiency levels and may or may not know characters. This material would be presented in a textbook or hand-out with vocabulary lists, grammatical and cultural notes, and an audio recording. After they have internalized the content, learners would perform in class and be critiqued by their instructors.

14.9 Consular Affairs

Our second example of Chinese language-related diplomatic work comes from the realm of consular affairs. Consular affairs are divided into a number of subspecialties such as immigrant visas, nonimmigrant visas, and American Citizen Services. Again, it should be noted that the description of consular vocabulary and functions in this section is in no way intended to be comprehensive; the words and phrases cited below are merely meant as examples of the type of language that visa officers are expected to know.

14.9.1 Examples of Specialized Vocabulary for Consular Affairs

Some of the types of vocabulary that consular officers serving at Chinese language posts must learn include: the Chinese names for different types of visas such as immigrant visa, nonimmigrant visa, fiancé(e) visa, tourist/visitor visa, student visa, exchange visitor visa, investor/employment creation visa, specialty occupation visa, intracompany transfer visa, extraordinary ability worker visa, artists and athletes visa, and religious worker visa; the names of countries; the names of Chinese provinces and major cities; the Chinese names of American states and major cities; common Chinese surnames; kinship terms; occupations; different academic fields; the names of different academic degrees; government offices; the names of major corporations, banks, and universities; various financial terms (such as guarantor, affidavit of support, different types of bank accounts, tax returns, pay stubs, certificate of owning real estate, stocks, and negotiable securities); and the various words used in the process of taking fingerprints.

The following brief sampling of specialized vocabulary for consular officers will serve as an example of the hundreds of words with which diplomats working in this cone must be familiar: 表格 “form”, 出生证明书 “birth certificate”, 窗口 “window (where interviews are conducted)”, 存款簿 “bank passbook”, 非移民签证 “non-immigrant visa”, 公民 “citizen”, 公证 “notarize”, 工作许可证 “work permit”, 户口誊本 “household registration”, 护照 “passport”, 奖学金 “scholarship”, 缴费 “pay a fee”, 良民证 “police certificate”, 领事馆 “consulate”, 旅行社 “travel agency”, 聘书 “formal letter offering employment”, 弃船 “jump ship”, 签名 “sign, signature”, 入学证明书 “verification of enrollment in a school”, 上岸许可证 “seaman’s landing permit”, 申请 “apply, application”, 生活保证书 “affidavit of support”, 收入 “income”, 受训 “receive training”, 邀请信 “letter of invitation”, 移民签证 “immigrant visa”, 移民局 “Immigration and Naturalization Service”, 一年有效多次入境签证 “one-year multiple-entry visa”, 永久居留权 “right of permanent residence”, and 总领事馆 “consulate general”.

14.9.2 Special Challenges for Visa Officers

Common challenges for visa officers include listening comprehension of Mandarin spoken with different local accents; ability to interact with speakers some of whom are under extreme stress and may be shouting or crying; ability to read various types of Chinese documents (e.g., identification card, household registration record, birth certificate, death certificate, marriage certificate, divorce certificate, certificate verifying employment, certificate attesting that someone has no police record, bank books, certificates of deposit, business licenses, medical certificates, university transcripts, university diplomas); and recognition of handwritten documents. It is not always necessary to be able to understand everything in these types of documents, but it is important at least to be able to identify the type of document and understand the gist. The level of complexity in reading such documents is increased because three different societies—the PRC, Hong Kong, and Taiwan—are involved, each with different laws, different formats, some differences in vocabulary and grammar and, of course, differences in the type of characters. And yet, because consular officers frequently move from one Chinese language post to another, they need to become familiar with as much of this variation as possible.[21]

14.9.3 An Example of Mandarin Pedagogical Materials for Consular Officers

In the past, several sets of pedagogical materials related to consular work have been compiled by consular officers working together with their Chinese language instructors. This would seem to be an ideal method of materials preparation since especially consular work involves levels of domain knowledge and detail that persons without specialized training and experience would be unlikely to possess. Below is an example from one such textbook, consisting of a nonimmigrant visa interview.[22]

[21]A typical pattern of assignments might be, for example, two years of Chinese language training followed by a two-year tour in Shenyang, a three-year tour in Taipei, and a three-year tour in Hong Kong.

[22]Adapted from Chen, Angel A. C. and Brian V. Evans, (no date), *Standard Chinese: A Modular Approach, Optional Module: Consular Matters* (unpublished field test edition, Foreign Service Institute, U.S. Department of State). This is an excellent example of a textbook compiled by an experienced teacher of Chinese as a Second Language (Chen) in cooperation with a Foreign Service Officer (Evans) with extensive experience in conducting visa interviews. The reason the interview is in Pinyin rather than characters is that for junior officers, who make up the majority of visa officers, speaking and listening are by far the most important skills and are much easier to acquire than the written skills. Since training for junior officers is usually limited to 24 weeks, the focus of training must be on spoken Chinese. Moreover, the positions for which these junior officers are training are typically designated at the S-2/R-0 level, meaning that no reading proficiency is required.

A: **Nǐ shi Zhào Tàitai ba?**	You're Mrs. Zhao, I presume?
B: **Duì.**	Yes.
A: **Zhào Tàitai, zhèizhāng biǎogé shì bu shi nǐ zìjǐ tiánde?**	Mrs. Zhao, did you fill out this form yourself?
B: **Shìde.**	Yes.
A: **Qǐngwèn, nǐ cóngqián yǒu méiyou shēnqǐngguo Měiguo qiānzhèng?**	Have you ever applied for a visa to the U.S. before?
B: **Méiyou. Wǒ zhàngfu zài Měiguo dúshū, wǒ yào qù yīqīn.**	No. My husband is studying in the U.S. and I want to go join him.
A: **Hǎo. Qǐng nǐ ràng wǒ kànkan nǐ xiānsheng xuéxiào fāgěi nǐde I-20 biǎogé.**	All right. Please let me see the I-20 form issued to you by your husband's school.
B: **Hǎo a. Zài zhèli.**	O.K. It's here.
A: **Nǐ hé nǐ xiānsheng yǒu méiyou háizi?**	Do you and your husband have children?
B: **Yǒu. Liǎngge érzi.**	Yes. Two sons.
A: **Nǐ zhǔnbèi bǎ tāmen dàidào Měiguo ma?**	Do you plan to take them to the U.S.?
B: **Méiyou. Wǒ pópo yào zhàogu tāmen.**	No. My mother-in-law will care for them.
A: **Hǎo. Zhào Tàitai, nǐ kěnéng zhīdao nǐ zài Měiguode shíhou, Měiguo zhèngfǔ bù zhǔn nǐ gōngzuò. Liúxuéshēng hé tāmende jiājuàn dōu shi zhèiyangzide. Suóyi nǐmen zhǔnbèi zěmme shēnghuó ne?**	O.K. Mrs. Zhao, perhaps you know while you're in the U.S., the U.S. government won't permit you to work. This is the case for all foreign students and their dependents. So how do you plan to support yourself?
B: **Wǒ gōnggōng gěi women shēnghuófèi.**	My father-in-law will be providing our living expenses.
A: **Tā gěi nǐde shēnghuó bǎozhèngshū hé tāde cúnkuǎn zhèngmíng yǒu méiyou dàilái?**	Have you brought his statement of support and bank balance?
B: **Yǒu, zài zhèli.**	Yes, here.
A: **Hǎode, xièxie. Zhào Tàitai, qǐng nǐ hòutiān xiàwǔ sāndiǎn bàn dào sìdiǎn bàn zài huílái lǐng nǐde hùzhào. Xiànzài qǐng nǐ dào bāhào chuāngkǒu jiǎo yìbǎikuài diànbàofèi.**	All right, thank you. Mrs. Zhao, please return the day after tomorrow between 3:30 and 4:30 p.m. to pick up your passport. Now please go to window number 8 to pay the NT 100 telex fee.
B: **Hǎo, xièxie. Zàijiàn.**	All right, thank you. Good bye.
A: **Zàijiàn.**	Good bye.

14.9.4 An Example of Cantonese Pedagogical Materials for Consular Officers

There follows an example of a Cantonese language immigrant visa interview. It derives from the textbook *Cantonese Consular Course* that two Cantonese instructors and I prepared a number of years ago, based on actual visa interviews that were conducted at the US Consulate General in Hong Kong.[23] This material is in Yale Cantonese romanization only, since spoken Cantonese is more useful and

[23] *Cantonese Consular Course* by Cornelius C. Kubler, Kam-Hung Peter Luk, and Yeuk Lan Tso, Cantonese Section, Dept. of Asian and African Languages, School of Language Studies, Foreign Service Institute (unpublished document, U.S. Department of State, 1981).

much easier to learn for Americans than written Cantonese. As with the other materials cited above, vocabulary lists, usage notes, exercises of various kinds, and audio recordings are made available to learners and instructors. Students who had studied beginning intensive Cantonese at the Foreign Service Institute for 24–44 weeks would be able to handle this material.

A: **Wòhng Táai, néih hái Méihgwok yáuh mātyéh chānchīk a?**	Mrs. Wong, what relatives do you have in the United States?
B: **Ngóh go daaih jái jyuhhái gódouh.**	My oldest son lives there.
A: **Néih yáuh móuh daihyihdī sailóugō a?**	Do you have any other children?
B: **Yáuh, ngóh yáuh sāamgo néui tùhng léuhnggo jái tìm.**	Yes, I also have three daughters and two other sons.
A: **Néih go jeuhngfù haih mhhaih juhng sàang a?**	Is your husband still living?
B: **Mhhaih, nghnìhn yíhchìhn kéuih hái Jūnggwok gwojósai lo.**	No, he died five years ago in China.
A: **Jyuhhái Méihgwok gógo jái, kéuih géisìh chēutsai ga?**	When was your son who lives in the United States born?
B: **1934 nìhn. Hái ngóhdeih hēunghá chēutsaige.**	In 1934. He was born in our native village in the countryside.
A: **Néih jeui hauh góchi gin kéuih haih géisìh a?**	When did you see him for the last time?
B: **1974 nìhn, hái kéuih heui Méihgwok jìchìhn gin kéuihge.**	I saw him in 1974 before he went to the United States.
A: **Néih hái Méihgwokge sìhhauh, haih mhhaih dásyun tùhng néih go jái jyuh a?**	When you're in America, do you plan to live with your son?
B: **Haih.**	Yes.
A: **Néih dásyun hái gódouh jouhgùng ma?**	Do you plan to work there?
B: **Mhdásyun, ngóh yiu dáléih ngóh seigo syūn.**	No. I'll take care of my four grandchildren.
A: **Bīngo yéuhng néih a?**	Who will support you?
B: **Ngóh go jái.**	My son.
A: **Hóu. Néih hái ngoihbín dáng yātháh, ngóhdeih jauh faatbéi néih.**	O.K. Wait outside for a moment and we'll issue it (the visa) to you.
B: **Hóu, mhgòi.**	All right, thank you.

14.9.5 American Citizen Services

Consular work includes not only visa interviews for citizens of other countries who wish to travel to the US but also service in support of Americans who are living or traveling abroad. The unit in the consular section responsible for such work is known as American Citizen Services. Here, to serve as examples of the kind of language with which an American Citizen Services officer must become familiar, are sentences related to the arrest of an American citizen in China:

我在美国总领事馆工作，有人通知我们说有一个美国人被捕了。
"I'm from the US Consulate General. We were informed that an American citizen has been arrested."

他 (她) 的罪名是什么?
"What has he/she been charged with?"

请你给我看看他 (她) 的护照。
"Please show me his/her passport."

他 (她) 现在关在哪里?
"Where is he/she currently being held?"

什么时候开始审判?
"When will the trial begin?"

他 (她) 有没有律师?
"Does he/she have a lawyer?"

我要定期来看他 (她)。
"I'll be coming regularly to see him/her."

美国政府对这个人不负任何责任,可是我们要确保他(她)会得到公平的待遇。
"The US government takes no responsibility for this person, but we want to make sure that he/she will be treated fairly."

Consular officers from the American Citizen Services unit are also responsible for handling matters related to the death of a US citizen overseas. Sample sentences related to this topic that are drilled and role played in class with trainees include:

我在美国大使馆工作, 有人通知我们说有一个美国人死了, 事情是怎么发生的?
"I'm from the US Embassy. We were informed that an American citizen has died. Can you tell me what happened?"

我可以看看他 (她) 的护照吗?
"Could I see his/her passport?"

他(她)还有别的证件吗?
"Did he/she have any other papers?"

死者生前在哪儿工作?
"Where did the deceased work?"

死者有没有亲属?
"Did the deceased have any relatives?"

需要解剖尸体吗?
"Is an autopsy necessary?"

有没有冷藏尸体的地方?
"Are there facilities for refrigerating the body?"

这个遗体必须什么时候埋葬?
"By when must the body be buried?"

14.10 Materials Preparation

A certain amount of useful class work can be done without a textbook and without prior preparation by students, for example, comprehension and discussion of television news or “cold” newspaper reading and discussion. More specifically, students might be handed a newspaper and given 15 minutes to locate all articles on a general subject before selecting one or two to gist and discuss orally. However, given the difficulty and complexity of diplomatic Chinese, so as to save learners time and increase efficiency, for most classes, there should be prepared materials with dialogs, reading passages, vocabulary lists, grammatical and cultural explanations, exercises, audio, video, and possibly computer software.

Unlike the field of English for Specific Purposes, which has many textbooks and other materials available, Chinese for Specific Purposes has limited materials, most of them dealing with Business Chinese. In the case of Chinese for diplomats, there are no commercially available materials at all, so programs teaching it usually need to prepare their own materials.

Writing a new textbook is a major undertaking that is bound to take more time and cost more money than anticipated. For the spoken curriculum, authentic materials such as lectures, news conferences, interviews, briefings, speeches, and debates can be adapted into pedagogical materials. For the written curriculum, authentic materials such as newspapers and professional journals in the diplomatic, political, and military fields may be used. Chinese university textbooks on diplomacy and politics are also a possible source of material. It is important that materials be as up-to-date as possible, so in many cases, Xeroxes with annotations and binder inserts are preferable to bound textbooks. In fact, in the author’s experience, some of the most successful language programs take advantage of current, ad hoc, disposable materials that are relatively quickly designed, which provide flexibility and high relevance to functional, job-related tasks.

Instead of single authors of materials, it is often preferable to organize materials preparation teams consisting of two to four persons. As was discussed earlier, these should ideally include both language pedagogy experts and content specialists and both native and non-native speakers. As we saw with the materials for consular officers, it can be advantageous to include the learners in designing the training materials.

14.11 Conclusion

Since the academic community is in general unfamiliar with government language schools, I will begin be reviewing the chief differences between US government Chinese language training and university Chinese language training.

14.11.1 Government Language Training Versus University Language Training

To begin with the learners, in comparing foreign service officer language trainees with undergraduate students, it could be said that the former tend to be more mature, have received a better general education, possess stronger analytical skills, know more about Chinese society and culture, and possess stronger motivation. However, given their generally greater age and, for the most part, instrumental rather than integrative motivation, they may be somewhat weaker in acquiring accurate pronunciation and, once in country, may be more hesitant to "mix and mingle with the locals" and make close friends. Of course, there is no question that much depends on the individual.

Government training is practical, job-related, goal-oriented, and designed to be applied in a particular position in the relatively near future. In government Chinese language training, there is typically a close connection between the training program and the receiving post. The learners, and usually their instructors, already know what position they will be filling at which post and how many months or years they have available for training. There is great pressure on students and their trainers to attain specific proficiency targets by the end of training.

As discussed earlier, in government language programs, it is common that only three skills (speaking, listening, and reading) or, depending on the position and the amount of training time available, only two skills (speaking and listening) are emphasized; writing is usually not taught because it is not tested, which reflects the belief that the skill of writing is seldom needed by American foreign service officers. Moreover, with the exception of training beyond the S-3+/R-3+ level, the reading curriculum ordinarily includes almost no literature or history.

Also as noted earlier, the government language training environment provides strong instrumental motivation for diligent study and good performance on proficiency evaluations. Even though, in the author's opinion, there is far too little contact between the government language training community and the academic language training community, in the past few decades, a number of concepts and ideas from the government language training community have in fact strongly impacted the academic language training community. Examples include the new emphasis on proficiency and communicative ability, the so-called flipped classroom, the concept of oral proficiency interviews, and the ACTFL proficiency testing and rating system (Kubler 2018).

14.11.2 Prospects for the Future

Chinese for diplomats has become a fairly well-established variety of Chinese for Specific Purposes. It is taught mostly in government language schools and is unlikely to move to an academic setting. In the past century, it has developed from very traditional Chinese-style learning, rote memorization, and grammar-translation, through audiolingual pedagogy, to communicative language learning and teaching methods which increasingly focus on authentic materials and the autonomous learner. In the future, Chinese for diplomats is likely to make increasing use of multimedia and technology-driven pedagogy.

To sum up, it can be said that Chinese for diplomats consists primarily of a large amount of specialized terminology and several dozen specialized functions such as defending a certain point of view or persuading someone to adopt a certain course of action. As discussed earlier, Chinese for diplomats also requires control of *shumianyu* grammar and vocabulary. Unlike most academic courses in general Chinese, a central issue in the learning and teaching of diplomatic Chinese is the focus on practical outcomes. Also unlike at schools and colleges, the learners are adults who possess content expertise and are usually already at the intermediate level in Chinese when beginning their study of Chinese for diplomats.

The higher up on the proficiency scale one climbs, the greater the need for individualization of the training depending on learners' strengths and weaknesses, learning styles, and job needs. Training content must become increasingly professionally oriented and there is an increasing need for small classes. While beginning drill classes can flourish with 8–15 students, advanced conversation classes are best limited to 2–3 students. Beginning at the intermediate level, every student needs some tutorial instruction, ideally at least one hour per day.

In reading, in addition to the difficulty level of the material read, there are also the factors of fluency and speed. I witnessed more than once situations where an ambassador or section chief asked an officer at 9:00 A.M. to read through several local newspapers, identify all articles dealing with a certain topic, and be prepared to summarize them orally—or write a gist of them—in English by 10:00 or 11:00 A.M. The ability to scan, skim, and read at a fairly high rate of speed is important in professional contexts; there are situations where general understanding and speed trump detail and precision.

As learners attain ever higher levels of proficiency, it becomes increasingly difficult to predict their future rate of progress and training outcomes. At the higher levels of language proficiency, progress is more difficult, takes longer, and depends more than at the lower levels on general education, intelligence, language learning aptitude, personality, motivation and, of course, the effort of the individual student. To put this another way, we could say that though almost any learner can, with sufficient work, attain basic and, probably, intermediate-level proficiency in Chinese, it would appear that not every learner can aspire to truly advanced levels of proficiency (above S-3/R-3), at least not without spending an inordinately long time in training.

Based on classroom performance, the training outcomes of learners at the basic and intermediate levels can be predicted with a fairly high degree of accuracy; however, it is much harder to predict the outcomes of students at the higher levels. In my experience, of those students who have achieved S-3/R-3, a substantial number will be unable to achieve S-4/R-4 even after one full year of additional intensive training. Moreover, depending on a learner's personality and other factors, it may be easier to attain Level 4 in one or the other skill. For example, an introverted but hard-working student with a good visual memory may find it easier to attain R-4, while an extraverted student who is articulate in English but has problems remembering characters may find it easier to attain S-4. For these and other reasons, experimental programs for diplomats in Chinese and other languages designed to bring learners to S-4/R-4 have been termed “Beyond Three” rather than “4/4”, which could easily create unrealistic expectations.

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Chapter 15
Mandarin for Wine Tasting: Terminology and a Pedagogical Application

Chiara Romagnoli

Song of Liangzhou
Good grape wine glistens in
a cup that glows in the night.
Before we can drink
the pi-pa summons us to mount.
Don't laugh, my friend, should I
lie drunk on the battleground.
Since ancient times, how many soldiers
have ever returned to town?

Wang Han (687–726)*.

Abstract China is fast becoming the world's largest importer of wine; moreover, in 2016 its vineyard surface area was second only to that of Spain. Although still facing challenges in high-quality winemaking, Chinese consumer habits have changed, and many are now aware of the specific varieties and features of wine. This chapter provides an overview of recent trends in production and consumption, before focusing on Chinese terminology with cross-reference to Italian Sommelier Association classifications regarding the all-important chromatic and olfactory aspects of wine tasting. The present scenario also offers an occupational opportunity for learners of Chinese, and the final part of the chapter focuses on didactic applications with suggested classroom activities for language learning through wine tasting.

*This poem appears in the famous collection of Tang dynasty verse, *Tang shi sanbai shou*. The English version is by Chang (2007: 382).

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15.1 Introduction

The Chinese word for wine, *pútáojiǔ* 葡萄酒, is comprised of two morphemes: The former means *grape*, the latter *alcohol*. *Pútáo* is an example of a loanword that entered the Chinese lexicon very early on, and which, despite its disyllabic structure, is not likely be recognized as a foreign word by the ordinary speaker. Not only does the word for grape have a long history in China but, according to McGovern et al. (2005), the production of a fermented beverage made with grapes also dates back thousands of years, well before wine was produced in the Middle East. However, despite the fact that wine has almost never been absent from China, its function, production and, above all, consumption have changed considerably over time. Chinese wine is now viewed favorably by both domestic and foreign wine producers, who are striving to satisfy the drinking preferences of millions of Chinese consumers. For this reason, a review of the vocabulary needed to talk about wine in Chinese is more important—and more necessary—than ever. Indeed, it is hoped that this presentation of specific terminology will be of benefit to those interested in the fields of both enology and sinology.

The chapter begins with an overview of Chinese viticulture (Sect. 15.1.1), the wine market and wine classification (Sects. 15.1.2 and 15.1.3) followed by a discussion of wine consumption in China (Sect. 15.1.4). The second part focuses on the profession of the wine taster (Sect. 15.2) and specifically on the terminology relating to wine tasting and the sensory analysis of wines (Sects. 15.2.1–15.2.1.3). The third and final section provides suggestions for a pedagogical application with various activities that might be adopted in the classroom in order to learn Chinese through wine tasting.

15.1.1 Viticulture in China: A Historical and Geographical Perspective

This section presents various data regarding viticulture and the wine market in China. In illustrating these topics, the Chinese renderings of the key words are provided in order to introduce the basic vocabulary relating to wine.[1]

We know that viticulture (*pútáo zāipéi* 葡萄栽培) has been practiced in China's western regions, corresponding to today's Xinjiang province, for almost 3000 years, and that the introduction of *vitis vinifera* in China can be dated back to the fourth century BC. Viticulture in the inner regions developed later, perhaps following the explorations made by the imperial envoy Zhang Qian (200–114 BC); then, however, it was not until the cosmopolitan Tang dynasty (seventh–tenth centuries), when the geographical barriers were temporarily overcome, that

[1]Pinyin transcription and characters will be used the first time each term occurs.

winemaking techniques (*niàngjiǔ jìshù* 酿酒技术) developed fully (Kupfer 2010). From the Eastern Han to the Tang Dynasty, wine was exclusively a luxury for high officials and the nobility.

The consumption of wine blossomed during the Yuan dynasty (thirteenth–fourteenth centuries), when vineyards (*pútáoyuán* 葡萄园) were planted and a system of classification was proposed. According to Hu Sihui, a royal physician at the Mongol court, the best wines were those 'imported' from Xinjiang, followed by those produced by ethnic minorities in the North-West and, lastly, those produced in Shanxi (Kupfer 2010: 172). The Ming and Qing dynasties (fourteenth–seventeenth centuries and seventeenth–twentieth centuries, respectively) marked a downturn in winemaking compared to earlier eras, though this might also be linked to the widespread consumption of a different type of alcohol, *báijiǔ* 白酒, made from sorghum and with a higher alcohol content. As a result, no significant advances were made in viticulture and winemaking techniques during this period.

In the wake of the dramatic impact of Western powers on China, the foundation of the country's first winery (*jiǔzhuāng* 酒庄 or *niàngjiǔchǎng* 酿酒厂) by the overseas diplomat Zhang Bishi in 1892 marked the beginning of modern Chinese winemaking. The Changyu Pioneer Wine Co. was established in Yantai, Shandong province, one of the key provinces for wine production in China, and its business license was personally signed by one of the most influential politicians of the late Qing period, Li Hongzhang. Zhang Bishi brought vines (*pútáoténg* 葡萄藤) from the USA and Europe, but he encountered several problems trying to get the plants to grow in Chinese soil. He also imported over one hundred European grape varieties (*pǐnzhǒng* 品种) and his winery opened officially for business in 1914. Just one year later, Changyu's wines picked up four gold medals at the Panama–Pacific International Exposition in San Francisco: This was the first time that a Chinese product had ever won such a prestigious international award.

The success of the company was underpinned by the government through favorable tax schemes and was bolstered by the area's geographical position as well as the input of the European enologists (*niàngjiǔ xuéjiā* 酿酒学家 or *niàngjiǔshī* 酿酒师) employed by Zhang. At that time, Changyu was the only winery managed by someone who was actually Chinese, as other wineries had been established and were run by foreigners, particularly from Japan and Germany. While the turbulent years before the foundation of the People's Republic in 1949 hindered the development of domestic winemaking, support returned in the 1950s and gained momentum after the reforms of the late 1970s.

In 1980, a Sino-French joint venture between Tianjin City Grape Garden and Remy Martin, called the Dynasty Winery, was founded in Tianjin, and soon after, in 1983, the Great Wall, a subsidiary of the state-owned COFCO Group, was also set up. Together, Changyu, Dynasty and Great Wall dominate China's domestic wine market and are among China's ten most influential wine producers, a distinction shared by Tonghua, Dragon Seal, Suntime, Harvest, Zixuan, Shangri-La and Great Dragon (Zheng and Wang 2017).

China's most productive wineries are located in three provinces, that is, Shandong, Hebei and Tianjin, which account for 70% of the total wine production

Table 15.1 Vineyard surface area in various wine-producing countries[a]

	2013	2014	2015	2016	2016/2015 variation
Spain	973	974	974	975	+0.8
China	757	796	830	847	+16.8
France	793	789	785	785	+0.1
Italy	705	690	682	690	+8.2
Turkey	504	502	497	480	−17.0
USA	449	448	443	443	0.0
Argentina	224	226	225	224	−1.0
Chile	208	213	214	214	0.0
Portugal	227	221	204	195	−9.0
Romania	192	192	191	191	0.0

[a]Figures given in *kha*, i.e., thousands of hectares. Here, as in Tables 15.3 and 15.4, European countries are in bold

in China (Zheng and Wang 2017). There are also important wineries in Xinjiang, Gansu, Yunnan, Jilin and Beijing. One indication of China's growing interest in winemaking is the increase in the overall vineyard surface area over the last few years. The data in Table 15.1, which combines figures given in two tables from a 2017 report issued by the OIV (The International Organization of Vine and Wine 2017), clearly show how the vineyard surface area in China has increased compared to the zero growth, and even reduction, in traditional wine-producing countries elsewhere. As of 2016, China's vineyard surface area is second only to that of Spain.

15.1.2 The Wine Market

The Chinese wine market is dominated by domestic producers, a fact that distinguishes it from other Asian nations. According to a recent study, just 35% of China's 2016 best-selling wines came from international producers, with the remainder being produced in China. As such, the first obvious difference in the market is between imported and domestic wines, that is, between *jìnkǒu pútáojiǔ* 进口葡萄酒 and *guóchǎn pútáojiǔ* 国产葡萄酒 (Mileham 2017). In the same year, China imported 638 million liters of wine, worth about US$2.364 billion, and 'by 2020 China is projected to surpass the UK to become the world's second most valuable wine market after the USA' (Wang 2017) (Table 15.2).

Conscious of both market value and international competition, Chinese wine producers have not been idle, and this is confirmed by data regarding wine production. As shown in Table 15.3, 11 million hectoliters make China one of the world's top wine producers, ranking sixth according to OIV data.

Table 15.2 Major wine importers

Importer	Volume (mln liters)
ASC Fine wines	6
Changyu	5.4
Yangcheng Food	4.6
Wajiu.com	4.3
Yangzhou Perfect	3.4
Panati Wines	3
Tenwow	2.8
Summergate	2.6
Jinyu	2.5
Torres China	2.4

Table 15.3 Wine production in various wine-producing countries

	2012	2013	2014	2015	2016	2016/2015 variation (%)
Italy	45.6	54.0	44.2	50.0	50.9	+2
France	41.5	42.1	46.5	47.0	43.5	−7
Spain	31.1	45.3	39.5	37.7	39.3	+4
USA	21.7	24.4	23.1	21.7	23.9	+10
Australia	12.3	12.3	11.9	11.9	13.0	+9
China	13.5	11.8	11.6	11.5	11.4	−1
South Africa	10.6	11.0	11.5	11.2	10.5	−6
Chile	12.6	12.8	10.0	12.9	10.1	−21
Argentina	11.8	15.0	15.2	13.4	9.4	−29
Germany	9.0	8.4	9.2	8.9	9.0	+1

15.1.3 Wine Classification and Label Information

Given the close relation between wine features and production areas, various classification systems have been proposed to guarantee the origin of the wine. The French system was among the first to be established and includes three wine types: *Appellation d'Origine Contrôlée* (*yuánchǎndì mìngmíng pútáojiǔ* 原产地命名葡萄酒); *Indication Geographique Protégée* (*dìchū bǎohù pútáojiǔ* 地区保护葡萄酒) and *Vin de Pays* (*dìchū pútáojiǔ* 地区葡萄酒). Additionally, there are *Vins sans indication géographique* (*wúchǎnchū xiànzhì jíbié* 无产区限制级别) and *Vin de France* (*Fǎguó rìcháng cānjiǔ* 法国日常餐酒). Top quality wines, with the acronym AOC, include first-rate products from specific areas with strict rules regarding the variety and quality of the grapes as well as the growing conditions. Similarly, IGP wines are produced in specific areas, but with more lenient regulations; the third category, abbreviated as VSIG or VDF, corresponds to the most basic tier and is the least regulated class of French wines.

Established more recently than the French classification system, the Italian system comprises four levels: *Denominazione di origine controllata e garantita*, i.e., DOCG wines (*bǎozhèng fǎdìng chǎnchū pútáojiǔ* 保证法定产区葡萄酒), *Denominazione di origine controllata*, i.e., DOC (*fǎdìng chǎnchū pútáojiǔ* 法定产区葡萄酒), *Indicazione geografica tipica*, i.e., IGT (*dìchū pútáojiǔ* 地区葡萄酒) and *Vino da tavola*, i.e., VDT (*rìcháng cānjiǔ* 日常餐酒). As in France, producers are subject to the strictest regulations, and qualifying for the high-status DOCG means that wines should be synonymous with the highest quality. These include internationally famous products such as Barolo and Brunello di Montalcino. A very useful source of information in this respect is the dictionary recently published by Gambero Rosso which reports the Italian names of wines and grape varieties translated into Chinese (*Dizionario dei vini e dei vitigni d'Italia*, 2019).

The Chinese government has yet to issue a similar classification system, although the introduction of the 'Estate winery' moniker (*pútáojiǔ jiǔzhuāngjiǔ* 葡萄酒酒庄酒) by the China Alcoholic Drinks Association (CADA) in 2014 was aimed at protecting wines 'made in Chinese wineries under the Trademark Law of the People's Republic of China' (Li 2014).

Some of the aforementioned information is reported on the label (*jiǔbiāo* 酒标), although regulations regarding label content may differ according to the country. In general, the buyer is usually given the name of the producer or winery (*shēngchǎnshāng* 生产商or *jiǔzhuāng míngchéng*酒庄名称), the producer's location (*shēngchǎn dìzhǐ* 生产地址), the standard of quality (*fǎdìng chǎnchū míngchéng* 法定产区名称 or *děngjí* 等级), the wine type (*pútáo pǐngzhǒng* 葡萄品种), the alcohol content by volume (*jiǔjīngdù* 酒精度), the net contents (*róngliàng* 容量) and the vintage (*niánfèn* 年份). Additional information may include service temperature (*yǐnyòng wēndù* 饮用温度), the bottler's name (*zhuāng píng diǎn* 装瓶地点), the importer's name (*jìnkǒushāng* 进口商) and a note regarding the addition of sulfites (*hán yàliúsuānyán* 含亚硫酸盐).

15.1.4 Wine Consumption in China

Even more reassuring for wine entrepreneurs are the data regarding wine consumption, considering that wine-drinking habits in China are very different from what they are in Europe. In France, Italy and Spain, for example, wine is consumed on a regular basis at mealtime, but in these countries, with the exception of Italy, people are drinking less than in the past. On the contrary, the trend in China has been the reverse for about the last fifteen years, making it one of the top wine-consuming countries in the world, according to the OIV. While wine consumption per person remains relatively low—about 1.3 L per year versus a world average of 3.5—the increase has been steady and, according to the data reported in Masson et al. (2017) and confirmed in Table 15.4, 'China is now the fifth biggest wine-consuming country and the first for red wine' (626).

Table 15.4 Major wine-consuming countries (in mhl)

	2012	2013	2014	2015	2016	2016/2015 variation (%)
United States	30.0	30.2	30.4	31.0	31.8	+2.5
France	28.0	27.8	27.5	27.2	27.0	**−0.7**
Italy	21.6	20.8	19.5	21.4	22.5	**+5.3**
Germany	20.3	20.4	20.2	20.6	20.2	**−1.8**
China	17.1	16.5	15.5	16.2	17.3	+6.9
UK	12.8	12.7	12.6	12.7	12.9	+1.4
Spain	9.9	9.8	9.9	10.0	9.9	**−0.4**
Argentina	10.1	10.4	9.9	10.3	9.4	−8.3
Russia	11.3	10.4	9.6	10.3	9.4	+0.3
Australia	5.4	5.4	5.4	5.3	5.4	+2.4

Apart from providing a quantitative analysis of the Chinese wine market and consumption, a recent line of research has focused on those who drink wine in China and their criteria for choosing it. In one such study, Liu and Murphy (2007) claim that the typical wine consumer in China is a businessman, who is educated and well-off, but without any real knowledge of wine. The consumption of wine, usually red, is linked to social and special occasions as well as to the notion of *miànzi* 面子, or ‘face,’ a crucial aspect of Chinese culture which must be taken into account for successful interpersonal relations. Interestingly, according to Yang and Paladino (2015), the purchase of wine has also become linked to another crucial aspect of social life in Chinese culture, that is, gift giving, and their study also discusses the criteria that are taken into consideration when selecting wine as a present.

Other studies, quoted in Masson et al. (2017), have confirmed that wine consumption in China is closely linked to gender (male), income (high) and traveling abroad. The Chinese not only prefer red wine because the color represents good fortune in their culture and thus has positive associations, but also for its perceived health benefits. It should be noted that the association of such benefits with red wine is also frequent among European consumers: A recent article by Vecchio et al. (2017) confirms this positive view of the health benefits of drinking red wine.

Other aspects that influence the wine choices of Chinese consumers are its country of origin, the brand and the price. Interestingly enough, the data reported in Masson et al. (2017) shows that the pattern of wine consumption in China is changing and gradually becoming more similar to western countries with their older traditions of wine drinking: Chinese people now drink wine for pleasure, something reflected in consumers being described as *wine lovers* and *relaxed amateurs*. The study also reports that regular consumers are typically people in their thirties and notes that those who consume imported wine have a very high income and level of education, but are not necessarily male. Another interesting finding in this study, which partially refutes the conclusions of previous works, is linked to the reasons why Chinese choose to drink wine: for health, to create a friendly atmosphere, to relax, to enjoy the taste, and to celebrate special occasions. According to Masson et al.'s sample, the selection criteria also signal a greater awareness of the features of wine: Geographic origin, grape variety and brand are considered rather than just the price. The consumption of very expensive wine on formal occasions confirms that maintaining *miànzi* and displaying personal status still plays a crucial role in the purchase of wine.

15.2 The Wine Taster and the Sommelier: Roles, Tasks and Tools

As any expert will confirm, wine tasting is very different from drinking wine with friends, since it requires concentration, a knowledge of the features of wine, and a mastery of the terminology used to describe them appropriately. A knowledge of winemaking and wine-tasting techniques are common to two similar, yet different, roles: the sommelier (*dàijiǔshī* 待酒师) and the wine taster (*pútáojiǔ pǐnchángyuán* 葡萄酒品尝员 or *pǐnjiǔyuán*品酒员 or *pǐnjiǔshī* 品酒师). It should also be noted that *sommelier* can also be translated as *pǐnjiǔshī*, which implies a more positive connotation for the layperson in China as it does not convey the idea of serving (*dài*) (Xu 2013). The term *wine taster* may be considered more generic than *sommelier* and is not necessarily linked to a professional figure. In distinguishing between the two, we might say that a wine taster is a wine expert whose task is to provide technical evaluation of a given wine and to eventually identify both its flaws and its correspondence to a particular product, whereas a sommelier tastes, presents, serves and pairs wine with food. Indeed, the former plays a crucial role in a winery, the latter in a restaurant or wine outlet. The language associated with the two roles may also differ: While the wine taster is required to express a technical evaluation, the sommelier may well describe wine by resorting to a richer vocabulary and even use rhetorical and figurative language.

A sommelier uses specific tools in his work: The most important is the corkscrew (*kāipíngqì* 开瓶器), followed by the decanter (*bìjiǔqì* 滗酒器or *xǐngjiǔqì* 醒酒器), which is usually used to aerate the wine and separate it from any sediment. In addition, there is also the wine thermometer (*pútáojiǔ wēndùjì* 葡萄酒温度计) and the ice bucket (*bīngtǒng* 冰筒) if white and sparkling wines are to be served.[2] The thermometer is used so that wines can be stored in optimal condition, something that may be part of the sommelier's responsibilities in a winery, wine shop or restaurant. Independent of their respective roles and work contexts, both the sommelier and wine taster need to master wine-tasting terminology. This is described in the following sections.

[2]In the past, a *tastevin* (*pǐnjiǔdié* 品酒碟 or *shìjiǔdié* 试酒碟) was used to contain the wine for tasting, but it has since been replaced by glass. See AIS (2012a).

15.2.1 Wine-Tasting and Sensory Analysis: Steps and Terms

Wine tasters receive sensorial stimuli (*cìjī* 刺激) from the wine. These sensations (*gǎnjué* 感觉) become conscious perceptions (*zhījué* 知觉) and are associated with specific qualities that are labeled according to a conventionally approved vocabulary. Wine tasters usually work in a tasting room (*pǐnchángjiān* 品尝间 or *pǐnchángshì* 品尝室) where the light and temperature are controlled in order to provide the best conditions for tasting wine.

The sensory analysis (*gǎnguān fēnxī* 感官分析) is divided into three phases: visual examination (*shìjué fēnxī* 视觉分析), olfactory analysis (*xiùjué fēnxī* 嗅觉分析) and olfactory-taste analysis (*wèijué yú xiùjué fēnxī* 味觉与嗅觉分析).[3] The actions required to carry out sensory analysis include the so-called six Ss: sight (*kàn* 看), swirl (*yáo* 摇), sniff (*wén* 闻), sip (*chuò* 啜), savor (*cháng* 尝) and spit (*tǔ* 吐). Wine tasters analyze the content of a glass of wine (*jiǔbēi* 酒杯) and record their evaluation and notes on a wine-tasting card (*pǐnchángbiǎo* 品尝表 or *pǐnjiànbiǎo* 品鉴表).[4]

15.2.1.1 Visual Examination

Through observing the appearance of the wine (*wàiguān* 外观), wine tasters are able to describe its limpidity (*chéngqīngdù* 澄清度 or *qīngchèdù* 清澈度), color (*yánsè* 颜色) and consistency (*choúdù* 稠度 or 浓稠度 *nóngchoúdù*) or effervescence (*qǐpàoxìng* 起泡性 or *qìpào* 气泡): Consistency pertains to still wine (*jìngzhǐ pútáojiǔ* 静止葡萄酒) and effervescence to sparkling wine (*qìpào pútáojiǔ* 气泡葡萄酒). Every glass of wine has these features to varying degrees. Pouring the wine (*dǎojiǔ* 倒酒) provides information about its color, consistency and the possible presence of carbonic anhydride; by swirling the glass (*yáohuàng jiǔbēi* 摇晃酒杯), the legs (*guàbēi* 挂杯) left behind by the liquid can be noted, and the color can better observed by tilting the glass to a 45° angle (*qīngxié sìshíwǔ dù* 倾斜45度).

Limpidity corresponds to the absence of suspended particles (*chéndiàn* 沉淀). According to the degree of limpidity, a wine can be defined as veiled (*hùnzhuó* 混浊), quite limpid (*jiào tòumíng* 较透明), limpid (*tòumíng* 透明), crystal clear (*jīngyíng* 晶莹) or brilliant (*guāngliàng* 光亮). A veiled wine is unacceptable, whereas a limited presence of particles for aged wines is seen as acceptable, and it can therefore be described as 'quite limpid.' Most red wines are limpid, without sediment, and most white and rosé wines are crystal clear. The term 'brilliant' is usually used only for sparkling wines.

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[3]The main source of information here is the Associazione Italiana Sommelier (AIS) publication, *La Degustazione* (2012b edition). I also checked Li (2006).

[4]The wine card produced by the AIS is an example of this.

Describing the color of a wine is the scope of the visual examination, since it allows for the prediction of various features which can be verified later on during the olfactory and olfactory-taste analysis. According to their color, wines are classified as white (*bái pútáojiŭ* 白葡萄酒), rosé (*táohóng pútáojiŭ* 桃红葡萄酒 or *fěnhóng pútáojiŭ* 粉红葡萄酒) and red (*hóng pútáojiŭ* 红葡萄). The color of the wine is directly linked to the phenolic compounds largely present in grape skins (*pútáopí* 葡萄皮): Red wines are obtained by leaving grape skins in contact with must (*wèifā jiào de pútáozhì* 未发酵的葡萄汁) throughout the alcoholic fermentation process; rosé wines are produced by a partial maceration (*jìnzì* 浸渍), and the vinification of white wines is the result of separating the grape skins from the must.

The terms used to describe the color of white wines include the following: greenish yellow (*lǜ huángsè* 绿黄色), straw yellow (*dào huángsé* 稻黄色), golden yellow (*jīn huángsé* 金黄色) and amber (*hŭpò huángsé* 琥珀黄色). The first term is generally used for very young fresh wines, whose softness yields to acidity. Straw yellow wines are still rather young wines, but they balance softness and acidity. By contrast, golden yellow wines are usually mature white wines, in which acidity yields to softness; they are obtained from ripe or slightly over-ripened grapes, with maceration possibly occurring prior to vinification in wooden barrels (*mùtŏng* 木桶). Amber wines are usually *passito* or liqueur wines in which softness distinctly prevails over acidity.

The color of rosé wines can be described as soft rosé (*qiăn fěnsè* 浅粉色), cherry red (*yīngtáo hóng* 樱桃红) or dark rosé (*shēn fěnsè* 深粉色). Soft rosé wines are a peach blossom color and are generally obtained from red grapes whose skins have been in contact with must for a short time. More intense than soft rosé, the nuance of cherry red usually evidences a longer maceration, whereas the color of dark rosé is very similar to red wine.

Red wines are characterized by the following nuances: purple red (*z-ĭhóng* 紫红), ruby red (*hóngbăoshí* 红宝石), garnet (*shēnhóngsè* 深红色) and orange red (*chénghóngsè* 橙红色). Young red wines, whose softness yields to roughness, are usually an intense red with clear purplish hues. Ruby red is the shade associated with rather young wines with a fairly balanced ratio between softness and roughness and whose color resembles that of the precious stone. Garnet wines are mature reds: Here softness prevails over roughness and the color may be of different shades, from an intense blood red to a pomegranate red, when the color is more transparent. Orange red is usually the color of wines that have undergone a long period of aging and with a softness/roughness ratio tending toward softness.

The visual examination of still wines also includes their consistency, which depends on the presence of ethyl alcohol. This can be perceived through the ‘tears’ and ‘legs’ left behind by the wine on the sides of the glass. The terms used to describe consistency are flowing (*liúchàng* 流畅), scarcely consistent (*lüè nóngchoú* 略浓稠), quite consistent (*jiào nóngchoú* 较浓稠), consistent (*nóngchoú* 浓稠) and oily (*yóunì* 油腻). A flowing wine is considered unacceptable, while a scarcely consistent wine has a weak structure evidenced by quick tears and wide legs. A quite consistent wine flows into the glass with moderate fluidity, forming fairly quick tears and medium-sized legs. The term *consistent* describes a wine

Table 15.5 Terms used for visual examination

澄清度/ 清澈度	混浊, 较透明, 透明, 晶莹, 光亮
颜色	白葡萄酒: 绿黄色, 稻黄色, 金黄色,琥珀黄色
	桃红葡萄酒/粉红葡萄酒: 浅粉色,樱桃红, 深粉色
	红葡萄酒: 紫红, 红宝石,深红色, 橙红色
稠度/浓稠度 (静止葡萄酒)	流畅, 略浓稠, 较浓稠, 浓稠,油腻
气泡/起泡性 (气泡葡萄酒)	细致度(颗粒大小粗大, 中等,细致), 数量(少, 多, 很多), 持久性(时间短, 中等, 时间长)

which flows slowly to the bottom of the glass with slow tears and thick legs: In this case, the structure is rich and the softness/roughness ratio favors softness. Oily wines flow heavily to the bottom of the glass, almost like syrup, and are relatively rare: only some dessert wines, *passito* wines or sweet liqueur wines are defined as oily.

As noted above, sparkling wine is described in terms of effervescence rather than consistency: The wine taster observes the bubbles and describes their size (*xìzhì* 细致度), number (*shùliàng* 数量) and persistence (*chíjiǔxìng* 持久性). In terms of size, bubbles may be large, quite fine or fine; in terms of number, they can be very few, quite numerous or numerous; in terms of persistence, fading, quite persistent or persistent. Table 15.5 shows the terminology used for visual examination in Mandarin.

15.2.1.2 Olfactory Analysis

Olfactory analysis is probably the most difficult step in wine tasting, as recognition of the nuances constituting the aroma of a wine is based on an individual's experiences: How can we find nuances of hawthorn, elder, box tree or sweet violet in wine if we have never smelled them? Other problematic issues include 'the scarce habit one generally has in concentrating and realizing the aromas and odors he or she is smelling' and 'the difficulty of finding aromas in a group of many smells, sometimes pretty vast and complex' (http://www.diwinetaste.com/dwt/en2003013.php).

Analyzing the smell of wine regards intensity (*nóngyùdù* 浓郁度), complexity (*fùzádù* 复杂度) and quality (*zhìliàng* 质量) as well as describing its aromas (*xiāngqì* 香气). A wine taster starts the evaluation by holding the glass motionless: An initial smell provides a first impression of the intensity and maturity of the wine with a view to confirming the results of the visual analysis. The wine should then be swirled in the glass to encourage the volatilization of the aromas before bringing the glass close to the nose for a few seconds for a series of inhalations in order to recognize the aromas and evaluate the wine's complexity and quality. Aroma types vary according to diverse factors, such as grape variety, vinification process, barrel maturation and aging in a bottle. The universally accepted classification includes three basic categories: primary aromas that generally develop with specific grapes and are directly linked to the vine variety (*yīlèi xiāngqì huò pǐnzhǒng xiāngqì* 一类香气或品种香气); secondary aromas that develop during alcoholic fermentation (*èrlèi xiāngqì huò fājiào xiāngqì* 二类香气或发酵香气) and tertiary aromas that develop as a consequence of the wine aging in a wooden barrel or the bottle (*sānlèi xiāngqì huò chénniàng xiāngqì* 三类香气或陈酿香气).

Within the above three categories, there are several sub-types: floral aromas (*huāxiāng* 花香), fruity aromas (*guǒxiāng* 果香), vegetal aromas (*zhíwùxiāng* 植物香), aromatic herb aromas (*fāngxiāng cǎowèi* 芳香草味), mineral aromas (*kuàngwùwèi* 矿物味), spicy aromas (*xiāngliào qìwèi* 香料气味), toasted aromas (*shāojiāo qìwèi* 烧焦气味or *xūn xiāngwèi*熏香味), animal aromas (*dòngwù qìwèi* 动物气味) and ethereal aromas (*mí xiāngwèi* 醚香味).

Floral aromas are mostly found in young red wines, while fruity aromas are even more common and diverse: Prosecco may have a pear-like aroma, while Gewürztraminer might evoke lychee, Chardonnay pineapple and so on. On the other hand, the smell of vegetal aromas is pungent and penetrating and can be associated with tomato leaves, asparagus, green pepper, unripe fruit or dried leaves. Aromatic herbs are mostly found in young white wines, such as the sage smell in Moscato wine, or the smell of rosemary and basil in Riesling. As in the case of vegetal aromas, mineral aromas are uniquely penetrating and are occasionally associated with unpleasant smells, like gasoline, gunpowder and graphite. Aged wines often have spicy aromas and are sweet like vanilla or cinnamon, or pungent like cloves or black pepper. Toasted and animal aromas are also linked to mature wines: The former might recall chocolate, cocoa, toasted almonds, coffee and even tar; the latter are often associated with smells that might be regarded as unpleasant, such as leather, pelt, wet wool or feathers and game. The last subgroup, the ethereal, evidences the full spectrum of wine aromas and can be associated with the smell of wax, enamel, medicine, iodine or plastic.

After this brief description of wine aromas, we can now list the terms that are used in evaluating the various features linked to the olfactory analysis. The first, as mentioned above, is intensity, that is, the sum of the notes perceived. The scale to describe intensity ranges across the following grades: lacking intensity (*chà*差), scarcely intense (*wēinóng* 微浓), quite intense (*jiào nóng* 较浓), intense (*nóng* 浓) and very intense (*hěn nóng* 很浓). The first term is used for wines whose scent can hardly be perceived and is therefore considered negative. The scent of a scarcely intense wine can be only perceived slightly, while quite intense aromas are strongly perceived. The term *intense* is used for wines where the odor is very distinctive and nuances are evident. Finally, very intense wines are provided with a wide and rich range of nuances which are clearly perceived.

The second parameter to be taken into account is olfactory complexity, namely the variety of sensations perceived when inhalating the wine. The terms used here are lacking complexity (*quēfá fùzá gǎn* 缺乏复杂感), scarcely complex (*jiào quēfá fùzá gǎn* 较缺乏复杂感), quite complex (*jiàowéi fùzá* 较为复杂), complex (*fùzá* 复杂) and ample (*xiāngwèi kuānguǎng* 香味宽广). As with intensity, the wine is deemed unacceptable if complexity is lacking, whereas scarcely complex wines are often simple and young with a bouquet that changes after repeated inhalations. Young wines can be described as *quite complex* if they possess a medium range of nuances, but may even be defined as *complex* if they are produced from highly scented vines. Both aged red and white wines in a similar condition might also fall into this category. An ample wine possesses various olfactory nuances that become recognizable after repeated inhalations.

The third parameter is the quality of the wine, which implies intensity and complexity, plus features such as typicity and elegance. These can be described using the following terms: coarse (*cūcāo* 粗糙), scarcely fine (*jiào cūcāo* 较粗糙), quite fine (*yōuyǎ* 优雅), fine (*shífēn yōuyǎ* 十分优雅) and excellent (*zhuóyuè* 卓越). Coarse quality wines are those with a poor bouquet, and they are always deemed unacceptable; likewise, scarcely fine wines are characterized by a second-rate bouquet. Quite fine wines have a sufficiently pleasant scent with medium intensity and various nuances, while fine wines possess an elegant bouquet with a remarkable range of nuances and a good typicity. Top-quality wines boast a distinct bouquet, an ample variety of nuances, typicity, elegance and personality. The final stage of the olfactory analysis is the description of the wine's bouquet. The terms used are again those largely mentioned above: aromatic (*fāngxiāng* 芳香), vinous (*jiǔxiāng* 酒香), floral (*huāxiāng* 花香), fruity (*guǒxiāng* 果香), grassy (*shùnhuá* 顺滑), mineral (*kuàngwù* 矿物), frank (*míngkuài* 明快), fragrant (*qīngxiāng* 清香), spicy (*xiāngliào* 香料) and ethereal (*míxiāng* 醚香) (Table 15.6).

15.2.1.3 Olfactory-Taste Analysis

Having observed and smelled our glass of wine, we can finally taste it. This last step implies the consideration of several factors, such as the presence of sugars (*táng* 糖), alcohol (*jiǔjīng* 酒精), tannins (*dānníng* 丹宁), acids (*suān* 酸) and mineral substances (*kuàngwù zhíwù* 矿物物质). This is to define the body or structure of the wine (*jiǔtǐ* 酒体 or *jiégòu* 结构) and evaluate the taste-olfactory balance (*wèijué*

Table 15.6 Terms used for olfactory examination

<table>
<tr><td>浓郁度</td><td colspan="2">差, 微浓, 较浓, 浓, 很浓</td></tr>
<tr><td>复杂度</td><td colspan="2">缺乏复杂感, 较缺乏复杂感, 较为复杂, 复杂</td></tr>
<tr><td>质量</td><td colspan="2">粗糙, 较粗糙, 优雅, 十分优雅, 卓越</td></tr>
<tr><td rowspan="3">香气</td><td>一类香气或品种香气</td><td rowspan="3">芳香, 酒香,花香,果香, 顺滑, 矿物, 明快, 清香,香料, 醚香</td></tr>
<tr><td>二类香气或发酵香气</td></tr>
<tr><td>三类香气或陈酿香气</td></tr>
</table>

xiùjué pínghéng 味觉嗅觉平衡), intensity (*nóngdù* 浓度), persistence (*chíxùxìng* 持续性) and quality (*zhìliàng* 质量). Final considerations may include the maturity (*chéngshúdù* 成熟度) and harmony (*héxié* 和谐) of the wine.

The level of sweetness is produced by sugars in a wine, meaning that wines can be dry (*gān* 干), medium dry (*bàngān* 半干), medium sweet (*bàntián* 半甜), sweet (*tián* 甜) or excessively sweet (*guòtián* 过甜).

The pseudo-warm sensation given by the wine is directly linked to the degree of alcohol content, and wines can thus be labeled as light (*dī jiǔjīnggǎn* 低酒精感 or *búrè* 不热), lightly warm (*wēi jiǔjīnggǎn*微酒精感 or *wēirè* 微热), medium warm (*zhōngdù jiǔjīnggǎn* 中度酒精感 or *yìbān* 一般), warm (*gāo jiǔjīnggǎn* 高酒精感 or *rè* 热) or alcoholic (*hěn gāo jiǔjīnggǎn* 很高酒精感 or *hěn rè* 很热).

Softness is largely caused by the presence of poly-alcohols; however, both sugars and alcohol affect this feature of the wine, which can thus be defined as sharp (*bù róuruǎn* 不柔软), scarcely soft (*wēiruǎn* 微软), quite soft (*yìbān* 一般), soft (*róuruǎn* 柔软) or velvety (*huárùn* 滑润).

Acidity (*suāndù* 酸度) lends freshness to wines; according to the acidity perceived, a wine can be characterized as flat (*píngdàn* 平淡), scarcely fresh (*wēisuān* 微酸), quite fresh (*yìbān* 一般), fresh (*qīngxīn* 清新) or acidulous (*hěn suān* 很酸).

The presence of tannins in wine gives a sensation of dryness and roughness in the mouth, and the intensity of this sensation means that wines can be defined as flabby (*bùsè* 不涩), scarcely tannic (*wēisè* 微涩), quite tannic (*yìbān* 一般), tannic (*sè* 涩) or astringent (*hěn sè* 很涩).

Although often surpassed by its acidity, the perception of saltiness in a wine is caused by the presence of salts found in its organic and inorganic acids. In such cases, wines can be defined as tasteless (*bùxián* 不咸), scarcely tasty (*wēixián* 微咸), quite tasty (*yìbān* 一般), tasty (*xián* 咸) or salty (*hěn xián* 很咸).

Wine structure (*jiégòu* 结构) or body (*jiǔtǐ* 酒体) depends on the presence of solid particles, and these features give us thin (*hěn xūruò* 很虚弱), weak (*xūruò* 虚弱), full (*zhōngděng* 中等), vigorous (*jiēshi* 结实) or heavy (*hěn jiēshi* 很结实) wines. All these aspects contribute to the taste-olfactory balance of the wine, which can therefore be evaluated as unbalanced (*bù pínghéng*不平衡), quite balanced (*zhōngděng* 中等) or balanced (*pínghéng* 平衡).

The impact of these substances on the mouth mucous determines the taste-olfactory intensity, according to which we may have wines that are lacking (*wúwèi* 无味), scarcely intense (*quēfá nóngyù* 缺乏浓郁), quite intense (*jiào nóngyù* 较浓郁), intense (*nóngyù* 浓郁) or very intense (*shífēn nóngyù* 十分浓郁). Based on the sum of all the tactile and taste-olfactory sensations determining the wine's complexity and variety, also known as *intense aromatic persistence*, wines may be defined as short (*wúhuíwèi* 无回味 or *hěn duǎnzàn* 很短暂), scarcely persistent (*quēfá huíwèi* 缺乏回味 or *duǎnzàn* 短暂), quite persistent (*huíwèi jiàowèi chíjiǔ* 回味较为持久 or *yìbān* 一般), persistent (*huíwèi chíjiǔ* 回味持久 or *chíjiǔ* 持久) or very persistent (*huíwèi fēicháng chíjiǔ* 回味非常持久 or *hěn chíjiǔ* 很持久). The intensity and complexity of wine, as well as other features like neatness, distinctness, frankness and typicity, are considered when evaluating wines

Table 15.7 Terms for olfactory-taste examination

糖	干, 半干, 半甜, 甜, 过甜
酒精	低酒精感/ 不热, 微酒精感/ 微热, 中度酒精感/ 一般, 高酒精感/热, 很高酒精感/很热
柔软度	不柔软, 微软, 一般, 柔软, 滑润
酸度	平淡, 微酸,一般, 清新, 很酸
涩度 (丹宁)	不涩, 微涩, 一般, 涩, 很涩
咸度	不咸, 微咸, 一般, 咸, 很咸
结构/酒体	很虚弱, 虚弱, 中等, 结实, 很结实
平衡度	不平衡, 中等, 平衡
嗅味觉浓郁度	无味, 缺乏浓郁, 较浓郁, 浓郁, 十分浓郁
嗅味觉持久度	无回味/很短暂, 缺乏回味/短暂, 回味较为持久/ 一般, 回味持久/持久, 回味非常持久/很持久
质量	低劣, 普通, 较优雅, 优雅, 卓越
陈化度	未成熟, 新酒/年轻, 适合饮用, 成熟, 衰老/ 年老
和谐	不和谐, 较和谐, 和谐

as coarse (*dīliè* 低劣), scarcely fine (*pǔtōng* 普通), quite fine (*jiào yōuyǎ* 较优雅), fine (*yōuyǎ* 优雅) or excellent (*zhuóyuè* 卓越).

In addition to the aspects mentioned above, the wine taster also considers maturity and harmony. Maturity is linked to the age of the wine, it being immature (*wèichéngshú* 未成熟), young (*xīn jiǔ* 新酒 or *niánqīng* 年轻), ready (*shìhé yǐnyòng* 适合饮用), mature (*chéngshú* 成熟) or old (*shuāilǎo* 衰老or *niánlǎo* 年老). This feature should not, however, be confused with *aged* (*chénniàng* 陈酿), which refers to a process in which wines are kept in a barrel or bottle for an extended period of time. Finally, the harmony of the wine is evaluated after the three different tasting phases and is based on the consistency of these analyses as well as the qualitative level of the wine in question. In this case, the wine may be found to be disharmonious (*bù héxié* 不和谐), quite harmonious (*jiào héxié* 较和谐) or harmonious (*héxié* 和谐) (Table 15.7).

15.3 Wine Tasting in the Classroom: A Proposal

Wine production and consumption have been integral to different cultures for thousands of years. Before presenting the content and terminology relating to wine tasting, the language instructor might want to introduce learners to the habits that have developed in specific communities as well as the different language associated with wine consumption in specific social settings. Unfortunately, to my knowledge, no comparative research has been carried out in this field.

Pedagogical material relating to wine tasting is also lacking. Although several handbooks aimed at teaching Mandarin for tourism have been recently published, little has been done to help learners to describe and present wine. Proof of this is a recently published book focusing on Chinese for tourism in Italy (Bulfoni et al. 2017), which only provides a few words about wine types, despite the widespread consumption of wine in Italy.

As a subtype of language for specific purposes, Mandarin for wine tasting could be taught at different levels and according to different needs. However, since most of the vocabulary used to describe wine takes the form of adjectives, or terms not usually included in elementary and intermediate level courses, it would be preferable to introduce this terminology to learners at advanced levels. Potential students would thus be required to have completed at least two years of Chinese in order to enroll in a Mandarin class on wine tasting.

The design of language courses for specific purposes is usually preceded by a needs analysis to identify stakeholder requirements, set goals and forecast outcomes. In the present case, stakeholders would include language instructors, learners and potential customers.

A needs analysis questionnaire could gather information about the skills and linguistic competence required in the target situation, the learner's present level and the gap between the current and target situation. In particular, participants might be asked questions such as the following:

(1) What skills are required for wine tasting?
(2) What are the key words and phrases required for wine tasting in Chinese?
(3) What are the most challenging aspects of learning Chinese and/or wine tasting?
(4) What are the learning preferences in terms of activities, contexts and materials?
(5) What is the best approach for teaching wine tasting-related terminology?

Chinese for wine tasting would be a much newer type of course than more established courses such as business and tourism. What is more, any pedagogical proposal without a specific target learner in mind would be of little use: These might be a sommelier eager to work in the Chinese market or a student majoring in Chinese who is interested in wines but lacks a background in enology. The former would have to get acquainted with a new language and a completely different culture; the latter would need to know the processes and products relating to winemaking. Both need to master new terminology: Sommeliers might well have difficulties in associating new labels with notions they already know, while sinologists will have to expand their vocabulary to convey new notions and meanings. Independent of their background, if they intend to engage in wine tasting in China —and in Chinese—they would share common linguistic goals that could be achieved through various activities. General learning would revolve around the development of linguistic and communicative skills in Chinese, focusing on the professional role of the wine taster/sommelier. More specific objectives should include: (i) building and expanding vocabulary specific to wine and wine tasting; (ii) communicating in a wine tasting context; (iii) understanding wine and

Table 15.8 A pedagogical proposal for wine tasting

	Function	Activities	Skill
Wines and vine varieties	Describing the main features of specific wines and wine varieties	Class and group discussion	Speaking
	Expressing personal preferences	Brainstorming	
	Reporting people's wine-drinking preferences	Interviews and interaction with Chinese people	
Wine purchase	Helping to choose a wine	Field work in a winery or wine shop	
	Interacting with customers when serving and tasting wine	Role-play	
	Understanding customers' preferences and habits	Role-play	Listening
	Responding to customers' complaints	Role-play	
Wine selection	Organizing a supply order	Project proposal using PowerPoint presentation	Writing
	Editing a wine menu	Project proposal using PowerPoint presentation	
Wine evaluation	Filling in a wine evaluation card	Writing exercises	
	Reading a wine evaluation card	Reading and comparing cards from different countries	Reading
Wine regulation	Understanding wine labels	Collecting data from wineries on specific products	
	Understanding wine regulations	Finding information in official documents	

wine-tasting communication (Peng 2015). Each objective entails different functions and could be achieved through specific activities involving mainly oral, but also written, skills.

The functions listed in Table 15.8 are closely linked to the tasks performed by the sommelier in real life, and all presume a knowledge of winemaking and the various features of wine that relate to its variety and origin. Whereas the functions (in the second column) can be considered part of a sommelier's routine work, the activities listed in the third column are mere suggestions: These can be adapted according to the needs and interests of the class.

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Chapter 16
A Corpus-based Study of the Vocabulary of Macao Tourism Chinese

Shan Wang and Huiting Luo

Abstract Tourism Chinese in Macao is different from that in other regions. The existing research on tourism Chinese courses, teaching materials, and vocabulary has not considered the language situation in Macao and is thus not fully applicable to Macao. Macao Tourism has unique features in its language use, tourism resources, and intangible culture. Therefore, there should be specifically designed materials based on Macao tourism Chinese. This study builds a small-scale corpus of Macao tourism Chinese and systematically analyzes the characteristics of its vocabulary through comparing it with *A Syllabus of Vocabulary and Character Levels for Chinese Language Proficiency*, *The Tourism Chinese Vocabulary Handbook*, and Mandarin Chinese of Mainland China. The outcomes of this study can not only benefit Macao tourism practitioners and learners, but also promote the development of Chinese for specific purposes.

16.1 Introduction

Chinese for specific purposes (CSP) refers to the Chinese language used in a certain professional field, a specific scope or a fixed occasion. It includes not only professional Chinese that is closely related to some disciplinary areas, but also Chinese for specific businesses, occasions, and environments (Li 2011), such as business Chinese, Chinese for science and technology, legal Chinese, and Chinese for travel. With Chinese language teaching developing toward specialization and professionalism, CSP is becoming an important part of foreign students' education in college settings (Li 2011). Tourism Chinese as one kind of CSP refers to the language

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commonly used in tourism activities. It is common to find overseas students expressing an interest in Chinese tourism culture and related courses (Shi 2001), and it has become an important subject for international Chinese teaching (Liu 2011). In Mainland China, there have been numerous textbooks published for tourism Chinese, such as *Practical Tourism Chinese* (Zhang 2005), *Tourism Chinese* (Tourism Chinese Program Group 2008), and *A Tourism Chinese Vocabulary Handbook* (Shanghai Normal University 2008). There is also an HSK (tourism) proficiency test (Liu and Zhang 2006) in the area of Chinese language assessment.

CSP exhibits unique features compared with general Chinese, and thus specific syllabus, curriculum design, and teaching materials should be used in CSP (Du 1981; Shi 1990; Zhang and Li 2010). The construction of a special corpus in this field can provide reference materials for the teaching and research of CSP in tourism. According to *General Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area* (The Central Committee of the Communist Party of China & The State Council of China 2019), Macao is to develop into a world-class tourism and leisure center and a commerce and trade cooperation service platform between China and Lusophone countries. This larger context makes tourism Chinese particularly important for Macao. On the one hand, Macao's unique language status quo and the special tourism resources have led to many differences between Macao and other parts of China in terms of tourism Chinese (Huang 2005; Yao et al. 2015). On the other hand, due to the existing linguistic situation in Macao, where "three writing languages and four spoken languages" coexist (Cheng 2003; Zhang 2015), there are many different usages of Chinese in Macao compared with Mandarin Chinese in Mainland China in both the spoken and written registers (Cheng 1997a; Cheng and Liu 1990). Vocabulary is especially representative of such differences. To reveal the characteristics of vocabulary, this study establishes a small-scale Macao Tourism Chinese Corpus (henceforth SMTCC), which specifically collects written tourism language materials from various sources. We hope that results based on this corpus can provide data as well as theoretical insights for Macao tourism practitioners and learners.

16.2 Related Research

There are four types of corpus-based research on tourism Chinese, which we summarize below. (1) Research on the construction and applications of tourism corpora with the purpose of assisting translation of Chinese tourism texts: For example, there is discussion on ways to construct corpora in order to deal with issues in translation of China's local tourist attractions (Chen 2015). An example along this line is the construction of Southern Anhui translation corpus of tourism resource (Anhui University Innovational Experimentation Project Team of SFS 2011). (2) Studies on bilingual tourism corpora for the purpose of assisting the translation of Chinese texts in tourism: One example of this has to do with design and operational procedures of constructing a corpus of Hong Kong-based Chinese and English tourism texts (Li and Wang 2010). Another example is regarding Hengyang's Chinese tourism texts and their English translation (Xiao and Chen 2012). (3) Research on monolingual tourism corpora for the purpose of assisting the translation of Chinese tourism texts: Research in this area has focused on monolingual Chinese tourism translation texts and American English travel texts as sources for corpus building, which have resulted in comparisons of lexical, sentential, and stylistic features in the languages (Wei 2011). There are also studies using English texts of Chinese revolutionary tourist attractions and texts of European and American revolutionary war tourist attractions to establish a corpus for comparative studies (Deng et al. 2015). (4) Research on tourism corpora for Chinese learning: Studies in this area concentrate on the vocabulary of tourism Chinese textbooks as well as topical areas, such as accommodation, in order to provide reference materials for tourism Chinese teaching (Deng 2014; Guo 2014). There is only one paper which touches upon Macao tourism Chinese. That is *The Study of Mandarin Teaching Materials for Tourism in Macao* (Lu 2006). This study proposed principles for the preparation of Macao tourism Chinese textbooks, with a comparison of the contents of three Macao tourism Chinese textbooks. It proposed that Macao tourism Chinese textbooks should contain both basic vocabulary and professional vocabulary. It also analyzed the rationale of the selection of the contents of the textbooks. This study attempted to provide guidance for Macao tourism Chinese textbooks from a theoretical perspective. However, no corpus was used and no analysis was provided on the basis of any characteristics of the Chinese vocabulary in Macao. There was also no suggestion on key content areas that should be listed in textbooks and other teaching materials.

Some of the aforementioned studies touched upon the idea of constructing a tourism corpus without actually constructing one; very rarely did any of them focus on vocabulary features of tourism Chinese, let alone on Macao tourism lexicon. Thus, there is a great need for research on vocabulary features of Macao tourism. To solve this problem, this study collects primary data of Macao tourism Chinese and establishes a small-scale tourism corpus. We also analyze the vocabulary of the corpus and compare it with Mainland Chinese. The outcomes of this study will not only offer a useful reference for the compilation of Macao tourism teaching materials, but also facilitate the application and education of Macao tourism practitioners and learners.

16.3 Characteristics of Macao Tourism

The special geographic location, political history, and demographic composition of Macao have led to distinctive features in its language use, tourism resources, and intangible culture.

16.3.1 Language Features

Macao's special politics and history lead to the unique current linguistic status of the officially sanctioned "three written languages and four spoken languages." "Three written languages" refer to Chinese, English, and Portuguese. "Four spoken languages" refer to Mandarin, Cantonese, English, and Portuguese. The statuses of these languages in Macao are as follows. (1) Cantonese: The majority of Macao residents are from Guangdong and they usually communicate in Cantonese. According to the statistics of 2001, Chinese is the most frequently used language in Macao's families, with Cantonese as the mostly used Chinese dialects (Zeng and Liu 2010). (2) Portuguese: Portuguese is one of the official languages of Macao (Cheng 2003). During the period when Portugal occupied Macao, Portuguese was the only official language in Macao. Now some of the population of Macao still uses Portuguese (Zeng and Liu 2010). Most of the young people in Macao treat Portuguese as their second foreign language (Qin and Xu 2016). (3) Mandarin: Since the return of Macao to China in 1999, the status of Mandarin in Macao has been continuously increased (Cheng 2003). First, Mandarin was established as an official language, changing the situation of "Portuguese monopoly." Second, due to the greater exchanges between Mainland China and Macao, the residents of Macao realize the necessity of learning Mandarin and it came to a boom in learning Mandarin in the late 1970s (Hu 1996). Nearly half of the investigated students in Macao believe that Mandarin has the role of working language (Qin and Xu 2016). Moreover, the promotion of using Mandarin by the government and schools has also led to the growth of speaking Mandarin (Cheng 1997b; Cui 2008). (4) English: In Macao, English is a popular language in the fields of finance and commerce, modern science and technology, higher education, etc. As English is a manifestation of competitiveness, it is also a necessary condition for Macao's access to higher education and promotion (Zeng and Liu 2010). Most of the young people in Macao think that English is their first foreign language and an important working language (Qin and Xu 2016).

"Three written languages" and "four spoken languages" infiltrate and influence each other. The multilingualism situation in Macao has caused these languages to inevitably interact with each other, resulting in the mixed use of Cantonese, Mandarin, English, and Portuguese and the existence of some Macao-specific vocabulary.

16.3.2 The Characteristics of Tourism Material Resources

Macao has been an important foreign trade port in China since the sixteenth century because of its special geomorphology, the complementarity of mountains and seas, and the interconnection of islands and land. After it was occupied by Portugal in the middle of the sixteenth century, many westerners have settled in Macao, which has led to the emergence of many western-style buildings in Macao (Ding and Gao 2007; Li 2007). On the other hand, due to the Macao government's emphasis on cultural undertakings, various types of museums have been built in Macao. The density of museums is the highest in the world and is known as the "city of museums" (Ding and Gao 2007; Luo 2010). Tourism material resources such as Macao's special landforms, western-style buildings, and museums have been reflected in Macao's tourism Chinese. There are many words related to the geographical features, such as "码头" *mǎtóu* (wharf), "灯塔" *dēngtǎ* (beacon), and "渔业" *yúyè* (fishery industry); western building such as "教堂" *jiàotáng* (church), "圣若瑟修院" *Shèngruòsè xiūyuàn* (St. Joseph's Seminary), "巴洛克式" *Bāluòkèshì* (baroque style); and museums, such as "展览" *zhǎnlǎn* (exhibition), "重现" *chóngxiàn* (recurrence), and "风貌馆" *fēngmàoguǎn* (style and feature museum).

16.3.3 The Characteristics of Intangible Culture

Macao's intangible culture mainly includes its religious culture and food culture. In addition to the major world religions such as Buddhism, Taoism, Catholicism, and Christianity, the folk beliefs in Macao are very prosperous. One reason is that Macao is close to the sea, and thus there are many legends about the gods and ghosts. The fishermen need to go fishing and sailing on the sea. They always worry about all kinds of unpredictable disasters. Therefore, they must pray for the blessing of the gods. They depend on the blessings of the gods for life and death, prosperity and happiness, resulting in a variety of folk religious activities (Li 2007). As for the food culture, the cooking ingredients and methods of Macao are deeply influenced by the West, absorbing the dietary cultures of Portugal and South East Asia, combined with Guangdong and so on. After fusion and improvement, Macao's diet becomes an independent cuisine (Li 2007; Xiang et al. 2017). The characteristics of Macao's religious culture and food culture have resulted in many related words in Macao's Chinese, such as "妈阁" *Māgé* (a-ma temple), "圣母" *Shèngmǔ* (Notre Dame), and "庙宇" *miàoyǔ* (temple) which are related to the religious culture, "汤圆" *tāngyuán* (rice ball), "蛋糕" *dàn'gāo* (cake), and "咖啡厅" *kāfēitīng* (cafe shop) which are related to the local food culture.

16.4 The Construction of a Small-scale Macao Tourism Chinese Corpus

The construction of a corpus usually follows the principles of authenticity, representativeness, scale, and structure (Guo 2013; Yu 2009). This study holds that the construction of a specialized corpus like a tourism corpus should also follow these principles, as well as the targeted principle. They are elaborated as follows. (1) The targeted principle: Tourism Chinese is the language used for a special purpose, which is different from general Chinese, so the sources of data should be selected from tourism materials. (2) Authenticity: The data collected should come from tourism activities and is still in use, ensuring that the statistical analysis obtained from the corpus is reliable and practical. (3) Representativeness: It is impossible and unnecessary to collect all the materials of tourism Chinese, and thus the number of samples that can be collected into the corpus is limited. It requires the selected data to be representative, such as data from an authoritative organization screened by professionals. (4) Scale: Tourism involves many aspects such as housing, food, travel, entertainment, purchase, and travel. Therefore, the number of corpus samples in the tourism corpus must reach a certain scale in order to reflect the characteristics of the tourism. (5) Structure: The tourism samples should be organized in a structured way and in a computer readable form, which can facilitate further analysis for different research needs, such as reflecting the common vocabulary through calculating word frequency and the common topics of tourism expressions.

16.4.1 The Selection of Macao Tourism Samples

Macao Government Tourist Office[1] is the department responsible for the management of the tourism business in Macao. According to the "Administrative Regulations No. 18/2011 of Macao," its main duties include assisting in the formulation of tourism policies, promoting the quality of tourism services, assisting in the protection and appreciation of Macao tourism resources, and assisting in the improvement and expansion of Macao tourism products, promotion of Macao tourism, etc. The data (simplified Chinese) on the official Web site of Macao Government Tourist Office is thus collected. In addition, more information about famous hotels, scenic spots, etc., in Macao is collected from their respective websites.[2] The collected samples mainly introduce Macao's scenic spots, hotels, restaurants and so on. Most of them were edited and reviewed by professionals, and thus use canonical words, which can reflect the language used in Macao tourism-related activities.

16.4.2 Word Segmentation and Manual Correction

The collected samples are first automatically segmented by Word Sketch[3] and then manually corrected following the principles of consistency, fixedness, and not

[1]Simplified Chinese data source URL: http://zh.macaotourism.gov.mo/index.php, data collection date: April 5, 2018.

[2]Data collection date: January 22, 2019.

[3]https://www.sketchengine.eu/user-guide/user-manual/word-sketch/.

breaking the original meaning after word segmentation. Common errors are handled as follows. (1) Divide unsegmented phrases into several words. For example, “也不例外” *yě bù lìwài* (no exception as well) should be divided into “也” *yě* (also), “不” *bù* (no), and “例外” *lìwài* (exceptions); “留在” *liúzài* (stay in) should be divided into “留” *liú* (stay) and “在” *zài* (in); “并在” *bìngzài* (and in) should be divided into “并” *bìng* (and) and “在” *zài* (in). (2) Combine morphemes into one word, such as transliteration nouns and proper nouns that should not be divided. For example, “圣奥斯” *shèng'àosī* and “定” *dìng* should be merged into “圣奥斯定” *Shèng'àosīdìng* (St. Augustine); “娘” *niáng* and “妈” *mā* should be merged into “娘妈” *Niángmā* (a name of god); “醉” *zuì* and “龙节” *lóngjié* should be merged into “醉龙节” *Zuìlóngjié* (Dragon Drunk Festival). (3) Modify the inconsistently segmented words that can either be divided or not by referring to the segmentation results of the majority of the same word or similar words. For example, the name of a person is sometimes divided into the first name and given name and sometimes not. We divide “孙逸仙” (a name) *Sūnyìxiān* into “孙” *Sūn* and “逸仙” *Yìxiān*. Another example is “科学馆” *kēxuéguǎn* (science museum). In most cases, it is no longer further divided, while it is further divided into “科学” *kēxué and* “馆” *guǎn* in a few cases. We change all the later cases into “科学馆” *kēxuéguǎn* (science museum). (4) For the crosscutting errors, we modify them according to the original meaning. Such kind of errors is usually due to the fact that a morpheme can be merged into a word with the morpheme before or after it. For example, we change the segmentation result “计程” *jìchéng* (calculate mileage) and “车站” *chēzhàn* (station) into “计程车” *jìchéngchē* (taxi) and “站” *zhàn* (station), change the “博物” *bówù* (many things) and “馆区” *guǎnqū* (pavilion area) into “博物馆” *bówùguǎn* (museum) and “区” *qū* (area), and change “并存” *bìngcún* (coexist) and “有” *yǒu* (exist) to “并” *bìng* (and) and “存有” *cúnyǒu* (exist).

16.4.3 The Scale of SMTCC

After manually correcting word segmentation errors and removing the numbers and letters, a small-scale corpus on Macao tourism Chinese is built, containing a total of 25361 Chinese word tokens (counting repetitions) and 5434 Chinese word types (not counting repetitions). On average, each word appears 4.7 times, showing a high repetition rate. The number of Chinese word types with different frequencies is shown in Table 16.1. We can see that in general the number of high-frequency words is small and the number of low-frequency words (such as occurring once or twice) is large, which conforms to Ziff’s law. Moreover, the number of words with the frequency of 3, 6–10, and 11–50 is relatively high.

Table 16.1 Number of Chinese word types with different frequencies

Word frequency	Number of word types	Percentage (%)	Cumulative frequency
>100	21	0.4	0.4%
51–100	39	0.7	1.1%
11–50	317	5.8	6.9%
6–10	407	7.5	14.4%
5	136	2.5	16.9%
4	263	4.8	21.8%
3	430	7.9	29.7%
2	935	17.2	46.9%
1	2886	53.1	100.0%
Total	5434	100.0	/

16.5 Vocabulary Comparison between SMTCC and SVCL

A Syllabus of Vocabulary and Character Levels for Chinese Language Proficiency (hereinafter abbreviated as SVCL) provides references to Chinese teaching, Chinese textbook compilation, and Chinese assessment (Examination Center of The National Chinese Proficiency Test Committee 2001). In order to analyze the specificity of Macao's tourism Chinese vocabulary, this study compares the vocabulary in SMTCC with that in SVCL.

SVCL is generally considered to contain 8822 words. However, there are different cases in it, and thus this study makes some treatment to them. First, in SVCL some words with different forms are considered as one token, such as 吸烟 *xīyān*/ 抽烟 *chōuyān* (smoke), 薪金 *xīnjīn* /薪水*xīnshuǐ* (salary), and 赢利 *yínglì*/ 盈利 *yínglì* (profit). Since they belong to different word forms, this study treats each set of them as two words. Second, in SVCL some constructions have repeated forms, such as 一面……一面…… *yīmiàn…yīmiàn…* (…while…); this study uses one of them as 一面 *yīmiàn*. Third, in SVCL some hyponyms are considered as different words, such as 结果 *jiéguǒ* (result) as a grade one- (conjunction), grade three- (noun), and grade four-level word. It is counted four times. Since such words share the same form in different grades, this study treats them as one word form. After such treatment, there are a total of 8632 word forms (word types). They are used to compare with the words in SMTCC.

By comparing the words in SVCL and SMTCC, we find that there are 2151 common words (the words both in SMTCC and in SVCL). There are 3283 unique words in SMTCC (the words which are in SMTCC but not in SVCL). There are 6481 unique words in SVCL (the words in SVCL but not in SMTCC). The statistical results and examples are shown in Table 16.2.

Table 16.2 Comparison of the vocabulary in SMTCC and SVCL

Comparison item	Number of words	Percentage	Examples
Common words	2151	39.6%	地址 *dìzhǐ* (address), 电话 *diànhuà* (phone), 假期 *jiàqī* (vacation), 免费 *miǎnfèi* (free), 教堂 *jiàotáng* (church)
SMTCC unique words	3283	60.4%	阁下 *géxià* (your Excellency), 邮箱 *yóuxiāng* (e-mail), 天后宫 *Tiānhòugōng* (Tianhou Palace), 葡人 *Púrén* (Portuguese)
SVCL unique words	6481	/[a]	上班 *shàngbān* (go to work), 不幸 *bùxìng* (unfortunately), 主人翁 *zhǔrénwēng* (master), 伤痕 *shānghén* (scar), 俩 *liǎ* (two)
SMTCC total words	5434	100.00%	/

[a]The "/" symbol in the table means that the comparison does not apply to the item

(1) Common words of SMTCC and SVCL

The top ten common words according to the word frequency in SMTCC are "的" *de* (auxiliary word), "为" *wèi* (for), "及" *jí* (and), "是" *shì* (yes), "一" *yī* (one), "年" *nián* (year), "时" *shí* (time), "在" *zài* (at), "有" *yǒu* (have), and "于" *yú* (in; on; at). Their recurrence frequency in SMTCC has reached 181 times or above, and they belong to either grade one or grade two vocabulary in SVCL, indicating that the commonness between Macao tourism Chinese and general Chinese.

(2) Unique words in SMTCC

The top ten unique words according to the frequency in SMTCC are "澳门" *Àomén* (Macao), "中国" *Zhōngguó* (China), "网址" *wǎngzhǐ* (Web site), "前地" *qiándì* (foreland), "大楼" *dàlóu* (building), "入场" *rùchǎng* (admission), "香港" *Xiānggǎng* (Hong Kong), "设有"*shèyǒu* (set), "客运" *kèyùn* (passenger transport), and "公众" *gōngzhòng* (the public). Their frequency of recurrences in SMTCC has reached 38 or above. Some frequently used words in Macao's tourism Chinese are not present in SVCL due to the following characteristics of Macao Chinese. ① SMTCC contains some words borrowed from Cantonese, such as "质素" *zhísù* (quality) and "利是" *lìshì* (red paper containing money as a gift). The reason for this feature is that a large number of people in Macao come from Guangdong and the verbal communication between them is still in Cantonese. The written Chinese in Macao often reflects certain expressions in Cantonese (Cheng 1997a). ② SMTCC contains some classical Chinese words, such as "现时" *xiànshí* (present), "数次" *shùcì* (a few times), "翌日" *yìrì* (the next day), "即时" *jíshí* (immediate), and "执" *zhí* (hold). There are two reasons for this feature. One is that the tourism Chinese itself is elegant (Shi 2001). Some idioms and classical Chinese expressions are used to enrich the text richness in culture, such as "数次" *shùcì* (a few times) and "翌日" *yìrì* (the next day); secondly, Cantonese preserves more ancient Chinese features (Shi et al. 2002), resulting in a significant number of classical Chinese words retaining in the written Chinese of Macao, such as "即时" *jíshí* (immediate) and "执" *zhí* (hold). ③ SMTCC contains some Taiwanese words. Due to the close relationship between Macao and Taiwan, some words in Taiwan have become common words in Macao, which is reflected in written Chinese in Macao (Chen 2006), such as "计程车" *jìchéngchē* (taxi) and "电邮" *diànyóu* (e-mail). ④ SMTCC contains some Macao unique words that reflect Macao's life. These words are rarely used in Mainland China, Hong Kong, and Taiwan (Diao 2013). For example, the word "前地" *qiándì* (square) refers to the open space or a square; the word "堂区" *tángqū* (parish) denotes administrative divisions. ⑤ SMTCC contains many foreign words translated from other languages. Many buildings were built by Portuguese (Wang 2016) and there are many western-style place names, such as "圣保禄" *Shèngbǎolù* (St. Paul), "圣奥斯定" *Shèng'àosīdìng* (St. Augustine), "花地玛" *Huādìmǎ* (Fátima), and "格兰披治" *Gélánpīzhì* (Grand Prix).

(3) Unique words in SVCL

There are some words used only in SVCL but not in SMTCC, such as "一块儿" *yīkuàier* (together), "亭子" *tíngzi* (pavilion), "分红" *fēnhóng* (profit sharing), "人权" *rénquán* (human rights), "仓库" *cāngkù* (warehouse), "严寒" *yánhán* (cold), "盆地" *péndì* (basin), "滑冰" *huábīng* (skating), and "京剧" *jīngjù* (Beijing opera). There are three main reasons that the above words are in SVCL but not in SMTCC. The first is that the Chinese language in Macao is influenced by the Cantonese dialect. Some common Mandarin words are seldom used or even not used in the written language in Macao, but other words are used to express similar meanings. For example, the written language in Macao usually does not use "一块儿" *yīkuàier* (together) but uses "一起" *yīqǐ* (together), and usually does not use "亭子" *tíngzi* (pavilion) but uses "亭" *tíng* (pavilion). Second, some of the words in SVCL are not related to tourism activities, and thus are rarely used in tourism Chinese, such as "分红" *fēnhóng* (profit sharing), "人权" *rénquán* (human rights), and "仓库" *cāngkù* (warehouse). Thirdly, some of the words in SVCL are inconsistent with the climate characteristics, geographical features, and tourism resource characteristics of Macao, such as "严寒" *yánhán* (cold), "盆地" *péndì* (basin), "滑冰" *huábīng* (skating), and "京剧" *jīngjù* (Beijing opera).

16.6 Vocabulary Comparison Between SMTCC and *The Tourism Chinese Vocabulary Handbook*

The Tourism Chinese Vocabulary Handbook (hereinafter referred to as "the Handbook") is the only vocabulary book published for tourism Chinese teaching. To analyze the differences between the vocabulary in Macao tourism and the Handbook, explore whether the Handbook is applicable to the teaching of Macao tourism Chinese, and this study compares the vocabulary in SMTCC with that in the Handbook.

Table 16.3 Comparison of the vocabulary in SMTCC and the Handbook

Comparison item	Number of words	Percentage	Example
Common words	971	17.9%	时间 *shíjiān* (time), 分 *fēn* (minute), 附近 *fùjìn* (nearby), 中心 *zhōngxīn* (center), 路线 *lùxiàn* (route)
SMTCC unique words	4463	82.1%	电邮 *diànyóu* (e-mail), 妈祖 *Māzǔ* (Mazu), 天象 *tiānxiàng* (celestial phenomena), 航程 *hángchéng* (voyage)
Handbook unique words	3709	/	出租车 *chūzūchē* (taxi), 寒冷 *hánlěng* (cold), 画儿 *huàr* (painting), 橘子 *júzi* (orange)
Total number of words in SMTCC	5434	100.00%	/

The Handbook has a total of 4674 words, but words with different forms are only counted once in it, such as "报道 *bàodào/* 报导 *bàodǎo*" (report) and "砂 (沙) 锅 *shāguō*" (casserole). Since they have different forms, this study treats each set of them as two words. After such treatment, we get a total of 4680 words. By comparing them with SMTCC, we obtain a total of 971 common words (the words in both the SMTCC and the Handbook), 4463 unique words in SMTCC (the words in SMTCC but not in the Handbook), and 3709 unique words in the Handbook (the words in the Handbook but not in SMTCC). The statistics is shown in Table 16.3.

There are 971 common words in SMTCC and the Handbook, showing the commonality between tourism Chinese in Macao and other parts of China. However, they only take up 17.9%. SMTCC and the Handbook also have many different words. The reasons leading to it are as follows. ① The language characteristics of Macao Chinese: Due to the influence of Cantonese, SMTCC contains unique words such as "利是" *lìshì* (red packet containing money as a gift), "雀仔园" *Quèzaĭyuán* (bird garden), and "街坊" *jiēfāng* (neighborhood). There are also some words in the Handbook but not appearing in SMTCC, such as "聊天儿" *liáotiānr* (chat), "暖和" *nuǎnhuo* (warm), and "毯子" *tǎnzi* (blanket). Due to the influence of Portuguese, English, and western cultures in Macao, the corpus contains unique words like "耶稣" *Yēsū* (Jesus) and "提督" *tídū* (admiral). ② The differences in tourism resources: Macao's special tourism resources have led to the existing of some unique words, such as "炮台" *pàotái* (battery) and "巴洛克" *Bāluòkè* (Baroque). There are also some words in the Handbook but not appearing in SMTCC, such as "暴风雪" *bàofēngxuě* (snowstorm), "田野" *tiányě* (field), and "冰川" *bīngchuān* (glacier), due to the lack of such natural phenomenon and landscapes in Macao.

16.7 Vocabulary Differences Between Macao Tourism Chinese and Mandarin

Since Macao's main languages in the past were Cantonese, Portuguese, and English, it did not begin to promote Mandarin until it returned to China in 1999 (Fu 2006). In Mainland China, the promotion of Mandarin began in 1956, and before that, "northern dialect," the foundational dialect of Mandarin, has been widely used (He 2015). The lag of the promotion of Mandarin in Macao has led to a different evolution and development of Chinese vocabulary in Macao. As a result, there are differences between Macao tourism Chinese and Mandarin of Mainland China in terms of word meanings, word forms, classifiers, and words' common usages.

(1) Homographs, which refer to words with the same form but different meanings. For example, the word "狗房" *gǒufáng* is rarely used in Mandarin It does not exist in Tagged Chinese Gigaword Corpus (second edition) (Huang 2009) and only occurs 4 times in the literature type data of the BCC corpus (Xun et al. 2016), whose meaning is "kennel, doghouse." While in SMTCC, "狗房" *gǒufáng* refers to "市政狗房" *shìzhèng gǒufáng*, which is a kind of institute of the Macao government that offers animal diagnose, immunization inoculation, health certificate, and animal quarantine services. Another example is "一楼" *yīlóu*, which means the ground floor in Mandarin, while it means the floor above the ground floor in SMTCC, as shown in ①.

① 地面层主要展示, 销售与氹仔及葡萄牙特色相关的文化产品, 书籍及出版物等;一楼为举办临时展览的空间。(SMTCC)
Dìmiàn céng zhǔyào zhǎnshì, xiāoshòu yǔ Dàngzaǐ jí Pútáoyá tèsè xiàngguānde wénhuà chǎnpǐn, shūjí jí chūh nwù děng; yī lóu wéi jǔbàn línshí zhǎnlǎn de kōngjiān.
ground_floor_mainly_display_sell_with_Taipa_and_Portugal_specialty_related_culture_products_books_and_publications_and so on_the first_floor_is_for_hold_temporary_ex-hibitions_space
'The ground floor mainly displays and sells cultural products, books and publications related to Taipa and Portuguese specialties; the first floor is a space for holding temporary exhibitions.'

(2) Verbs with the same form in both SMTCC and Mandarin, but the commonly used meanings are different. The meanings of "巡游" *xúnyóu* are (a) "hang out" and (b) "walk around and take a look" in *Contemporary Chinese Dictionary* (Dictionary Editing Room 2016), which is a dictionary that reflects the use of Mandarin. We annotated the top 50 sentences in the BCC corpus and found that the second meaning takes up 76%, as shown in ②. In SMTCC, the meaning of "巡游" *xúnyóu* is a kind of religious activity or ceremony, which takes up 100% of all the occurrences, as shown in ③.

② 索朗月在四周巡游着, 对木筏的准备做最后一次检查。(BCC)

Suǒlǎngyuè zài sìzhōu xúnyóu zhe, duì mùfá de zhǔnbèi zuò zuìhòu yī cì jiǎnchá.
Solange_ in_all around_cruise_durative aspect, to_raft_DE_preparation_do_ last_one_time_check_
'Solange is cruising around, making a final inspection of the raft's preparation.'
③ 圣像巡游本是南欧的宗教仪式,澳门自16世纪设立澳门教区以来,便一直继承着这个传统。(SMTCC)
Shèngxiàng xúnyóu běn shì Nán'ōu de zōngjiào yíshì, Àomén zì 16 shìjì shèlì Àomén jiàoqū yǐlái, biàn yīzhí jìchéng zhe zhè ge chuántǒng.
The Sacred Icon_tour_originally_be_Southern Europe_DE_religious_ ceremony, Macao_since_16_ century_establish_Macao_parish_since then, soon afterwards_all along_inherit_durative aspect_this_tradition
'The Sacred Icon Tour was originally a religious ceremony in Southern Europe and Macao has inherited this tradition since its parish was established in the 16th century.'

(3) There are some words that have the same meaning but different forms in SMTCC and Mandarin. For example, the meaning "the road for people to pass" is often expressed by "人行道" *rénxíngdào* in Mandarin. In the literary type data of the BCC corpus, the frequency of "人行道" *rénxíngdào* is 1566, while the frequency of "行人道" *xíngréndào* is only 36, showing significant differences in the frequency of use. In SMTCC, only "行人道" *xíngréndào* is used.
(4) The classifiers of some nouns in SMTCC are different from that in Mandarin. For example, the top five classifiers of "船" *chuán* (ship) in Chinese Gigaword Corpus (second edition) are shown in Table 16.4. However, in SMTCC only "条" *tiáo* (a measure word) is used as the classifier of "船" *chuán* (ship).
(5) Some words have different habitual usage. For example, whether "有" *yǒu* (have) is used before a verb to indicate past actions is different. In Mandarin, "有" *yǒu* (have) is not used directly before a verb, but in SMTCC it can be used in such a way to express past actions, as shown in ④. "有" yǒu (have) is used before the verb "想" *xiǎng* (think) to mean "thought of sth."

④您有想过在一个教堂, 炮台等欧式建筑物林立的地方过一个农历新年吗? (SMTCC)
Nín yǒu xiǎngguò zài yīgè jiàotáng, pàotái děng ōushì jiànzhú wù línlì dì dìfāng guò yīgè nónglì xīnnián ma?

Table 16.4 Top five classifiers of "船" *chuán* (ship)

Classifier	Frequency	Saliency
艘 *sōu*	3233	100.9
条 *tiáo*	1112	64.15
只 *zhī*	128	39.51
号 *hào*	187	35.87
班 *bān*	47	29.3

you_have_thought_in_one_CL_church_fortification_and so on_European style_building_stand in great numbers_DE _place_spend_one_CL_lunar_New Year_final interrogative particle
'Have you ever thought about spending a Lunar New Year in a place where European-style buildings such as churches and fortifications are everywhere?'

In summary, Macao tourism Chinese vocabulary reflects the following characteristics. ①The vocabulary covers living, food, travel, entertainment, shopping, transportation, and other related contents, which are influencing factors in tourism activities (Shen 1999; Zhou 2010). Many words exemplify these activities, such as accommodation-related words like "酒店" *jiǔdiàn* (hotel) and "套房" *tàofáng* (suite), food- and beverage-related words like "餐饮" *cānyǐn* (catering), "月饼" *yuèbǐng* (moon cake), "汤圆" *tāngyuán* (rice dumpling), and "乳猪" *rǔzhū* (sucking pig), tour-related words like "博物馆" *bówùguǎn* (museum), "牌坊" *páifāng* (memorial archway), "夜景" *yèjǐng* (night scene), and "展厅" *zhǎntīng* (exhibition hall), entertainment-related words like "酒吧" *jiǔbā* (bar), "烟花" *yānhuā* (firework), "度假" *dùjià* (vacation), and "龙舟赛" *lóngzhōusài* (dragon boat race), shopping-related words like "街市" *jiēshì* (downtown street), "出售" *chūshòu* (sale), "产品" *chǎnpǐn* (product), and "销售" *xiāoshòu* (sale), and the way of travel-related words like "巴士" *bāshì* (bus), "客运" *kèyùn* (passenger transport), "航程" *hángchéng* (voyage), and "乘船" *chéngchuán* (by ship). ②The vocabulary reflects the tourism culture of Macao. Cultural attributes are the essential attributes of tourism. Tourism itself is a large-scale cultural exchange (Wang 2005). Tourism culture includes material culture, institutional culture, and spiritual culture (Shen 1999), and the various types of tourism cultures are reflected in Macao's tourism Chinese language. The vocabulary that embodies the material culture of Macao includes "炮台" *pàotái* (battery), "建筑物" *jiànzhúwù* (building), "牌坊" *páifāng* (memorial archway), and "山顶" *shāndǐng* (culmen); the vocabulary that embodies the institutional culture of Macao includes "强制性" *qiángzhì xìng* (mandatory) and "提督" *tídū* (provincial commander in chief); the vocabulary that embodies the spiritual culture of Macao includes "显灵" *xiǎnlíng* [(of a ghost or spirit) make its presence or power felt], "扫墓" *sǎomù* (sweep the grave), "信徒" *xìntú* (believer), and "传统" *chuántǒng* (tradition).

16.8 The Teaching of Macao Tourism Chinese Vocabulary

The above comparison results show that a large number of words in SMTCC are not present in SVCL and the Handbook, which shows that the existing materials cannot reflect Macao tourism Chinese. Moreover, Macao's tourism Chinese vocabulary has its unique features, which are different from Mandarin of Mainland China. In the course of teaching Macao tourism Chinese, if only the vocabulary in SVCL and the Handbook is used as references, students will encounter a lot of new words when they travel in Macao or reading Macao-related materials. At the same time, these materials contain a large number of words that are not used or are not commonly used in Macao tourism Chinese. If these words are included in the vocabulary teaching of Macao tourism Chinese learners, it will unnecessarily increase the student's learning burden or even cause confusion to students and reduce learning effectiveness. To solve these problems, the construction of SMTCC can provide an important reference to the compilation of regional vocabulary list. In addition, some word meanings, word forms, classifiers, and words' common usages in Macao tourism Chinese are different from those in Mandarin. Therefore, it is not sufficient only to explain and practice those of Mandarin. To solve this problem, SMTCC in this study can be used as an important reference.

This paper proposes the following suggestions for the teaching of Macao tourism Chinese. (1) Enrich the existing tourism Chinese vocabulary list or establish a new one. A scientific Chinese common vocabulary list is an important reference to Chinese teaching, textbook compilation, and teaching evaluation. However, the existing words in SVCL and the Handbook cannot satisfy the needs of tourism Chinese learners who are interested in Macao, because there are many unique words in Macao. They will be new words that hinder reading comprehension. Some studies have found that when the density of new words exceeds 3%, the understanding ability will be obviously affected (Wu 2015). Thus, if only the vocabulary in SVCL and the Handbook is learned, the ability to understand Macao tourism Chinese will be affected. It is recommended that the vocabulary in this corpus is referred to in order to enrich the existing vocabulary lists. (2) Pay attention to the teaching of special meanings and usages. The common meanings and usages of some words in Macao tourism Chinese are different from those in Mainland China. In the teaching process, they should be emphasized, such as homographs, synonyms, and classifiers. (3) Pay attention to Macao's unique words. On the one hand, most of these words have synonyms in Mandarin. For example, the synonym for "质素" *zhísù* (quality) of Macao is "素质" *sùzhì* (quality) of Mandarin. Therefore, the synonymous words can be used to help students know the new words. On the other hand, for a word whose meaning is the combination of its morphemes, the morpheme meaning can be introduced to students. For example, when teaching "计程车" *jìchéngchē* (taxi), explaining the morphemes "计" *jì* by "计算" *jìsuàn* (calculate) and "程" *chéng* by "路程" *lùchéng* (distance) or "里程数" *lǐchéng shù* (milage) can help students understand the whole word. When teaching the word "堂区" *tángqū* (parish), explaining the morpheme "堂" *táng* by "教堂" *jiàotáng* (church) and "区" *qū* by "区域" *qūyù* (area) can help students understand that an administrative district of Macao is generally named after a representative church. (4) Pay attention to the teaching of common classical Chinese words and foreign words translated to Chinese. In the teaching of classical Chinese words, pay attention to their meaning and the nature of written style. For foreign word teaching, the translation method can be used as an aid. (5) Combine language teaching with culture teaching. The ultimate goal of second language acquisition is to cultivate learners' ability of cross-cultural communication (Zhang 2006). The tourism activities involve cross-cultural communication among tourists of different nationalities, tourism industry workers, and tourists. Moreover, tourism Chinese contains a large number of words that reflect the culture of tourism destinations. By introducing the words related to regional material culture, institutional culture, and spiritual culture, students can understand and use them appropriately. Therefore, in the process of teaching tourism Chinese, introducing Macao's culture can not only stimulate students' interest, but also enable them to communicate more effectively across cultures.

16.9 Conclusion

This study analyzes the characteristics of Macao tourism, collects samples from Macao Government Tourist Office and other websites, and creates a small-scale corpus for Macao tourism Chinese. Based on the corpus, this study compares the vocabulary in SMTCC with SVCL, the Handbook, and Mandarin of Mainland China. It also systematically explores the characteristics of the vocabulary of Macao tourism Chinese and puts forward some suggestions for Macao tourism Chinese teaching. In sum, the findings in this study indicate that the existing Chinese vocabulary lists such as SVCL and the Handbook cannot reflect Macao tourism Chinese. It is necessary to investigate Macao tourism Chinese vocabulary based on authentic data of Macao tourism. The outcomes of this study can not only offer a useful reference for Macao tourism practitioners and learners, but also promote the development of CSP.

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Chapter 17
Chinese for Specific Purposes in the Hong Kong Context

Shui Duen Chan

Abstract Chinese language education in its traditional sense focused primarily on the cultivation of students' knowledge of Chinese language and literature, mainly via the root learning of exemplary writings. Many of these writings were in fact traditional varieties of CSP, although their literary achievements were often given primary attention. Alongside the study of such texts, modern practical writings are also introduced to students after the 1990s. This paper reviews the situation and practices in the Hong Kong education sector regarding research on and the practices of teaching "Chinese for special purposes", the newly introduced "practical writing" or "Professional Chinese". Emphasis will be put on the relationship between traditional varieties of CSP and modern practical writings, and how programmes in the latter are designed and delivered.

17.1 A Brief Review of Chinese Practical Writing Research

While "English for specific purposes" (ESP) is a well-established academic discipline, its counterpart in Chinese, i.e. "Chinese for specific purposes" (CSP) is less well studied or even unheard of. That said, it does not mean that the creation and study of Chinese texts focusing on specific contents in order to address certain specific requirements or objectives are non-existent. Rather, a large number of texts produced throughout Chinese history were of practical purposes. These texts form a major body of references and resources for pre-modern Chinese scholars as well as students of the modern day to whom the Chinese language curriculum comprising a selection of such texts is always a core subject area in the school system. Alongside the study of such texts, which are always treated as works of Chinese literature nowadays given that their practical value has diminished, modern types of practical

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texts that align with the workplace manpower structure, workflow and etiquette of the modern society are also introduced to students. This latter kind of teaching is often termed the teaching of "practical Chinese" (應用文/實用文) in a general sense, or "professional Chinese" (專業中文) if the content is linked to certain industries or professions. Unlike ESP which is often considered as an outgrowth of English as a second/foreign language and can be learned at different levels (Dudley-Evans 1998), the teaching of practical/professional Chinese involved mostly L1 learners. Since systematic and large-scale teaching of Chinese as a second/foreign language has a relatively shorter history compared to that of English language teaching,[1] not much attention has been paid to CSP for non-native speaking learners since cultivation and enhancement of L2 learners' generic skills in the Chinese language are still considered by most teachers and learners as challenging tasks that should be given higher priority. A more detailed discussion of this development is given below.

It is argued that almost all texts produced in ancient Chinese society were originally for practical purposes, be they narrative, expressive, argumentative, or exploratory (Chan 1982). The inscriptions on the oracle bones and those on a variety of bronze utensils in ancient China were writings that served religious, political or social purposes. The great Confucian classics were texts illustrating the core value and beliefs in Confucianism, through records of the emperor's speeches, the etiquette systems, the ancient history and records of divination. In the dynasties that followed, from 221B.C. (the year that the Qin Dynasty established) onward, practical texts produced had become more diversified in terms of both content and language style. Cai Yong (蔡邕) (133A.D.–192A.D.) of the Han Dynasty was the first one to classify written texts produced during his era according to their functions. He classified articles produced by the emperors for giving orders/assigning duties and articles produced by government officials for reporting duties or seeking approval into different categories according to their functions and purposes. Cai's categorization had actually taken into consideration the political hierarchy in determining the relationship of the addressers and the addressees in different communicative events. Accordingly, official documents can be classified into three broad categories, namely texts for upward submission (上行), for downward dissemination (下行) and for horizontal transmission (平行). Since then, and until the downfall of the last imperial dynasty by early twentieth century, there have been anthologies of essays published before that, with texts collected and classified according to their stylistic differences, sometimes on their functional variation, resulting in diverging text types being proposed by authors of different anthologies. Based on analysis of the ancient anthologies, Chan (1982) proposed a

[1]Even though starting from the Ming Dynasty (late fourteenth century) onward, students and scholars from neighbouring countries of China, such as those from Korea, Japan, Ryukyu, and Siam, started to visit China periodically, and learnt Chinese language as well as Chinese culture from the Imperial Academy (國子監), the notion of teaching Chinese as a second/foreign language was not formulated until after the introduction of modern linguistics to China in the twentieth century.

reorganization of traditional practical writings into eleven categories, namely (1) letters, (2) prefaces and post-faces, (3) celestial writs, (4) emperors' words, (5) memorials to the throne, (6) official documents, (7) inscriptions on memorial stone tablets and tombstones, (8) praises and prayers at sacrificial rites, (9) military documents, (10) epigraphs, exhortations, admonitions, and (11) religious documents.

However, it is worth noticing that although many of such essays were typical practical writings with specific communication purposes, many of them had been passed down and appreciated mainly for the superb literary skills embedded in them that qualified them as great works in the Chinese literary tradition. Two typical examples of texts serving specific purpose, yet composed in literary style are the two works produced by Zhu Qingyu (朱慶餘) and Zhang Ji (張籍), both poets of the Tang Dynasty. Zhu attempted to enquire the examiner about his chance of passing the imperial examination by turning the enquiry into a question put forward by a wife to her husband about the style of her eyebrows.[2] Similarly, Zhang depicted a lady returning in tears a gift to her admirer, while the real purpose of composing the poem was to turn down an offer of appointment.[3]

In fact, starting from Cao Pi's (曹丕) *Historical Allusions—Discussion on Essays*[4] (*典論•論文*) and Lu Ji's (陸機) *Wen Fu*[5] (*文賦*), the two works that laid the foundation of Chinese literary criticism, studies and analysis of written texts constantly attach primary importance to literary achievements of the texts, seldom to their functions, contexts or their practical values. While Cao Pi himself had summarized stylistic characteristics of four types of texts,[6] the summary was far too brief and loose to comprise only an adjective for each text type on the one hand, and on the other, he argued that the perfect mastery of different text types was a manifestation of the authors' innate talent or as a consequence of their diligent practices (Du 1981; Cheng 1985: 14). It is also worth noticing that irrespective of

[2]The line in the poem that embedded the "hidden" message was "畫眉深淺入時無?" (Is the colour put on my eyebrows fashionable enough?)

[3]The two lines in the poem were very famous for demonstrating a touching love story: "還君明珠雙淚垂, 恨不相逢未嫁時" (In tears I return the shiny pearls to you. So regrettable it is that we hadn't met before I got married) which, however, is an euphemistic expression disguising the real intended message the poet wanted to convey.

[4]Cao Pi (187A.D.–226A.D.) was the emperor of Wei during the Three Kingdom period. Apart from a poet himself, he was also a literary critic. The chapter "Discussion on Essays" in his book *Historical Allusions* was the first work in literary criticism in China. In the chapter, he adhered great importance to literary works which he regarded as a splendour that had unending permanence.

[5]Lu Ji (261A.D.–303A.D.) was a famous writer and calligrapher of the West Jin Dynasty. His work *Wen Fu* focused on the discussion of literary theories and classification of text types, yet composed in the form of an ode.

[6]Cao proposed that texts all had the same root but differed in their branches, which were translated into elegance for memorials to the throne, rationality for argumentative letters, honesty for inscriptions and eulogies, and gorgeousness for poetries (夫文本同而末異, 蓋奏議宜雅, 書論宜理, 銘誄尚實, 詩賦欲麗).

whether it was personal style, genre style, or style of a certain period, similar criteria or adjectives such as "unconstrained, over-elaborated, simple and unadorned, prosaic, graceful" were used to explain or describe them. Since the critic Yan Yu (嚴羽) (1192–1245?) of the Song Dynasty who suggested that expression of profound message using limited words should be regarded as the highest standard[7] of outstanding poems, there was a tradition in pre-modern China that appreciation of literary works focused primarily on how messages were transmitted tacitly instead of in-depth analysis of the words or structures of the texts, thus failing to produce objective criteria for text evaluation, making it difficult for stylistic research in ancient China to come up with a scientific system of analysis (Yuan and Zong 1994: 231). Such a tradition could probably be accounted for by the fact that in ancient China, most civil service officials, who were also producers and critics of the practical writings, were recruited through the imperial examination which put much emphasis on the candidates' literary writing skills and the command of Confucian classics (Elman 2000). It was therefore not uncommon that even texts of practical use were composed with profound literary skills using classical language.

After the May Fourth Movement which advocated the overhauling of literary traditions by using the vernacular instead of classical language (Encyclopædia Britannica 1998), the situation became more complicated. Discussion on literary origin and faction, text composition, rules of writing, text analysis and appreciation, language use, art form, thematic style, etc. were often subsumed under different disciplines, such as text analysis, prose analysis, rhetoric, and stylistics, thus being approached from different perspectives. In terms of research methodology, before the 1960s, studies on language use and genre-specific style of texts by these different disciplines mainly followed the traditional practice of focusing on an individual writer or an individual article. Very often critics were concerned more about the themes, topics, propositions or key messages that a certain text wanted to convey, and what sort of rhetorical devices were used to help achieve better literary effects. Seldom were the communicative functions, purposes, participant relationships, and how such factors affect the lexical and grammatical patterns of the texts explored.

17.2 Form Practical Writing Research to Research on Chinese Registers

In the later 1950s, the former Soviet linguist V. V. Vinogradov was among the first linguists to describe the different styles of speech in respect to their functions (Sachkova 2012). Probably influenced by his work, starting from the 1960s, some

[7]Yan Yu's book *Cang Lang Shi Hua (滄浪詩話)* has been regarded as the most representative work in literary criticism in pre-modern China. According to him, words have their ends, but not the messages they carry. The most successful poems should carry profound messages that could not easily be traced by the words, just like a deer hiding in the wood that one could not tell where to find the branches and where to find its horns.

scholars in the rhetoric circles began to notice that certain texts have specific communicative targets and purposes, and the use of language as well as the formation of style was largely constrained by the context, modes, channels, and content of communication. After the 1980s, different fields of western linguistic theories and concepts were introduced to China. Challenged by perspectives and methodologies different from the conventional practices, scholars in the field of Chinese rhetoric started to pay more attention to the close relationship between rhetorical use of language and specific contexts, and noted that the result of communication would be greatly affected if the choice of language did not conform to the context. Consequently, more and more researchers in rhetoric turned to the study of sentences, passages, texts and stylistic problems related to language use or contextual factors on top of discussing micro-rhetorical devices at character or word level. Researchers also started to explore features of different registers in their rhetoric studies, although the notion of "register" was not as clearly defined as what was proposed by sociolinguists of the western world—being language varieties identified according to their use in particular social contexts for particular purposes (Halliday 1978). There also appeared separate chapters dedicated to the study of registers (for instance, Zong et al. 1988; Li and Zhang 1986; Zhang 1993; Luo 1994; Yao and Pan 1995; Wang 1996). Some scholars even declared that registers involving language used in specific areas were more complex than that of literature since its purpose of expression, participants, and problems to be solved were more specific. "The more specific they are, the more complex they are" (Li and Zhang 1986: 202–203, 244). In these works, the term "register" (語體) gradually replaces the term "genre" (文體), meaning that the researchers are interested in more than just the characteristics of any independent texts or text types, but functional varieties with systematic features of language use that aim at fulfilling certain communication purposes in specific contexts (Yuan and Li 2005). Some scholars have also called for the inclusion of contextual elements in the study of rhetoric, believing that such an approach would greatly enhance the scope and practicability of rhetorical research (Hu and Zong 1987: 11).

In the following two decades, some works in register study started to come up with more concrete results, such as the suggestion of certain linguistic phenomena associated with functions and contexts (such as: ECNU & CRS 1987; Wang 1987; Li 1989; Wang and Chan 2000; Yuan and Li 2005). A large number of papers as well as independent monographs on register studies have been published. These works on register studies, compared to previous works on rhetoric or genre study, have extended their scope and content of study to include not just analysis of phonological or lexical features that carry rhetorical meaning, but also features at grammatical and textual levels (e.g. Li 1989; Zheng 1991; Wang and Chan 2000). In 2012, the journal "Contemporary Rhetoric" dedicated the entire Issue 6 to register studies, among which three papers were about grammatical patterns of different registers. Jin and Bai (2012) think that specific register requires the selection of vocabulary, syntactic structure, textual cohesive devices and prosodic form to correspond to its function and context; therefore the language elements used in specific registers and their respective configuration rules should become the core topic of register research. In consonance to this trend, a number of syntacticians have also put forward the concept of "register syntax" when discussing prospects of research on syntax (e.g. Hu 1992; Tao 1999; Fang 2007; Feng 2010, 2014a, b; Wang 2011, 2012; Zhu 2012). They suggest that any register variation will lead to differences in syntactic features, implying that syntactic research and register research should be inextricably linked. It can be seen that as far as the study of register is concerned, scholars with different academic backgrounds have different points of departure, but they all come up with a similar conclusion. The rhetoricians propose the extension of the scope of rhetoric study to include devices not just at phonological or lexical levels, but also syntactic and textual levels. The syntacticians suggest an integration of syntactic research and register research given the close relationship between syntactic variation and register variation.

Amidst the above discussions, many scholars have also proposed to apply research results to teaching, especially to second language teaching (Luo 2001; Li 2004; Feng 2006; Zeng 2009), so that L2 learners would know how to use appropriate words and grammar to complete the communicative tasks in accordance with the context and participants. In the past decade, some universities in the Chinese mainland have offered courses in register study at both undergraduate and postgraduate levels. Subsequently, a number of master's theses combining register research with teaching Chinese as a foreign language have been published (e.g. Shu 2001; Xiang 2013; Tong 2016; Hu 2017). Just as ESP has its origin in English language teaching, the integration of register study, syntactic study and second language teaching seems to have gained recognition in both the fields of linguistics and education. While increasingly more people are learning Chinese as a second or foreign language, there arise different needs of the learners that curriculum designers and course organizers have to address. What should be pointed out though, is that such needs are not confined to second language learners. CSP teaching and study for L1 learners had a long history in China as elaborated in Sect. 17.1 of this chapter, although the approach had been rather different.

As mentioned above, alongside a long history of language training based on literary tradition, there were a large number of anthologies published in different dynasties containing mainly texts that were of practical use. Many of such texts, together with the Confucian canons, had become the major body of study for candidates of the imperial examination. A large number of the practical texts also constituted a core component of the Chinese subject in the modern-day school system. What made the study of Chinese practical texts so special was that many of the practical texts were composed in literary styles and were appreciated mainly for their literary achievement, with their functional and contextual factors often neglected. This is especially so in the modern days since the social structure and human relationship of the modern society differ tremendously from those of the ancient time, making the practical value of these texts obsolete. There is of course needs for the creation of new types of practical texts that fulfil the communication needs of the modern society. They are then given a new name "practical writings" (應用文) to differentiate them from the ancient practical texts. Nonetheless, the newly emerged practical writings, compared to the famous classical texts passed down from the ancient times, seem to be much inferior in terms of their literary credit, and it is commonly believed among Chinese scholars that anyone equipped with profound knowledge in classical Chinese could easily master any kind of modern practical writing without proper training. It is therefore not surprising that teaching of newly created Chinese practical writings compiled in modern Chinese had not been given much attention until the 1990s when new text types such as press release, promotional leaflet, direct marketing letter, CEO's message, and company annual report started to emerge.

Chan (1982) who proposed to reorganize the traditional practical writings also endeavoured to introduce the convention, format, structure, language requirements and jargons used in practical writings that are still in use in modern society. While observing some of the practices in composing practical writings in the Chinese tradition, he went further to propose revisions and adjustments to both the format and the language of modern practical writings to align with the living style and etiquette of the modern society. His work has been considered as one of the most influential ones in the study and practice of modern practical writing in early years in Hong Kong.

In the last two decades, new approaches of text analysis were also proposed, incorporating studies at lexical and grammatical levels (Lee 2008), sometimes by adopting communication theories as well (Lee 2000). The study of practical writings has attracted more and more interest and attention, especially when many practical writings in Hong Kong demonstrate special linguistic features, such as mixture of Chinese and English, mixture of Classical and modern Chinese, and mixture of standard Chinese with vernacular Cantonese. One can also find gradual emphasis on the teaching of practical writings in curriculum documents for the Chinese language in the Hong Kong context, although the above suggestion of integrating register study with syntactic study have not yet been fully picked up by curriculum planners as well as front-line teachers. Below we shall briefly introduce the situation of CSP or register teaching in the context of Hong Kong and explore possible future directions of CSP development.

17.3 Teaching and Research on Chinese Practical Writings in the Hong Kong Context

17.3.1 Teaching of Chinese Practical Writings at School Sector

The two terms "register" or "CSP" are quite unfamiliar to the teaching profession in Hong Kong. A more common term adopted is "practical writings", or "professional Chinese" if the writings are related to particular professions. In earlier years, teaching of practical writings was not included in the school curriculum (Curriculum Development Council 1990). It was not until 1998 that a clear provision of practical writing was proposed. In both the 1998 and 2004 documents, lists of practical writings to be taught were given. They include official letter, notice, diary, manual, advertisement, poster, leaflet, slogan and announcement. But other than the list, learning objectives and assessment criteria for such kinds of teaching were missing (Curriculum Development Council 1998, 2004).

That being said, for Chinese language teaching in the secondary school stage, there had been a tradition of focusing on the study of exemplary texts, which included a large number of practical writings of the ancient times, such as *Admonish against the expulsion of guest officials (諫逐客書), On the Six nations (六國論), Biographies of Lian Po and Lin Xiangru (廉頗藺相如列傳), Memorial to the emperor on dispatch of troops (出師表), Notes on Zuiweng Ting (醉翁亭記), Notes on Yueyang Lou (岳陽樓記)*, etc. In the 1990 curriculum document, 34 exemplary texts were listed as core study content for junior secondary school students. Schools could choose 20 to 24 texts from the list to constitute the school syllabus. Another 26 exemplary texts were identified for study at the senior secondary stage. The texts also formed an important component of the Chinese subject test in the Hong Kong Certificate of Education Examination (HKCEE), which was a public examination taken at the end of students' secondary school education and was considered as the gateway to further studies and career pursuance (HKEAA website). The exemplary texts for Chinese education at secondary level belonged to a variety of functional categories. They included: travel notes, biographies, prefaces, fables, letters from home, persuasive essays, and discourses on politics. It is obvious that the teaching of well-written practical texts has never halted throughout Chinese history. However, the tradition of focusing on the literary achievement of these texts has also been followed through. One of the reasons accounting for such a phenomenon is that these texts were composed using classical Chinese whose usage has become rather limited in modern society. In addition, the Chinese society has experienced huge changes at political, societal, economic, and educational levels in the past century since the fall of the Qing dynasty. Most of the addresser–addressee relationship and contextual factors that underlay the composition of the classical practical writings no longer existed, thus rendering many practical text categories obsolete. Text types such as emperors' words, memorials to the throne, inscriptions on tombstones, epigraphs and admonitions, etc., had either been replaced by new text forms written in modern Chinese, or had become redundant. It is only natural that when studying these texts, emphasis would be put on their literary achievement, instead of their practical value, which could no longer be applied to resolving communication problems in modern Chinese society.

To address communication needs in modern society, there are new forms of practical writings. In the colonial days when a large number of administration, legislative and judiciary documents were compiled in English, which was also extensively used in the business and industrial sectors, practical writings in Chinese were only used in limited areas and comprised a relatively small number of categories. This explains why the teaching of Chinese practical writing was not given much attention before 1998. With the opening up of China by the early 1990s, and the return of Hong Kong's sovereignty from Britain to China, Chinese is used more extensively in all areas of the society to serve genuine communication needs between users of Chinese coming from different areas (Chan 2014). The teaching of practical writings was therefore given more emphasis in the curriculum documents.

In line with the policy of promoting practical writing among students, a *Reference for Chinese Practical Writing for Primary and Secondary Schools* (hereafter *the Reference*), covering 17 types of practical texts,[8] was published by the Curriculum Development Institute of the Hong Kong Education Bureau in 2001 (EDB 2001). A learning software based on *the Reference* was also developed and distributed to schools in 2006 (EDB 2006). Unlike other general guidelines on practical writings, *the Reference* provides detailed explanation on the functions of different categories of practical texts, the relationship between the addressers and addressees, the scope of usage, and the ways of expression and linguistic features characterizing each type of practical text. *The Reference* has also paid attention to the ways of presentation of the registers in printed format versus in electronic format publicized on the Internet. It points out that the physical layout of the Internet texts affected the structure as well as mode of presentation of the texts. The Internet version can thus be seen as variations to the traditional type of practical texts. *The Reference* has in fact introduced some new perspectives of analysing and discussing Chinese registers and can be seen as the emerging stage of Chinese for Specific Purposes, incorporating concepts and practices borrowed from sociolinguistics studies.

In 2004, the Hong Kong Government reconstructed a blueprint for education. It was proposed that starting from 2009, the secondary school would be changed from a seven-year system (five-year secondary school and two-year matriculation programme) to a six-year system (three-year junior high school, three-year senior high school) in 2009, and the university curriculum would also be changed from a three-year one to a four-year one in 2012. The Chinese Language curriculum for the new senior secondary (NSS) stage had thus undergone major changes. Under the old curriculum, Chinese language, Chinese literature and Putonghua were three related but stand-alone subjects. They were combined into one under the new curriculum, with a core compulsory component and an elective component. The study of the exemplary texts was eliminated from the core component, which shifted its focus to enhancement of students' language ability. Students were provided with a long list of reading materials instead and were required to demonstrate integration and application of language skills on a variety of topics in different contexts. The elective section consists of ten modules with cross-disciplinary elements embedded. For instance, in addition to Chinese literature and Putonghua modules, there are modules on general science, culture, performing arts, news and media writing and language application in multimedia settings, etc., to cater for the different learning interests and abilities of the students (CDC & HKEAA 2007).

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[8]The 17 types of practical writings include: (1) notice, (2) announcement, (3) informal note, (4) letter, (5) diary and weekly note, (6) regulation, (7) instruction, (8) guideline, (9) speech, (10) meeting note, (11) press release, (12) proposal, (13) report, (14) thematic/feature writing, (15) commentary, (16) advertisement, and (17) promotional writing.

In alignment with the curriculum change, the HKDSE examination has also introduced a number of new question types and assessment method in 2013. Instead of asking students to conduct in-depth analysis of the exemplary texts on top of assessing their other skills in speaking and reading, there was a paper on integrative ability that required students to demonstrate their sub-skills in listening, speaking, reading and writing in relatively complex communication settings, such as answering questions or completing writing tasks after listening to audio/video recordings or after reading certain materials. Many of such materials were practical writings closely related to students' life experience, such as posters, promotional materials, press releases and meeting minutes, and the tasks often involved meeting specific communication needs, such as drafting a speech, writing a report or proposal, in order to demonstrate students' ability to interpret and integrate information, express opinions, make reasonable inferences or feasible recommendations, through the proper use of the Chinese language. The marking schemes required students to demonstrate contextual awareness and to use language appropriate to the contexts and the identity of the addresser required by the topic. There is evidence that both the NSS curriculum and the HKDSE examination have made an attempt to shift the traditional approach of relying too much on studying a limited amount of exemplary texts whose literary achievements are the major focus of attention, to emphasizing more on cultivating students' ability in applying their language skills to serving real-life communication needs, involving different media and multimodal meaning-making. The notion of "practical writing" has been expanded to include all text types that serve specific purposes, and the study of these different text types has become the core content area of the Chinese language subject.

For L2 learners of Chinese in Hong Kong, receiving CSP training is rather uncommon. These L2 Chinese learners can be classified into two broad categories. One comprising students coming from higher/middle-class families, and studying in international schools that mainly follow syllabuses of overseas countries. To them, Chinese is often learnt as an additional and elective language subject not necessarily leading to any formal qualification. Therefore, most Chinese subjects are pitched at elementary or low intermediate levels, with students only able to use Chinese for simple and general communication after completing their study. CSP training is entirely not applicable to these students. Another broad category of students are mostly coming from low-income families, belonging to various ethnic minority (EM) groups who study in mainstream local schools (Chan 2014). These students, while studying side by side with their local peers who are mainly ethnic Chinese, have to follow the local Chinese curriculum which is basically designed for L1 speakers. It turns out that the majority of these EM students failed to catch up with the syllabus, mainly owing to their inability in handling the Chinese language which is also used in most schools as the medium of instruction (MOI) for many other subjects. Passing the DSE Chinese subject also appears to be a mission impossible for them, thus barring them from gaining tertiary education opportunity since a pass in the DSE Chinese constitutes part of the entrance requirements for many tertiary institutions. In order to offer these students an alternative pathway, the

EDB introduced an "Applied Learning (Chinese)" subject to the senior secondary curriculum, as a parallel subject to the NSS Chinese, in order to cater for the EM students' different interests, needs and abilities (CDC & HKEAA 2009). Although this subject does not aim at providing pre-employment training, it focuses on practical use of the Chinese language in occupational settings, such as that of media communication, creative industry, business management, services, applied sciences, engineering and production. Since the subject aims at training generic language skills underlying common daily communication in different contexts, the EM students can choose topics related to different professions (EDB 2017). This subject was formally introduced in 2014/15 and is mainly provided by universities and tertiary institutions through outsourcing. It is anticipated that in the years to come, course providers may come up with research outcomes related to teaching of CSP to L2 learners in the Hong Kong context, with demonstration of course materials.

17.3.2 Teaching and Research on Cross Curriculum Register Variations

Since the 1970s, most secondary schools in Hong Kong have adopted English as their MOI. However, upon the handover of Hong Kong's sovereignty from Britain to China, mother-tongue teaching was vigorously promoted by the education authority since 1997. The EDB has thus organized a series of training workshops for the front-line teachers to prepare them for mother-tongue education. One of the training teams that provided teaching support for the teachers adopted the theoretical framework of Systemic Functional Grammar proposed by M. A. K. Halliday to analyse the various registers constituting discourses used in school textbooks and teaching materials in subject areas such as history, geography, economics, physics, chemistry, and mathematics (Shum 2015). The focus of analysis was placed on how the linguistic features and discourse structure were configurated to construct the knowledge of these different disciplines. Relevant research results were provided to teachers for reference in the form of teaching examples and register study seems to contribute quite substantially to the MOI reform. After the implementation of the new senior secondary school curriculum in 2009, the above-mentioned research team extended their practices to guiding the teaching of the general education subject, which is one of the core subjects in the NSS curriculum.

17.3.3 Teaching of Chinese Practical Writings at Tertiary Sector

Traditionally, teaching of practical writings has never been seen as academically rigorous enough to be given high academic status, as mentioned towards the end of

Sect. 17.2 above. In the 1960s and 1970s, there were only two universities in Hong Kong, both of which did not offer any subject in Chinese practical writing. For undergraduate students majoring in Chinese language and literature, their core area of study remained Confucian classics, history, philosophy and literature, despite the fact that many well-known classical texts were composed with specific purposes. Occasionally, subjects such as "Examples of various genres" (各體文章示例) could be found on the subject list, but the focus was again put on literary skills of the selected texts instead of the analysis of co-variance of linguistic features and contextual factors of practical texts.[9] It has been a common perception held by scholars in the field of Chinese language teaching and research that the study of great books or pursuing of literary creation deserves more attention and respect, while composition of practical writings only involves adjustment of basic writing skills that any person good in the Chinese language should be able to master with minimal or no prior professional training. Consequently, most scholars would only treat research on practical writings as secondary or subsidiary, making it even more difficult for the field to gain proper recognition (Lee 2004). Affected by such a widely shared perception, most curriculum planners did not see a need to offer such courses. Even for students from other disciplines, classical Chinese courses were organized for them if they were required to take Chinese courses at freshmen years at university. It was not until the 1990s that more and more language training elements were gradually added to Chinese language courses at tertiary level.

Hong Kong's economy started to take off by the late 1970s and experienced rapid development in the 1980s. The growing economy required a workforce well equipped with administration and management skills as well as high language proficiency. Therefore, the language courses offered by tertiary institutions gradually shifted from the learning of literary texts to the training of basic language skills and the composition of texts for practical purposes. The first general courses mainly focused on the writing of formal letters for different occasions, such as job application and resignation, leave application, invitation, acknowledgement and complimenting. The adoption of strict format with classical Chinese words and jargon was preferred. As business activities became more complex and diverse, new types of practical writing started to appear, resulting in new registers being introduced to practical writing courses offered by tertiary institutions. A small number of universities even offered courses in professional disciplines, such as Business Chinese, Legal Chinese, Engineering Chinese and Medical Chinese. That said, such courses were mostly taught by junior or lower-rank teaching staff who were not required to conduct research, meaning that both the design and the delivery of these courses were not well informed by research (Lee 2004).

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[9]The author of this chapter had taken such a subject while studying for an undergraduate degree in Chinese language and literature in one of the universities in Hong Kong, and found that this was one of the very few subjects involving text types of different registers offered during the 1970s and 1980s. The practice was not continued after the mid-1980s subsequent to the retirement of the staff teaching the subject.

It was not until the late 1990s that the above-mentioned phenomena began to change: on top of the efforts made by Shum (1997, 1999) and his colleagues (Shum et al. 2002) in adopting the Systemic Functional Grammar to analyse the structure and linguistic features of common practical writings used in the school settings and in various subject disciplines, Chan (2000) also adopted the same theoretical framework to explore the linguistic and grammatical features of three written registers, namely news (local, international, sports and financial), science reports, and different types of business correspondences through the construction of a small corpus; Lee (2000, 2008) introduces theories and concepts of modern business communication when exploring the use of language and communication skills in various types of business documents. The works of these three scholars are among the few published in the early 2000s, with relatively strong theoretical input and high academic standards.

On the other hand, the professional Chinese courses offered by certain universities have begun to demonstrate a closer link to the needs of the industries. For instance, as part of the new four-year curriculum, the Hong Kong Polytechnic University stipulates that students from all disciplines must take a discipline-specific (DS) language course in English and another one in Chinese, on top of two general language training courses. In the process of designing the Chinese DS courses, staff members from both the Chinese Language Centre and the various disciplines worked closely to co-develop the course content. Practitioners from the industry and professional bodies were interviewed to understand the industry's demand for language. More than 30 Chinese DS courses have been developed in 2017 while fine-tuning is still ongoing. The focus of training of these courses is put on the ability of students to summarize information, identify key points according to their importance, and the skills of organizing messages in meaningful order. The unit on written communication mainly teaches students how to compile thematic reports that fulfil genre-specific function and purpose. According to the relevant course documents (CLC 2015), students need to determine the content and structure of the report based on its function and purpose. However, when talking about language requirements, the course adopts a more traditional approach, only pointing out that the language of the special report needs to be accurate, concise, objective and normative but stops short of going further to explore the specific characteristics of such professional reports in terms of their lexical and grammatical features. After all, the teaching and learning of professional Chinese should focus on how the use of language helps to construct the professional knowledge, instead of an introduction of the professional knowledge per se. Since the above-named university seems to be the only tertiary institution that has gone so far as to develop a whole series of discipline-related teaching materials, it is fair to say that at present, the Hong Kong education sector still lacks sufficient understanding of and in-depth investigation into the teaching of CSP.

17.4 Concluding Remarks

The use of language is a kind of multiple-level social activity. When a person wants to convey a certain message to a specific addressee for fulfilment of certain purpose in a specific context, the language will have to be planned and adjusted by taking into consideration all such factors. In other words, the use of language is determined by factors including contexts, participants, purpose, and means of communication, on top of certain psychological factors which are not included in our present discussion. Such facts must be understood and mastered by those who study, use and teach language. In the past, the teaching and research on Chinese language education emphasized the cultivation of students' generic skills through in-depth study of selected classics and literary texts. Many people think that as long as a person's generic competence is high enough, he/she will be able to handle most communication tasks in various contexts across different professional fields. Therefore, it appeared to those people that there is no need for teaching or research on the application and use of written Chinese for practical purposes, resulting in a general negligence of CSP study in the Chinese territories. Such phenomenon has begun to change from the 1990s after the education authorities in Hong Kong have added elements of Chinese practical writing in the curriculum of primary and secondary schools and public examinations for school leavers. In addition, texts for specific purposes have become a major body of study for students of the school sector, although not necessarily under the name of "practical writing". At the tertiary level, even though the teaching of practical writings is quite common, the content and teaching approaches do not seem to be informed by up-to-date findings of academic research in rhetoric or genre-based syntactic studies. It is worth noticing that some universities have begun to offer professional Chinese courses that closely meet the needs of the industry. They have a more in-depth discussion of the context, objectives, functions, and structures of different professional registers, but the language features presented by the different registers are still insufficiently explored, and systematic research with theoretical underpinnings has yet to begin.

As for the CSP teaching for second language learners, the main student body involved are EM students studying in mainstream local schools. A large percentage of them are unable to follow the Chinese language courses designed for native speakers. Some of them choose to take the Applied Learning (Chinese) course that started being offered in 2014/15. As the title tells, this programme has a strong application focus. It is closely tied to different professionals and the learning of various types of practical writings constitutes a major component of the programme content. It can be regarded as a typical CSP programme. Although the course providers still show little awareness of the importance of CSP research and practice, and it appears that there is still a long way to go for CSP teaching and research to generate more concrete output in the Hong Kong context, it is argued that study of practical writings in Hong Kong should be given more attention, not only because its scope is now largely extended to cover a variety of different texts used for specific purposes, but also because many such texts demonstrate linguistic features unique to Hong Kong, such as different kinds of code-mixing, involving Chinese and English, classical and modern Chinese, Standard Chinese and vernacular Cantonese, etc. The convention, format and language use in many practical writings in Hong Kong, being a Chinese community greatly influenced by western practice in many aspects, have also shown characteristics different from those of other Chinese societies. Judging from this perspective, study of practical writings in Hong Kong carries special meaning and it is believed that the outcomes of the study would be able to contribute to CSP study in general in the years to come.

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