

Diachronic Research on Chinese Discourse Markers in China: Looking Back and Moving Forward

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Abstract

Diachronic research on discourse markers (DMs) has gained momentum in recent years, but the international community has only seen a few studies on the evolution of Chinese discourse markers (CDMs). One crucial reason is that many diachronic studies on CDMs are published in Chinese-written journals and have escaped international audiences. To address this gap, this paper reviews the diachronic studies of CDMs from scholars who are housed in Chinese and English language departments in China. The results show that research on CDMs is both benefited from and complicated by mixing the Chinese tradition of exegetical studies and the Western tradition of grammaticalization, lexicalization, and pragmaticalization. Second, conceptual ambiguities lead scholars to reach different conclusions on the evolutionary process of the same CDM. Third, accounting for the entire evolutionary process of CDMs needs to take an interdisciplinary perspective or a holistic view and analyze more than a single interface but jointly consider the linguistic facts at the interfaces of grammar, semantics, and pragmatics. Therefore, scholars must move away from conceptual arguments and focus on the linguistic facts of Chinese language evolution.

Keywords

Chinese discourse marker, Chinese exegesis, grammaticalization, lexicalization, pragmaticalization

Introduction

Being categorized as function words or phrases, discourse markers (DMs) contribute little to the propositional meaning of sentences but signal the relationship between prior discourse and present utterance or convey the attitude and emotion of the speaker. Similar to the constant discussions on the definition, categorization, and function of DMs in the West (Brinton, 1996; Fraser, 1996, 2009; X. Li et al., 2015), research on Chinese discourse markers (CDMs) also engages in constant terminological discussions. Mostly influenced by the translations of different English terms or the different translations of the same English term, as many as 50 terms emerged in mainstream Chinese studies, such as *lianjie chengfen* (连接成分, *textual connectives*) (Liao, 1986), and *gongneng ci* (功能词, *function words*) (Shao & Zhu, 2005) from traditional Chinese publications, as well as *yuan huayu* (元话语, *metadiscourse*) (Z. Li, 2001, 2003; J. Xu, 2006), *huayu xiaoci* (话语小词, *discourse particles*) (Wu, 2005), *huayu lianxiyu* (话语联系语, *discourse connectives*) (Z. He & Ran, 1999), and *yuyong biaojiyu* (语用标记语,

pragmatic marker) (M. Fang, 2005a, 2005b; Feng, 2004, 2005) from modern linguistic studies. These various terms reflect researchers' distinct interpretations of the essential features of the same linguistic phenomenon from various theoretical perspectives (Ran, 2000a; X. Li et al., 2015). However, scholars from the Chinese mainland, primarily from the Chinese and English language departments, with fewer contributions from the broader Greater China region and other countries, often opt to publish in Chinese journals predominantly distributed within China. These scholars frequently use terms interchangeably, and occasionally, the same scholar employs varying terminologies across different publications. Despite these differences, *huayu biaojiyu* (话语标记语,

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DM) seems to develop into an umbrella term to cover various linguistic markers that are studied in the Chinese research community (D. Huang, 2001; Yin, 2012a). In this study, following the conventional practice in Chinese research communities, we use DMs to refer to such linguistic phenomena in the Chinese language. The successive presidents of the China Pragmatics Association, who hold a high academic reputation in the field of pragmatics within China—Ziran He (Z. He & Mo, 2002), Xinren Chen (X. Chen & Wu, 2023), and Yongping Ran (Ran, 2000a, 2000b)—have all progressively incorporated the term DM into their scholarly work. Therefore, in this study, we do not distinguish among terms such as DMs, pragmatic markers, or metadiscourse in Chinese in a narrow sense but use CDMs to cover Chinese lexical items that do not contribute propositional meaning to the sentence but index the speaker's intended interpersonal meaning (i.e., affective attitudes) and textual meaning (i.e., logical relations between different parts of the text) in communication.

As a “living fossil” of interface evolution, DMs have garnered significant interests within the realm of historical linguistics to date. The diachronic research on DMs has experienced a peak in the form of books (Schiffrin, 1987), special issues (Fischer, 2006), and journal articles (Fraser, 2009) since the 1980s. A quick search conducted on October 19th, 2023, within the Web of Science database for the diachronic study of terms including “discourse marker” “discourse particle” “discourse connective” “cue phrase” “discourse operator” “discourse signaling device” “indicating device” “pragmatics connective” “pragmatic particle” “pragmatic operator” “phatic connective” and “pragmatic marker” yielded 161 publications in Indo-European languages such as English (Koops & Lohmann, 2015; Traugott, 2019), German (Siebold, 2021), and Spanish (Duque, 2019) as well as Asian languages such as Korean (Ahn & Yap, 2022) and Japanese (Tanno, 2018). For instance, typical instances of DMs in English encompass *well*, *so* (Schiffrin, 1987), *anyway* (Urgelles-Croll, 2010), *I think* (Aijmer, 1997), *but* (Fraser, 2006), etc.

As a pivotal element of the Sino-Tibetan linguistic family, Chinese exhibits both similarities and distinctions in the evolution of linguistic markers when compared to Indo-European languages. Research on CDMs has attracted enormous attention in China (Jing et al., 2023, p. 30), such as *jiushi* (就是, *that is*) (S. Yao & Yao, 2012), *bieshuo* (别说, *don't say*) (Dong, 2007), *wanle* (完了, *it's done*) (Z. Li, 2004; Z. Gao, 2004a), and *ni dong de* (你懂的, *you know*) (Yang, 2016). However, only a few diachronic case studies on CDMs, nine in all in the above quick search, that is, *bieshuo* (J. Chen, 2017), *bushi* (不是, *no*) (J. Chen, 2018; Zhan et al., 2021), *shishishang* (事实上, *based on facts*) (X. He, 2021), *suoyi* (所以, *so*) (X. Li

& Xiang, 2019), *zaishuo* (再说, *besides or moreover*) (Peng, 2014), *dehua* (的话, *like this*) (W. Wang, 2017), *meiyou* (没有, *no*) (Y. Wang et al., 2007), *wanle* (Zhan & Sun, 2022) are published in international journals. These studies only represent a fraction of the research landscape among the Chinese research communities. One crucial reason is that many of the authors who published diachronic CDM research are housed in the Chinese language departments and are more comfortable with publishing research in Chinese journals for various reasons. As a result, many important studies failed to reach international audiences.

To address the imbalance between prolific findings in Chinese studies and the scarce international voice of Chinese scholars, this paper aims to introduce the notable diachronic studies of CDMs published in China to international audiences, sorting out the contributions and limitations in existing diachronic research on CDMs, and exploring the directions for future diachronic research. Section “Research Questions and Methodology” introduces the research questions and methodology. Section “Diachronic Research on CDMs” presents a brief review of CDMs studies in traditional exegetical sense and then surveys different approaches to the diachronic research on CDMs. Section “Discussion” summarizes the findings in terms of language typology, and proposes several newly emerging approaches to the diachronic studies of CDMs. Our review aims to serve as a bridge for Chinese scholars to spread their voices in the international community and for international scholars to better understand the insights from Chinese studies, contributing to research on historical pragmatics and language typology.

Research Questions and Methodology

Our review examines the differential interpretations of the evolution of CDMs by scholars from various schools of thought, discussing the underlying reasons for these inconsistencies. We aim to demonstrate that these inconsistencies stem from scholars' different undertakings of Chinese linguistics or Western linguistics traditions, as well as their interpretations to the processes of grammaticalization, lexicalization, and pragmaticalization in the evolution of CDMs. Specifically, three research questions are proposed:

- 1) How does the Chinese exegetical research contribute to the diachronic study on CDMs?
- 2) How do the Western linguistic traditions, that is, grammaticalization, lexicalization, and pragmaticalization, contribute to the diachronic study of CDMs?

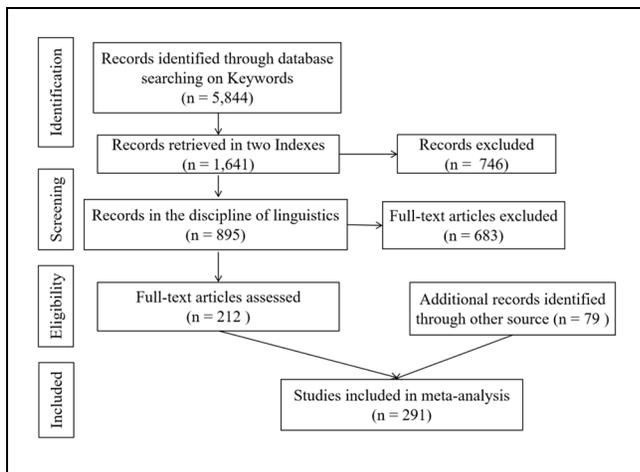


Figure 1. Summary of the search strategy results and set of included studies.

- 3) How can diachronic studies on CDMs benefit from the integration of various research traditions?

To sketch out the landscape of Chinese scholars' research on CDMs, we collected publications from the following sources (See Figure 1). First, we searched for the relevant journal articles and dissertations that are indexed in the China National Knowledge Infrastructure Database (CNKI). As the largest academic database in China, CNKI covers more than 8,540 journals. Therefore, this database can provide us with a comprehensive diachronic research on CDM in China.

A quick search on CDM and its universally acknowledged variant aforementioned in CNKI on September 20th, 2024 resulted in 5,844 entries. A third of high-quality publications of research are indexed by the Chinese Social Sciences Citation Index (CSSCI) and *A Guide to the Core Journal of China by Peking University Library*, both of which are recognized indexes in the academic community in China. Articles irrelevant to the diachronic research (i.e., evolution, grammaticalization, lexicalization, pragmaticalization, constructionalization, etc.) in our review were excluded through a thorough examination of their titles and abstracts.

Furthermore, to present an overview of CDM research, we incorporated articles penned by highly esteemed Chinese scholars, even if their publications were not indexed in the aforementioned two prestigious indices. Likewise, we also drew upon monographs, book chapters, and dictionaries authored by distinguished scholars within the field (二十世纪现代汉语语法八大家, the Eight Prominent Scholars on Chinese Grammar in the 20th Century) or issued by reputable commercial and academic publishers in China, such as Commercial Press

and Peking University Press. This exhaustive search yielded 79 relevant entries. These publications encompass contributions from both the seasoned scholars of the Chinese mainland and the emerging generation, with a significant majority holding doctoral degrees in linguistics.

Diachronic Research on CDMs

The study of CDMs in China is deeply influenced by traditional Chinese exegesis and Western linguistics. Early studies on CDMs mostly followed the traditional exegetical paradigm and included them in the category of *Function Words* with few references to international publications. Since the 1990s, scholars housed in the foreign language departments have been exposed to Western linguistic theories and have been introducing them to the broader research community in China. In addition, the new generation of scholars housed in the Chinese language departments with higher confidence in their foreign language proficiency become more receptive to Western linguistic theories, resulting in more fruitful findings. This section reviews studies that follow the Chinese exegetical tradition and the Western traditions of grammaticalization, lexicalization, and pragmaticalization, sketching out the research landscape in the contemporary Chinese linguistics community.

CDMs in Chinese Exegesis and Its Recent Development

Originating from interpreting the meanings of ancient Chinese words, Chinese exegesis is a branch of philology that focuses on interpreting words and studying semantics in Chinese. Studies following Traditional Chinese Exegesis treat CDMs as a subsection of *Function Words* based on their expressive functions (X. Chen, 1992, pp. 11–12). Unlike Content Words, *Function Words* serve to establish connections, as classified within the seminal work *Ma's Grammar* (Ma, 1983[1898]), penned by Ma Jianzhong (1845–1900), the pioneering author of the first comprehensive Chinese grammar monograph in China. This groundbreaking book integrated Western grammatical concepts with the unique features of Chinese grammar, meticulously categorizing *Function Words* into utterance-initial expletive conjunctions, continual expletive conjunctions, adversative conjunctions, and inferential conjunctions. A consensus has been reached that *Function Words*, as crucial devices for signaling grammatical relations, are often affixed to Content Words or syntagma within syntax, thereby rendering them incapable of functioning independently as syntactic elements (Y. Hu, 2011, p. 278; B. Huang & Liao, 2007, p. 27; Shao, 2001, p. 176). The transition from interpreting

word meanings to embracing their syntactic connecting function has marked a paradigm shift in the diachronic study of CDMs. This shift has evolved from the traditional annotation of Chinese characters to a more nuanced analysis of Chinese character categories and sentence structures, particularly since the publication of *New Version of Chinese Grammar* (J. Li, 2007[1924]), China's pioneering and comprehensive work on modern Chinese grammar authored by Li Jinxi (1890–1978). This seminal text encapsulates the fundamental laws governing Chinese word formation and sentence construction.

Given the resemblance between connectivity and adhesion, CDM is subsequently often regarded as a subcategory of conjunctions within the realm of *Function Words*. Conjunction is regarded as an umbrella term encompassing subordinating conjunctions, adverbial clauses, and phrases that link preceding and subsequent elements. (M. Lu & Ma, 1985, pp. 214–230; S. Lv, 1999). Prototypical examples of CDMs in this category originate from the macrosyntactic usage of conjunctions at the end of the preceding sentence and beginning of the following sentence, or when commenting on someone's words, such as *danshi*, *raner* (然而, *however*), and reduced main clauses, commonly in informal spoken language or certain types of written language, such as *woxiang* (我想, *I think*), *zhe jiushi shuo* (这就是说, *that is to say*) in Chao (1979, pp. 351–353). Z. Xie et al. (1994) argue that *raner* in ancient Chinese expressions can be used not only as a conjunction to denote the concept of *contrast* but also to the concept of *following*, while W. Wang and Zhou (2005) examine the traditional use of *ranhou* in ancient Chinese discourse and explore its new linking function in modern spoken Chinese, arguing that it can be used as a topic change marker in discourse. The reduced main clause is also considered as a parenthetical usage of some redundant phrases in sentences, which, as particular linguistic components, are syntactically independent, flexible in position, and isolated from the main clause (M. Gao, 2011[1948]; I. Wang, 1985, pp. 323–325).

Following the exegetical tradition, Chinese scholars often use *abstraction* to highlight the nature of *Function Words* (Xiang & Huang, 2008), as well as their progressive evolutionary process [content > semi-content/semi-function > function] (Yuan, 1989[1710]). Abstraction bridges the gap between grammar and semantics in that *Function Words* go through semantic bleaching which is frequently triggered by syntactic changes, only retaining their grammatical functions in sentences at the end of the evolutionary process (Ma, 1983[1898]).

Since the 1950s, research on abstraction has shifted from the typical syntactic and semantic features of *Function Words* to their derivation of grammatical functions in the evolutionary process. Linguists agreed that abstraction plays a vital role in the rise of grammatical

functions in Chinese, contributing to the emergence of the most commonly used *Function Words* in Ancient Chinese (H. Xie, 1987). During the evolutionary process, the lexical items also experience changes in pronunciation, grammar, semantics, morphology, and syntax, all of which create successive changes of grammatical meaning from vagueness to distinctness, structure from flexibility to inflexibility, function from diversity to uniqueness, as well as morphology from monosyllables to disyllables (Duan, 1988; Y. Li, 1981).

Overall, traditional exegesis primarily delves into the exploration of the intrinsic law governing the creation and evolution of words, alongside the emotion embedded in word expression, which aligns seamlessly with the role of CDMs in recognizing the speaker's emotional stance. J. Shi (1997) argues that the adverb *bushi*, in addition to *denial*, can be used as a reminder or confirmation in rhetorical questions. These two are different in function and form. The two usages of the adverb *buguo* (不过, *however*) in pre-Qin Chinese laid the foundation for the emergence of its marking usage in discourse (L. Liu, 1997). W. Wang (2003), on the other hand, explores the semantics and usage of “*shuo*-types” speech verbs in Chinese from diachronic and synchronic perspectives, discussing the variations in their lexical development. More recently, scholars in China have become more attentive to topics such as semantic reduction, the syntactic position advantage as well as the social attributes of CDMs (M. Fang, 2000). The procedural meanings, meta-pragmatic functions, and syntactic detachability of CDMs as well as their evolutionary process are examined in detail using corpus data (X. Li, 2008; L. Liu, 2005; J. Xu, 2009).

Since the turn of the new century, Chinese scholars rooted in exegetical research have ventured beyond traditional boundaries. They have shifted from a syntactic-semantic approach to a pragmatic-cognitive approach, enhancing the diversity and depth of Chinese exegetical endeavors while expanding the temporal scope of CDM research. In this period, the exploration of modern CDMs, including macrosyntactic conjunctions and abbreviated main clauses, has transitioned from static analyses of traditional function words to dynamic, interdisciplinary studies. These studies integrate syntactic, pragmatic, and semantic considerations, drawing from the perspectives of historical linguistics and linguistic typology. Typical examples in leading Chinese journals include *qiao/kan ni shuo de* (瞧/看你说的, *look/see what you said*) (Y. Li, 2011; Z. Li, 2011), *wo shuo shenme lai zhe* (我说什么来着, *what did I say*) (W. Lv, 2011), *zhebu* (这不, *you see*), *kebu* (可不, *isn't it*) (Yu, 2009), and *yao wo shuo* (要我说, *if you ask me*) (J. Zhang & Tang, 2013).

With the advent of Western grammaticalization research (Shen, 1994; C. Sun, 1994; Wu, 2005), the realm

of abstraction in Chinese exegesis has undergone a profound enrichment. Chinese scholars, including J. Liu et al. (1995), Hong (1998), Z. Li (2015), D. Liu (2001), Wu (2003, 2007), Y. Shi and Li (2001), Y. Z. Shi (2006), and Yin (2012a), have displayed a profound interest in investigating the process of grammaticalization. This includes examining factors such as shifts in the syntactic environment, semantic bleaching, contextual factors, reanalysis, and language contact, as well as the underlying mechanisms of grammaticalization, which encompass renewal, reinforcement, and unidirectionality. Furthermore, to elucidate the multifaceted functionality and systematic nature of grammatical forms in language evolution, scholars have resorted to semantic map models derived from cognitive semantics and typology (Guo, 2012; Wu, 2011, 2014; Wu & Zhang, 2011).

To summarize, adhering to the Chinese exegetical tradition, the diachronic research of CDMs stems from investigating the evolution of semantic and syntactic attributes of ancient Chinese words within the syntactic-semantic framework. The grammatical characteristics of CDMs are elucidated, and the lexical units undergo a gradual refinement process, transitioning from Function Words to conjunctions, which are then specified into macrosyntactic conjunction usage and simplified main clauses. The synchronic examination of syntactic patterns and semantic shifts facilitates researchers in clarifying the essence of CDMs and establishes a groundwork for comprehensive studies on their dynamic development at the intersection of syntax, semantics, and pragmatics.

Diachronic Studies of CDMs Under the Influence of Western Linguistics

Distinct from the prevalent grammaticalization framework for DMs in Western academia (Barth-Weingarten & Couper-Kuhlen, 2002; Brinton, 1996; Traugott, 1995), Chinese scholars on CDMs contend that linguistic evolution necessitates alterations at the intersection of grammar, semantics, and pragmatics. These scholars have integrated traditional methods of grammaticalization and lexicalization with innovative approaches tailored to the unique features of pragmatization in Chinese. Influenced by Western linguistic theories, Chinese scholars in foreign language departments emphasize examining lexical elements for semantic loss and the emergence of grammatical roles during the evolution of CDMs. Meanwhile, those in Chinese language departments focus on the monosyllabic to disyllabic transformation and related changes in CDMs.

Diachronic Studies on CDMs in Grammaticalization. The utilization of *grammaticalization* in contemporary Chinese linguistics is deeply rooted in the concept of

abstraction within the syntactic-semantic framework of traditional Chinese exegetical studies. The distinction lies in that grammaticalization focuses on the generation of syntactic structures, emphasizing the conventionalization of syntactic roles played by semantic or pragmatic elements, whereas abstraction in its narrower sense presupposes merely a process of semantic loss and syntactic transformation, excluding the formation of functional words or grammatical patterns, thereby inadequately explaining the emergence of grammatical roles in CDMs.

CDM is an intriguing research topic because it marks (inter)subjectivity, displays shared evolutionary paths cross-linguistically and is a typical phenomenon of grammaticalization (Wu, 2005). Case studies on the grammaticalization of CDMs emerged at the beginning of the 21st century. Those cases indicate that reanalysis is an important mechanism in grammaticalization that contributes to syntactic changes in the surface structures of sentences. Much-discussed examples include *nikan ni* (你看你, *looking at you*), *nixiang* (你想, *you think*), *wanle*, *ni bieshuo* (你别说, *you do not say*), and *zhebu*, etc. The conventionalization in CDMs *nikan ni* results from the reanalysis of the trans-layered surface syntactic structure from $[ni\ kan\ /ni\ x]$ to $[ni\ kan\ ni]$ (J. Zheng & Zhang, 2009), while *nixiang* from $[ni + xiang + \text{Object (Phrase/Subordinate Clause)}]$ to $[ni\ xiang, + \text{Subordinate Clause}]$ (D. Zhang, 2009). Furthermore, investigations on CDMs *ni bieshuo* (Q. Zhang & Xie, 2001), *zhe bu* (J. Hu, 2010), and *wanle* (Yin, 2011) also indicate that reanalysis is inclined to occur between adjacent linguistic items under the influence of the economy principle. For instance, *ni bieshuo* originates from the omission of anti-facts elements in syntactic structure $[ni\ bie\ shuo + \text{anti-facts, facts}]$, *zhebu/kebu* from the omission of *shi* and *ma* in rhetorical questions $[zhe/ke\ bu\ shi\ (...)\ ma?]$, and *wanle* starts with the omission of the verb element in the syntactic structure $[\text{Verb} + wan + le]$.

Another prominent aspect in the grammaticalization of CDM involves category transfer, firstly from the propositional domain (signifying action meaning) to the epistemic domain (implying knowledge-based meaning), and eventually to the discourse domain (conveying discourse-level meaning). Typical examples are CDMs with verbs, that is, *xiang* (想, *think*) (Z. Li, 2007), *shuo* (说, *say*) (Z. Li, 2014; Qi, 2022; D. Wang, 2024; Z. Yao, 2008), *kan* (看, *look*) (Z. Chen & Piao, 2006; L. Zeng, 2005; M. Zheng, 2023), and *(ke)jian* (可见, *it is evident that*) (S. Q. Li, 2012). Category transfer in grammaticalization frequently involves (inter)subjectification from objective action to subjective epistemic meaning, such as demonstrative CDMs *zhege/nage* (这个/那个, *umm, er, or well*) (L. Y. Liu, 2009; Yin, 2009; Yue, 2020), sequential CDM *ranhou* (J. Gao, 2022; H. He & Sun, 2010), unexpected CDMs *buliao* (不料, *unexpectedly*), *mei xiang dao*

(没想到, *had not thought of*), *qiliao* (岂料, *unexpectedly*), *shuizhi* (谁知, *who knows*), *danshi* (但是, *but*) as well as *nazhi* (哪知, *unexpectedly*) (Cao & Xin, 2012; Y. P. Sun, 2020; J. Zeng & Lu, 2016), and subjective-predicate type CDM *ni shuo* (你说, *you said*) (Sheng, 2013; S. Tang & Hua, 2011).

To sum up, studies on CDMs indicate that speech verbs and demonstrative pronouns tend to become grammaticalized as a result of alterations in syntactic functions, shifts in semantic content, and variations in the quantity of information across diverse contexts (J. Hu, 2012). Additionally, this process is influenced by frequent reanalysis and linguistic adjacency (L. Huang & Xiang, 2010).

Diachronic Studies on CDMs in Lexicalization. Scholars have questioned whether grammaticalization is indeed the only underlying evolutionary process of all DMs, as the inventory of DMs is composed of diverse items and DMs are often agrammatical (Brinton, 2008, p. 49). Similarly, scholars of Chinese language have also questioned the uniqueness of grammaticalization in the evolution of CDMs. Considering that the Chinese lexicon experienced a gradual shift from monosyllables in ancient Chinese to disyllables in modern Chinese (S. Jiang, 1994, p. 285; L. Wang, 1989, p. 228), scholars in Chinese language departments tend to endorse lexicalization in the evolution of CDMs which includes processes of deriving new words and developing conventionalized meanings, as well as a reversed process of grammaticalization.

Although the term *lexicalization* appeared relatively late in Chinese linguistics, the study of Chinese lexicalization could be traced back to the exploration of word formation in traditional exegesis. The emergence of *Ma's Grammar* advanced traditional Chinese lexicography in that the concept of meaning, functions of word formation, attribute of words, and the relations between those components enter into the realm of Chinese lexicalization studies (Z. Lu et al., 1964; L. Wang et al., 2003). An emerging consensus (Chu, 1986, p. 1; Pan et al., 2004, p. 379; L. Wang, 1985, p. 51, 1989, p. 277) is that the composite meaning from conventionalization of word collocation under high frequency naturally becomes prototypes of phrases, which is characterized by an expanded process of word formation from lexeme A and B to new phrase C (Fu, 2001, p. 181). The combined lexemes would generate subordinate and coordinate compound phrases (L. Wang, 1985, p. 51; Yang & He, 2001: 35) or subject-predicate compound phrases, verb-object compound phrases, coordinate compound phrases, subordinate compound phrases, verb-compliment compound phrases based on the syntactic principles involved in word formation (Ge, 2001, pp. 61–94; Y. Liu et al., 2004, p. 13). However, traditional Chinese exegesis lacks

further diachronic study of words, as well as accurate and in-depth theoretical exploration on the principles governing the evolutionary process (H. Liu, 2009a).

The initial utilization of *lexicalization* in Chinese language is documented in H. Zhou (1994), referring to the formation of new phrases via the conventionalization of rhetorical devices. Subsequently, lexicalization is scrutinized as a process of lexical grammaticalization (S. Xu, 1998), or as a process where the transparency of lexical expressions diminishes until their meanings can no longer be deduced from their literal sense (J. Wang & Miao, 2001), or as a transition from syntactic structures to lexical phrases due to functional alterations (Dong, 2002a, 2009), or as a shift from adjacent words to a phrase (Shen, 2004). It is widely acknowledged that lexicalization entails the conversion of non-lexical elements in a broad sense, rather than merely the shift from grammatical components to lexical components in a narrow sense.

In the 21st century, research on lexicalization in China has increasingly focused on the diachronic evolution of phrases (H. Liu, 2010), particularly on how Chinese linguistic units, such as lexical phrases or syntactic structures, become integrated into the lexicon (L. Jiang, 2004; C. Wang, 2005). It has been suggested that the proliferation of disyllabic words in Chinese is largely due to lexicalization (Dong, 2002b), a process that may lead to an increased dependency on the constituents as the meaning becomes more generalized or certain elements are lost. The majority of Chinese disyllabic words primarily stem from phrase structures, syntactic structures, and layered structures, with lexicalization being subconsciously influenced by rhythmic mechanisms, linear positioning, semantic shifts, and frequent adjacency. Typical pathways of lexicalization encompass the lexicalization of X-*shuo* and X-*zhe* constructions, the linking use of adjacent adverbs, and the evolving connection between adverbs and conjunctions (Dong, 2003a, 2003b, 2004a). Research has indicated that the lexicalization of adjacent non-syntactic structures exhibits unique evolutionary patterns, which are shaped by processes such as reanalysis, analogy, and cognitive chunking. These mechanisms are driven by oral communication, the vernacular movement in Chinese, and meta-pragmatic awareness (H. Liu, 2009b, 2011). Furthermore, the disyllabification of trans-layered structures may stem from the conventionalization of structural reduction, a phenomenon that occurs under the principle of language economy (C. Liu, 2013).

Scholars in departments of the Chinese language also tend to attribute the evolution of CDMs to the conventionalization of frequently used adjacent constituents. This perspective is grounded in the understanding that disyllabification represents an essential pathway for lexicalization, and almost all Chinese phrases are composed

of a pair of monosyllabic words. Additionally, there is a shift from an analyzable interior structure to one that is non-analyzable (Dong, 2007). Following the evolutionary cline of [phrase > cognitive epistemic adverbial > DM], the lexicalization of CDMs is manifested in cases such as trans-layered structure X *shuo* (Dong, 2003a, 2004a, p. 161), X *shi/zhe* (Dong, 2003b; 2004b), *wanle* (Z. Gao, 2004a; Z. Li, 2004), phrases *shuizhi*, *bieshuo* (Dong, 2007), *huitou* (Z. Gao, 2004b; Z. Li, 2006) and clausal sentence *wo gaosu ni* (Dong, 2010). In addition, speech verbs, including *shuo*, *xiang*, and *kan* are more easily conventionalized to become CDMs with adjacent items, such as *geng buyong shuo* (更不用说, *not to mention*) (Xiao & Zhang, 2014), *shuo zhende* (说真的, *seriously*) (Su, 2014), *huashuo* (话说, *it is said that*) (C. Zhou, 2012), and *nikan* (你看, *you see*) (Y. Shi, 2022; Wei & Zheng, 2013).

Lexicalization in Chinese usually goes through the stages of reanalysis, pragmatic inferencing, and contextual absorption. The syntactic change of linear position frequently functions as a trigger of lexicalization (Q. Fang, 2013), for example, *shiji shang* (实际上, *actually*), from an internal sentential position as an adverbial in [subject + *shiji shang* + V + O] to the initial position as a CDM in [*shiji shang*, + subject + V + O]. Reanalysis is also found in the syntactic structure as in the rise of CDMs *sheizhi* (D. Hu, 2011) and *shuishuo bushi* (谁说不是, *who said not*) (C. Liu, 2013), in which the gradual fusion between the boundary of subject *shui* (谁, *who*) and verb *zhi* (知, *know*) in the former and the boundary of elements in the latter, that is, subject *shui*, verb *shuo* (说, *say*) and object *bushi* emerged. Pragmatic inferencing and context absorption are crucial for the conventionalization of emerging modality functions within those developing CDMs, such as *kebushi* (可不是, *exactly*), *guanta* (管他, *whatever*), and *hebi* (何必, *why should*) (T. Zhang, 2011, 2012, 2013).

In summary, the lexicalization process in Chinese is concerned with the blurring of boundaries within the components of CDMs, as they evolve into newly established word classes. This evolution progresses from a state of analyzability to non-analyzability, culminating in the complete conventionalization of their form and meaning. It is important to note that lexicalization does not specifically address whether the components involved are grammatical or lexical. This is because the components can comprise solely lexical elements, exclusively grammatical elements, or a combination of both.

Diachronic Studies on CDMs in Pragmaticalization. Chinese research on the development of CDMs over the past decades has mainly been following grammaticalization or lexicalization. However, Brinton (2008, p. 61) suggests that DMs do not result from grammaticalization because

they may not be a part of “grammar proper” or a readily identifiable word class, typically occupying an extra-sentential position, conveying non-truth-conditional meaning, and functioning pragmatically. This is consistent with the observation that the classical parameters used to characterize the canonical type of grammaticalization (Lehmann, 1995[1982], p. 306) no longer neatly apply to the evolutionary processes in each case. Therefore, grammaticalization has frequently been broadened to resolve the dilemma, resulting in disputes in the concept of grammaticalization.

On the other hand, the diverse array of word classes within DMs clearly indicates that numerous instances are not inherently unanalyzable or fully lexicalized in morphological terms. Consequently, rather than drawing a binary divide between lexical and grammatical elements, scholars have sought to accommodate a third category known as “discourse items” (Hansen, 1998, p. 225). Concurrently, Erman and Kotsinas (1993), Aijmer (1997), and Frank-Job (2006) have suggested an alternative process, termed “pragmaticalization,” which addresses the shift of DMs from propositional content to textual and interpersonal functions.

The term pragmaticalization is not coined to tackle the above problems arising in the evolution of DMs. The earliest usage of pragmaticalization appears in Erman and Kotsinas (1993), discussing the mechanisms behind the evolution of DMs *ba* and *you know*, referring to the case that a lexical element could directly evolve into a DM without an immediate stage of grammaticalization, which mainly serves as a text structuring device at non-sentential levels of discourse. Aijmer (1996) suggests that the evolutionary results of pragmaticalization involve conversational routines with the function of discourse organizing and emotional expressing, such as *thank you*, and *I am sorry*. Further evidence for pragmaticalization comes from Aijmer (1997), who maintains that DMs are typically pragmaticalized with pragmatic, syntactic, semantic, and prosody features since they involve the speaker’s attitude toward the listener. Distinct from grammaticalization, pragmaticalization concentrates on meaning-functional changes, involving shifts from the semantic domain to the pragmatic domain (Onodera, 2004, p. 12), thus creating function words with particular discourse characteristics or pragmatic functions.

Further elucidations on pragmaticalization can be found in the works of Frank-Job (2006) and Beijering (2012, pp. 60–61). Frank-Job (2006) characterizes pragmaticalization as a process in which a syntagma or word form, within a specific context, shifts its propositional meaning toward a predominantly metacommunicative, discourse interactional meaning. This shift occurs as pragmaticalization involves the routinization and functional specialization that impact the discourse-organizing

function of words, rather than contributing to the propositional content of communication. Beijering (2012, pp. 60–61) views pragmaticalization as a multifaceted change that encompasses formal reanalysis and semantic reinterpretation, which is accompanied by a subset of correlated primitive changes across various linguistic levels. Beijering also suggests that pragmaticalization results in the emergence of DMs, and the side effects of these changes can be utilized to identify instances of pragmaticalization.

This approach has also been explored in recent studies on CDMs, with international publications on pragmaticalization resonating with some Chinese scholars. Those researchers, such as Shen (1998), J. Shi (2005, pp. 208–235), Hou (2007), and Xiang (2014, p. 200), generally regard pragmaticalization as the grammatical study of pragmatic functions or the conventionalization of usage across various contexts, alongside the fossilization of grammatical forms. The short-circuited conversational implicature, resulting from the omission of pragmatic inferential processes under the speaker's metapragmatic awareness, tends to become conventionalized through high-frequency usage.

Chinese studies have also attributed the rise of CDMs to pragmaticalization (L. Huang, 2012; Xiang, 2010), considering it as a type of conventionalization that is distinct from grammaticalization (Qiu & Sun, 2011). Pragmaticalization emphasizes semantic-pragmatic changes, whereas grammaticalization focuses on semantic-grammatical changes, although both processes involve semantic reduction and bleaching (J. Li, 2011). For instance, the speech verb *shuo* could undergo pragmaticalization [speech verb > adverb > conjunction > DM] and adverbialization [speech verb > sentential adverb > grammatical marker], respectively (H. Zhang & Zhang, 2015). Additional examples include clausal sentence *bushi wo shuo ni* (不是我说你, *I am not criticizing you*) (Yue, 2011), rhetorical questions *zheibu* (M. Zhou, 2011), and *shuishuo bushi* (C. Liu, 2013), all of which are triggered by changes in syntactic environment and ultimately become conventionalized as CDMs after the intensification of interpersonal function or the conventionalization of rhetorical function.

Grammaticalization and lexicalization do not necessarily lead to pragmaticalization, nor is pragmaticalization a subset of grammaticalization, despite their potential contributions to the emergence of CDMs. Pragmaticalization can occur independently of grammaticalization as in the rise of *nikan* and *wokan* (我看, *in my view*), or include grammaticalization as in the rise of *buguo* which grammaticalizes into a negative focusing adverb before acquiring pragmatic functions (R. Tang, 2008). Despite the diversity of evolutionary clines in CDMs *jiushi*, *name* (那么, *then*), *wanle*, and *wokan*, where lexicalization and

grammaticalization function at various degrees or distinct phases, Yin (2012b) contends that pragmaticalization exerts a more decisive influence than either lexicalization or grammaticalization in the evolution of CDMs. The characteristic features of pragmaticalization have been observed in various instances, including the detachability from the main clause in *duile* (对了, *incidentally*) (Ji, 2012; Y. X. Shi, 2017), the cognitive shift of action from the spatial domain to the mental domain in *lai* (来, *come*) (Hou, 2012), and the high frequency of use in *jiang hua'er* (讲话, *it said*) (W. Li, 2012).

In summary, pragmaticalization plays a pivotal role in the diachronic analysis of CDMs. It is widely acknowledged that the pragmaticalization process of CDMs entails an evolution of their scope, extending from syntactic dimensions to the broader realm of discourse. This progression unfolds subsequent to semantic bleaching, which is succeeded by the formalization of the entire structure, and culminates in the conventionalization of the pragmatic functions inherent to CDMs.

Discussion

The study of CDMs has been significantly enriched by the integration of traditional Chinese exegesis with contemporary linguistic theories. Despite the relatively recent coinage of the term DM, CDMs have long been a pivotal subject within the realm of Chinese linguistic research. The substantial expansion in CDMs can be credited to the robust paradigm of Chinese exegesis research, which has assimilated insights from lexicalization, grammaticalization, and pragmaticalization. Moreover, the investigation of traditional exegetical texts has furnished reliable and significant linguistic data for the analysis of Chinese *Function Words*, encompassing their lexical, semantic, and syntactic characteristics. This body of evidence has been instrumental in the examination of CDMs within the framework of modern linguistics, particularly since the turn of the millennium.

Contributions of Diachronic Studies of CDMs

The profound studies on CDMs both in traditional Chinese exegetical studies and modern linguistics are under different terminologies by scholars who are housed in Chinese and English language departments in China. These diachronic studies of CDMs have significantly enhanced our understanding by connecting the dots between Chinese and Western linguistic studies from a typological perspective, and they offer valuable insights and methods for future research on DMs across diverse languages.

Initially, Chinese scholars' studies on CDMs have revealed a significant degree of typological similarity to

DMs found in European languages, exhibiting comparable functional properties, lexical characteristics, syntactic attributes, evolutionary paths, and triggers (Heine, 2013; Rouchota, 1998; Traugott, 1995; Traugott & Trousdale, 2014). As functional words within Chinese language, CDMs possess distinctive features that reside at the interface of semantics, syntax, and pragmatics. Their evolution is deeply rooted in continuous changes occurring at these three intersecting domains. Additionally, there are analogous debates concerning terminology, word classes, and inventories that arise in diachronic analyses of both CDMs and DMs in other languages. The development of CDMs highlights the syntactic-semantic and pragmatic-cognitive transformations that have taken place over time (G. Yang et al., 2017). Drawing upon traditional exegetical studies that encompass lexical, grammatical, and rhetorical dimensions, research on CDMs delves into the synchronic aspects at the grammatical-semantic boundary and the perpetual alterations that occur from a diachronic perspective. The cognitive-pragmatic approach in European languages has substantively supported and advanced the ontological research of CDMs in the Chinese Mainland, offering valuable insights into the intricate relationship between language, thought, and context.

Second, Chinese scholars' studies on CDMs have revealed that lexicalization, grammaticalization, and pragmaticalization each concentrate on the evolution of CDMs at their respective interfaces. However, it is important to note that none of these processes can comprehensively describe the entire evolutionary process of CDMs over time. Numerous studies (Dong, 2007; Z. Li, 2009; Z. Yao, 2008) on CDMs have sought to broaden the scope of grammaticalization or lexicalization by integrating the concepts of (inter)subjectivity and (inter)subjectification into these processes, or by attempting to reconcile pragmaticalization with lexicalization or grammaticalization. Nevertheless, this has often led to a confusing theoretical framework and contradictory findings. For instance, Dong (2010) considers the pragmaticalization of the small clausal CDM *wo gaosu ni* as part of lexicalization, while Yue (2011) incorporates the lexicalization *bushi wo shuo ni* within the pragmaticalization framework. Yin (2012a) regards grammaticalization or lexicalization as a precursor to pragmaticalization in *wanle*, whereas Ji (2012) maintains that the conventionalization of pragmatic functions of CDM *duile* is facilitated by lexicalization.

Moreover, contradictory conclusions have emerged from many studies examining the same CDM. For instance, Dong (2007) maintains that the emergence of CDM *bieshuo* results from the fossilization and conventionalization or semanticization of adjacent elements in discourse, but Z. Li (2014) ascribes a greater role to

grammaticalization, though he does not refute the impact of lexicalization in the initial stages of evolution. Cao (2010) views the structural evolution of [*wo/ni* + *v*] from subject-predicate to CDM as a consequence of the inversion of the matrix and complement clause structure, coupled with the grammaticalization of the verb. However, Z. Li (2010) contends that the transformation from the subject-predicate structure *wo shuo* to a CDM is not a prototypical instance of grammaticalization or lexicalization based on a comprehensive analysis. Inconsistencies are also evident within the work of the same scholar. For instance, despite emphasizing lexicalization in *shuizhi*, *bieshuo*, Dong (2007) cannot overlook that CDM could also be a result of grammaticalization as both processes are interconnected and can operate on identical linguistic structures. Overall, from phrases to discourse markers, from the grammatical level to the pragmatic level, CDM has characteristics and tendencies of lexicalization and grammaticalization, but it is not lexicalization in the full sense (Qi, 2022).

Thirdly, Chinese scholars' studies on CDMs have revealed that the etymological diversity of CDMs can result in considerable discrepancies in their interpretation and the mechanisms they entail. CDMs may originate from various parts of speech, including conjunctions, adjectives, adverbs, exclamations, subject-predicate structures, trans-layer structures, and small clauses. These parts of speech can evolve into functional words that act as CDMs within discourse. The morphological variations among CDMs suggest that their development from the initial to the final state differs, depending on their starting conditions. For example, certain CDMs are semantically *emptier*, syntactically more stable, and pragmatically more multifunctional than others.

Besides, there are numerous CDMs with diverse formation mechanisms. The usage and structure of words can influence their evolution, and these differences are evident through processes such as lexicalization, grammaticalization, and pragmaticalization. CDMs in the form of polysyllabic words undergo lexicalization before grammaticalization, those in the form of monosyllabic words are formed by grammaticalization, while those in the form of phrases or clauses are formed through pragmaticalization. No matter which mechanism the CDMs are formed by, pragmatic factors will eventually be involved, and pragmaticalization only takes effect at the very end of the formation of discourse markers (S. X. Li, 2023).

For instance, the CDM *bushi wo shuo ni* is not fully lexicalized, whereas *danshi* is both lexicalized and grammaticalized. Moreover, CDMs are linguistically unique and stand out from markers in other languages. The historical shift from monosyllabic to disyllabic words in ancient Chinese has resulted in a higher degree of

lexicalization within CDMs compared to those found in other linguistic systems. However, it's worth noting that contemporary CDMs are more colloquial than their counterparts in other languages. This is evident in the frequent use of contextually clausal sentence CDMs like *wo gaosu ni* and open-ended CDMs such as *ni + V*, *bushi + V*, *XP + de shi*. Despite their prevalent use, the lexicalization process of these CDMs is still ongoing and far from complete. This ongoing evolution underscores the heterogeneity of CDMs, which necessitates a comprehensive interpretation that takes into account the emergence and development of these markers from multiple linguistic interfaces. Such an approach would provide a deeper understanding of how context, historical linguistic changes, and the interplay between different linguistic processes contribute to the unique nature of CDMs.

Finally, Chinese scholars' studies on CDMs have revealed that the diachronic study of DMs should take the heterogeneous features of DMs in the same language and the distinctiveness of DMs across different languages into consideration. A comprehensive examination of linguistic evolution can be achieved by scrutinizing the disparities between ancient and contemporary grammatical frameworks, recognizing that the latter evolves from the former (Xing, 1992, p. 390). Scholars specializing in DMs should commit to a rigorous exegetical approach, prioritizing empirical linguistic data over theoretical constructs, and distilling patterns from descriptive evidence. It is noteworthy that corpus methodologies have been frequently recommended and widely implemented in the diachronic analysis of CDMs (R. Tang, 2008; Xiang, 2010). Such corpus data facilitate researchers in compiling and presenting linguistic evidence on a broader scale, thereby enhancing the credibility of their studies.

Emerging Trends and Their Implications

Although there has been a lot of research on how CDMs evolve in the process of lexicalization, grammaticalization, and pragmaticalization, the linguistic differences of DMs across different languages or the lexical differences of DMs within the same language have not been fully taken into account in numerous studies. Similarly, influenced by Western scholarly research, numerous Chinese studies have endeavored to cover the whole evolutionary process of CDMs with distinctive features in one single theoretical framework, sparking considerable debate. For this reason, Chinese scholars have put forth several innovative theoretical approaches aimed at explaining the diachronic evolution of CDMs through their distinctive linguistic features, thereby offering fresh perspectives for future research in this area. Typical frameworks include the econopragmatic approach, the interface-integrated approach, and the constructionalization approach.

First, a number of Chinese scholars have embarked on the systematic study of CDMs from an economic perspective. Although existing case studies on grammaticalization, lexicalization, and pragmatics have illustrated the important role of language economy in accounting for the evolutionary process of CDMs, few of these investigations have provided a comprehensive explanation from an economic perspective. This economic viewpoint is compelling because it aligns with the overarching trend in language evolution toward conveying the greatest amount of information in the fewest words. For example, Xiang (2002a, 2008) drew upon economic theories to propose the Neo-economy Principle, which explains the dynamic equilibrium between language production and energy conservation. This approach maintains that language use is under the influence of economy concerns, which could be identified in phonology, syntax, and pragmatics (Xiang, 2002a, 2002b, 2017; Xiang & Liu, 2022). The interpretation of the diachronic evolution of language under the law of economy can integrate the multi-perspective and fragmented explanations to the motivation of language evolution in previous studies into the autonomy and rationality of human beings (G. Yang & Xiang, 2018).

The Neo-economy Principle offers a refreshing perspective on the diachronic evolution of language, which can be seen as a continuous process of selection, evolution, and elimination of linguistic elements. This process is governed by the economical configuration of speech elements in communication, where the most efficient and effective linguistic forms are preserved and transmitted across generations, while less efficient forms are gradually phased out. This explanation not only integrates the multi-perspective and fragmented explanations of language evolution proposed in previous studies but also highlights the autonomy and rationality of human beings in shaping their linguistic landscape. Empirical research has provided ample evidence to support the economic viewpoint of language evolution.

Secondly, a number of Chinese scholars have started to synthesize research on CDMs from an interface integration perspective. Despite fruitful research findings on the grammaticalization, lexicalization, and pragmaticalization of CDMs, most studies narrowly emphasize changes at a single interface, often at the expense of a holistic understanding. The partial interpretation of the diachronic changes of CDMs from a single interface has inadvertently led to a fragmented view of CDMs' diachronic evolution, resulting in inconsistencies and gaps between these theoretical perspectives and the inherent characteristics of CDMs. Language, as a dynamic and evolving system, does not evolve in isolation; rather, it progresses through intricate interplay between the domains of grammar, semantics, and pragmatics. For

this reason, the interface-integrated approach (G. Yang, 2017, 2022; G. Yang et al., 2017) suggests that the credibility of interpreting the rise of pragmatic functions in CDMs would be significantly compromised under one single interface, as language evolution is conducted based on different gradable continuums in these three domains.

To fully grasp the complexity in the diachronic development of CDMs, it is imperative to adopt a microscopic view that integrates mechanisms operating at the synchronic level. This necessitates a nuanced examination of how CDMs function within their immediate linguistic contexts, taking into account the intricate web of grammatical, semantic, and pragmatic relationships that underpin their use. Besides, a comprehensive understanding of CDMs' historical evolution necessitates an integration of the three language processes—grammar, semantics, and pragmatics—at the diachronic level. This holistic approach recognizes that language evolution is not a linear or isolated process, but rather a dynamic interplay of multiple factors operating within and across different linguistic domains throughout the entire diachronic process of language evolution. Empirical evidence and statistical data have further shown that CDMs often exhibit complex patterns of grammaticalization, with new pragmatic functions emerging through gradual shifts in syntactic structure and semantic content. Meanwhile, the interface-integrated approach sheds light on the inherent challenges faced by traditional studies that focus on a single interface.

Third, a number of Chinese scholars have started to explore the concept of CDM as a linguistic construction. However, the majority of traditional diachronic studies, which are grounded in lexicalization and grammaticalization, tend to view the lexical and grammatical evolutionary paths as opposing ends, with form and meaning serving as the poles of this evolutionary process (Wen & Yang, 2016). This perspective that severs the relationship between form and meaning limits our comprehensive and profound understanding of language evolution. Against this backdrop, the theoretical framework of constructionalization emerges, offering us an alternative perspective on viewing language evolution. The theoretical framework of constructionalization (Wen, 2017; Wen & Yang, 2015) maintains that language is a construction where form and meaning are inherently linked. When a mismatch arises between form and meaning within this pairing, it would trigger alterations to the original construction until a new equilibrium is achieved in the form of a newly emerged construction. This process is not only the driving force behind language evolution but also a significant manifestation of linguistic diversity and innovation.

Although the study of constructionalization is still in its infancy in linguistic typology, focusing mostly on the

evolution of English, the typological study of constructionalization has the potential to offer additional typological evidence in the study of Chinese. As a language with a long history, complex structure, and rich cultural connotations, the evolution of CDMs undoubtedly has a rich variety and unique characteristics. By examining the evolution of CDMs from the perspective of constructionalization, we can gain a deeper understanding of the interactions and influences between vocabulary, grammar, and semantics in Chinese, thereby revealing the internal laws and mechanisms of the evolution of the Chinese language. For example, many CDMs are fixed phrases. These phrases often have certain patterned characteristics in form and carry rich cultural connotations and historical information in meaning. The formation and evolution process of these fixed phrases is actually a manifestation of the process of constructionalization. In the process of constructionalization, the Chinese grammatical system continuously redefines and adjusts the boundaries between vocabulary and grammar to adapt to and embrace new linguistic phenomena and modes of expression. This adaptability and flexibility in adjustment is a crucial pillar underpinning the vitality and ingenuity of language evolution.

Conclusion

In this paper, we have reviewed the diachronic research conducted by Chinese scholars on the formation of CDMs derived from traditional Chinese exegesis, as well as the diachronic changes that occur in CDMs as a result of grammaticalization, lexicalization, and pragmaticalization. Scholars often explain the different stages of language evolution by examining the properties and structural forms of CDMs. However, grammaticalization, lexicalization, and pragmaticalization focus on different interfaces of linguistic change and cannot cover the entire evolutionary process of language change. Grammaticalization has emerged as the prevailing perspective in research, while lexicalization highlights the shift toward disyllabification in Chinese, and pragmaticalization underscores the growing emphasis on functional aspects within Chinese studies. Grammaticalization has emerged as the prevailing perspective in research, while lexicalization highlights the shift toward disyllabification in Chinese, and pragmaticalization underscores the growing emphasis on functional aspects within Chinese studies. As a result, different scholars have come to different conclusions on the rise of the same CDM, and even the same scholars have come to different conclusions at different stages of their research. Instead of fixating on conceptual controversies among grammaticalization, lexicalization, and pragmaticalization, diachronic studies of CDMs can benefit from clarifying the evolutionary clines of CDMs

by closely examining linguistic facts. Therefore, numerous diachronic studies on CDMs have advocated for integrating traditional Chinese exegetical studies with Western grammaticalization, lexicalization, and pragmaticalization. Additionally, emerging approaches such as the econopragmatic approach, the interface-integrated approach, as well as the constructionalization approach are also adopted in recent studies. In the long term, we anticipate that our review will contribute to language typology and facilitate the development of contrastive linguistics, enabling a deeper exploration into the principles, mechanisms, and clines of language evolution.

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Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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