

DISCOURSE MARKERS/PARTICLES IN CHINESE L1 AND L2: RETROSPECTIVE AND PROSPECTIVE

HONGYIN TAO
UNIVERSITY OF CALIFORNIA, LOS ANGELES
hongyin.tao@gmail.com

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In this paper, I start off with a discussion of some of the basic issues in discourse markers/particles (DM/P). I then turn to the state of the art in Chinese DM/P research, including both the L1 and L2 fields, noting that while an impressive amount of work has been conducted since the beginning of the 21st century, a number of important issues still exist, including conceptualization and identification of DM/P and deficiencies in genre understanding and data selection. I propose that future research may benefit from reconceptualization of the phenomenon and construction of multimodal corpora, which will afford new perspectives stemmed from diverse semiotic resources (including auditory and bodily/visual features) and serve as the basis for an improved Chinese L2 pedagogy.

Keywords: discourse marker/particle, spoken Chinese, multimodality, Chinese L2 pedagogy

1. Introduction

Research on discourse markers, also known as discourse/pragmatic particles (henceforth DM/P), among others, has emerged in recent decades as one of the key areas of usage-based discourse functional linguistics, and, likewise, an increasingly important topic in both L1 and L2 Chinese linguistics inquiries. This paper is set out to offer an overview of some of the general issues figuring prominently in DM/P research, examine major trends in works that have been conducted in the field of Chinese L1 and L2, and outline some potentially profitable directions for future investigations, with an outline specifically for improvement in Chinese L2 pedagogy.

Before touching on Chinese related issues, a quick review of the general literature on this topic is in order. DM/P research generally started, likely as early as the 1970s, with works on spoken English. Some of the major items identified as relevant then included the so-called interjections and hesitation markers (e.g., *ah, oh, well, say* (James 1972, 1973, 1974)), parenthetical clauses such as *you know, I mean* (Goldberg 1976, 1980), and pragmatic connectives (e.g., *but* (van Dijk 1979)). Over the past half century, enormous progress has been made both for the English language and cross-linguistically, yet there are remaining issues to be resolved. In many cases, however, this is not due to lack of understanding of what is under investigation but is rather related to the complex nature of the

phenomena. Current research has reached certain consensus amid disagreements, as aptly and comprehensively captured in Fischer (2006). In particular, Fischer (2006) brings to the fore a number of critical issues in the crosslinguistic investigation of DM/P. Due to space limit, I briefly touch on a few here.

One of the common issues may at first seem superfluous: terminology for the linguistic tokens in question. However, this is, as Fischer (2006) demonstrates, rather substantive and with important implications. As mentioned above, since the inception of the field of DM/P study, terms such as discourse particles, pragmatic particles, discourse connectives, and discourse markers have been in use by scholars of different theoretical persuasions. While *discourse marker* has been extremely popular as a result of Schiffrin's (1987) ground-breaking work, a growing number of scholars believe that *discourse particle* may be a more apt term to use. The main reason, as Fischer (2006, 5) points out, has to do with formal and functional inclinations associated with these terms, where *marker* carries a functional trait and *particle* is less functional but more formally oriented, with the former being more susceptible to exceptions – for example, the function of marking discourse units and their relations can be carried out by elements other than the typically understood DM/P¹.

Given the functional similarities between DM/P and other non-prototypical DM/P morphosyntactic elements, *marker/marking* in the label has also been called into question due to the vagueness of the scope of what it is that is being “marked.” A widely assumed understanding in this regard is that some discourse unit boundaries, as well as relations between units, are being delineated with the deployment of such tokens. Thus, Schiffrin (1987, 40) defines discourse markers as “linguistic, paralinguistic, or nonverbal elements that signal relations between units of talk by virtue of their syntactic and semantic properties and by virtue of their sequential relations as initial or terminal brackets demarcating discourse units”. In a similar vein, Fraser (1990, 2009, and elsewhere) compares the various approaches to DM/P, noting that discourse particles, which subsume discourse markers, can be conceived broadly to include lexical elements that serve to signal relations between discourse segments, including those produced by the prior speaker. Yet there are questions about the nature of what is being marked, namely, the entities over which discourse particles operate may in fact exist at multiple levels: discourse structure, speech act, turns and sequences at talk, as well as participation structure. If this is the case, marking of discourse units and their relations is obviously only one of the subsets of functions of discourse particles.

In a related issue, the term discourse marker seems to highlight one function of the particles, namely, marking or signaling (see the citation of Schiffrin (1987, 40) and Fraser (1990, 2009) above). It has been suggested that discourse particles can also help create meaning (such as affording procedural/instructional guidance in social interaction) on top of marking/signaling. However, given the popularity of the term discourse marker, many

¹ For a similar point but from a conversation analytic point of view, see Heritage and Sorjonen (2018, 4).

continue to prefer this term over others. In this paper I will use *discourse marker/particle* (or DM/P) as a compromise and sometimes use them interchangeably.

Since most discourse particles are polysemous and multifunctional, other questions concerning the functions of DM/P have also been raised. According to Fischer (2006, 10), most of the discussions can be characterized in terms of the distinction between connecting and conversation management related functions, where the former has to do with text-based functions, while the latter is concerned with interpersonal interaction in terms of epistemic and evaluative modalities as in typical conversational situations.

Functional issues can also be seen as intimately linked to text types. In written genres, many DM/P are said to be text-bound and embedded in clausal units, whereas in interactional spoken contexts, DM/P may be less integrated to a clausal unit, i.e., they are syntactically and prosodically free or detached, and can help construct intersubjectivity between speakers in conversational genres.

So far we have done a quick overview of some of the most prominent issues in DM/P research as detailed in Fischer (2006). The following table, based on Fischer (2006, 12) captures the various issues in the form of a summary of the multiple dimensions of variability.

Table 1 - *Dimension of variability in discourse markers vs. discourse particles*

The items considered	predominantly connectives	vs.	predominantly interjections, feedback signals, hesitation and segmentation markers, etc.
The functions determined	connecting	vs.	conversation management related functions
The types of data considered	written text	vs.	conversation
The types of host units recognized	aspects of host utterances	vs.	larger host units such as topics, activities, participation frameworks

Such a taxonomy provides a useful framework on which Chinese DM/P related research can be reviewed. In the sections to follow, then, I will first present an overview of DM/P research in Chinese as L1, which is followed by an overview of DM/P in Chinese L2. Finally, I will discuss some potentially profitable directions for future research in the use of DM/P in Chinese, with some suggestions for improvement in Chinese L2 pedagogy.

2. DM/P Research in Chinese L1

2.1 Early North American Tradition

Research on DM/P in Chinese in North America can be traced back to the 1990s. Biq et al. (1996, 10-11) highlighted a few early key studies published in the English language.

Among them, those done by Charles Miracle are likely among some of the earliest on Chinese DM/P. Miracle (1989), taking radio plays as data, analyzes *hǎo* 好 (good, well, okay) as a marker for closure of social actions and conversational transition. Miracle's (1991) dissertation extends this line of work with more comprehensive data and points out its closing and transmission roles in a much wider range of social settings such as commissive/requestive social actions, response to assertions, and telephone calls or other physical activities. Miracle (1991) also contains analyses of a number of other tokens, including contrastive markers *kěshì* 可是, *dànshì* 但是 and *bùguò* 不过, as well as *nà(me)* 那 (么) as a continuation marker.

Around the same time, Y.-O. Biq worked on a number of discourse tokens. For example, on the topic of *na(me)*, Biq (1990a) points out its wide range of functions beyond the clause centered condition-consequence relations, including the textual function of marking thematically linked textual elements as well as its signaling function of prefacing the transition of conversational topics. Another common conversation token that Biq (1990b) looks at is the question word *shénme* 什么 (what). She notes that this common function word is often used not for interrogation but for a wide range of discourse functions in conversational interaction: as an interactional hedge (filler), a referential hedge (disclaimer), and an expressive hedge (mitigator in negation). In a number of pragmatic studies of pronominal forms in Chinese, Biq reveals some of its discourse marking functions in formulaic chunks (phrasal or clausal units) based on those forms. For example, in discussing the extended (epistemic) uses of the second person pronoun *nǐ* 你, Biq (1991) argues that constructions such as *nǐ shuō* 你说 (you say, you'd say, don't you think?), *nǐ kàn* 你看 (you see, look, don't you think?), and *nǐ xiǎng* 你想 (you think, consider, don't you think?) can be regarded as akin to English parentheticals such as *I think* (Thompson, Mulac 1991), which she deems *short-circuited forms* (referencing Morgan 1978) functioning in the metalinguistic domain (i.e., for direct management of conversation participant interaction). This has expanded the scope of discourse markers in Chinese beyond single lexemes.

2.2 Related Spoken Discourse-Based Research

Since DM/P are intimately tied to the spoken language, research in this area has yielded useful information on sources, distributional patterns, and functions of DM/P and related lexical items. One particularly relevant area in this regard is spoken grammar and corpus based lexical analysis. For Mandarin, Tseng (2001, 168; 2006, 104) identifies 36 high frequency words as part of the core vocabulary on the basis of a small sample (less than ten thousand words) of spoken Chinese. Tao (2015), based on a natural conversation corpus of over 344,000 words, identifies the top 50 plus items listed under Table 2. Tao (2015, 339) also classifies these high frequency items into roughly 17 categories (Underlined forms indicate those overlapping with Tseng's list):

1. Pronouns: Pronouns: wǒ 我 (I); nǐ (you); tā 他 (he)
2. Low content verbs: shì 是 (be); yǒu 有 (have)
3. Speech act verbs: shuō 说 (say)

4. Cognitive verbs: *juéde* 觉得 (feel); *zhīdao* 知道 (know); *kàn* 看 (see, think)
5. Motion verbs: *qù* 去 (go); *dào* 到 (go to); *shàng* 上 (get)
6. Adverbs: *jiù* 就 (then); *jiùshì* 就是 (then); *dōu* 都 (all); *yě* 也 (also); *hěn* 很 (very); *hái* 还 (also)
7. Numeral/Classifiers: *yī* 一 (one); *yīgè* 一个 (one)
8. Modal expressions: *yào* 要 (would, will, should)
9. Negation: *bù* 不 (not); *méiyǒu* 没有 (not have)
10. Deixis: *zhè* 这 (this); *zhège* 这个 (this one); *nà* 那 (that); *nàge* 那个 (that one)
11. Temporal deictic: *ránhòu* 然后 (then); *xiànzài* 现在 (now)
12. Reactive tokens: *ò* 哦; *en* 嗯; *a* 啊; *duì* 对 (right)
13. Particles: *ba* 吧; *ne* 呢; *ma* 嘛; *a* 啊
14. Interrogatives: *shénme* (what)
15. Conjunctions: *suǒyǐ* 所以 (so); *érqiě* 而且 (and); *dànshì* (but)
16. General nouns: *rén* 人 (person)
17. Basic adjectives: *hǎo* (good)

Table 2 - Top 50 plus high frequency words in the corpus

1) 的.....13245	19) 那个.....3154	37) 到.....1666
2) 是.....12047	20) 然后.....3076	38) 她.....1606
3) 我.....10052	21) 在.....3067	39) 没.....1590
4) 就.....7782	22) 什么.....3064	40) 吧.....1539
5) 不.....7743	23) 这.....3027	41) 多.....1490
6) 你.....7658	24) 这个.....2772	42) 它.....1474
7) 了.....7484	25) 很.....2373	43) 没有.....1438
8) 那.....6846	26) 哦.....2245	44) 得.....1412
9) 啊.....5792	27) 看.....2197	45) 呢.....1384
10) 个.....4696	28) 人.....2100	46) 跟.....1336
11) 他.....4385	29) 还.....2093	47) 他们.....1335
12) 对.....4285	30) 嗯.....1953	48) 儿.....1326
13) 就是.....3920	31) 好.....1939	49) 上.....1235
14) 有.....3816	32) 要.....1871	50) 吗.....1200
15) 都.....3760	33) 我们.....1847	51) 现在.....1176
16) 说.....3677	34) 去.....1824	52) 知道.....1135
17) 一.....3497	35) 一个.....1814	53) 嘛.....1112
18) 也.....3186	36) 觉得.....1694	54) 但是.....1082

An important point made in Tao (2015, 340) based on these results is that many of the top ranked items can, and often do, combine with one another to form larger formulaic chunks. For example, *nǐ zhīdao* 你知道 (you know), *wǒ bù zhīdao* 我不知道 (I don't know), *nǐ kàn* (you see, look), *jiùshì shuō* 就是说 (that's to say), *shì a* 是啊 (right), *duì ya* 对呀 (right), *ránhòu ne* 然后呢 (then, and then) are all results of 2-3 high frequency item combinations, and many of them have indeed been treated as DM/P. For example, among the selected DM/P items discussed in Liu (2011), the following 33 are included:

Interjections: 喂 *wei*、嗨 *hai*、哎 *ai*、*a*、*en*、*e*、呦 *you*
 Deixis: 这个 *zhege*、那个 *nage*、*name*
 Connectives: *hao*、*shi*、*ranhou*、*ergie*、*suoyi*、*keshi*
 Say expressions: *wō shuō* 我说、*nǐ shuō*、*jiushi shuō*
Shi (copular) expressions: *shì bù shì* 是不是 (*shì bù* 是不、*duì bu duì* 对不对、*duì bù* 对不)、*bù shì* 不是
Zhidao (know) expressions: *nǐ zhīdao* (*ma/ba*) 你知道 (吗/吧)
 Completives: *wánle* 完了、*hǎole* 好了、*xíngle* 行了、*déle* 得了、*duìle* 对了、and *zhèyàngzi* 这样子

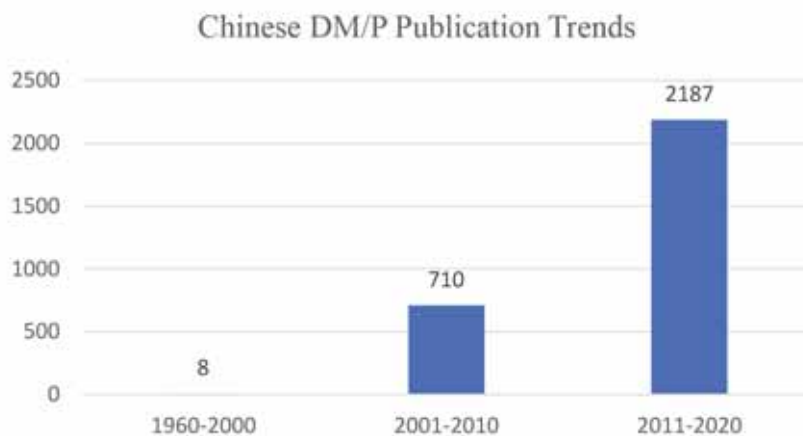
Where many of them, other than some of the interjections in the first line, are either individual high frequency forms reported in Tao (2015) or combinations of them. Spoken corpora, which offers valuable frequency information for selecting and understanding DM/P (Tsai, Chu 2017; Piccinini 2020) will continue to play an important role in the quest to gain a better understanding of the emergence and development of Chinese DM/P and the organization of language in general (Tao 2015).

2.3 Work within China

Work on DM/P in mainland China did not start in a systematic fashion until the 21st century. Prior to that, there were only sporadic studies touching on some pertinent issues but were cast mostly in a traditional morphosyntactic analytic light. For example, the well-known works by Meng Zong (1982) and Liu Yuehua (1986) on the verb of saying *shuo*, touch on derived uses such as metalinguistic and epistemic meanings, yet such studies are far from systematic and are rarely analyzed in terms of discourse marking or signaling. Other studies may have touched on text singling properties (Shen 1987; Lü 1999), but they are only limited individual occurrences. It is generally believed that research in this area started with the introduction of discourse connectives and DM/P concepts from the West by such scholars as Liao Qiuzhong (Liao 1986) on (written) textual connectives and He Ziran and Ran Yongping (He, Ran 1999; Ran 2000) on discourse signaling (in English). However, recent developments have burgeoned and seen full scale studies from both synchronic and diachronic points of view (Li 2010), as demonstrated by a string of monographs since early 21st century (e.g., Li 2011; Liu 2011; Yin 2012; Yao 2012, 2017; Cao 2016).

A number of surveys show major increases in the quantity of publications on the topic of DM/P in Chinese since 2000. For example, Xiao's (2021) search of *huàyǔ biāoji* 话语标记 and *huàyǔ biāojiyǔ* 话语标记语 from the China Academic Journals full-text database (also known as CNKI) yields the following result (bar chart mine).

Figure 1 - Xiao's (2021) data obtained from CNKI indicating the increase of research on Chinese DM/P over half a century



In addition to quantitative leaps, research in Chinese also makes advancement in understanding the nature of DM/P and how best to characterize their features as well as their hierarchical relationship in the Chinese context (see e.g., Liu 2011's distinction between lexical and non-lexical forms). At the same time there are also issues that still need to be resolved. Below I review some of the key issues based on available literature.

First, in terms of the items considered, scholars are not always in agreement in defining what a DM/P is and in deciding whether some forms (e.g., regular conjunctions) have evolved enough to be considered a DM/P (Huang 2021). In one of the earliest and most comprehensive studies on this topic, Feng (2008) defines pragmatic markers as “syntactically dispensable, truth-conditionally irrelevant expressions operating on the propositional content of the sentence to which they are attached.” He explicitly excludes a number of categories based on this definition, including what he calls “utterance modifiers” (e.g., *zhǔnquè shuō* 准确说, precisely speaking), “domain adverbials” (e.g., *(cóng) jīngjì shàng jiǎng* (从) 经济上讲, economically (speaking), from the point of view of the economy), “temporal connectives and ordinals” (e.g., *ránhòu*, then, *zuìhòu* 最后, finally, *zuìxiān* 最先, at first), and other miscellaneous types, including *hao* (good, well). He further makes a distinction between conceptual and non-conceptual pragmatic markers, on the basis of speaker involvement (i.e., level of subjectivity), which some would identify roughly as textual (*non-conceptual*) and interpersonal (*conceptual*) (See Liu 2009). Among some of the subtypes, he discusses the cases of epistemic and evaluative markers (under *conceptual*), as well as contrastive, elaborating, and inferential (under *non-conceptual*). While Feng's effort is laudable as it attempts to offer a systematic account of pragmatic particles in Chinese, a number of issues can be identified in his account. The first is that his method of inclusion and exclusion is heavily biased by the intuition-based grammatical categories of the tokens in question. For example, in his excluded categories, there are what he calls “pure connectives,” yet there is no empirical basis to justify what tokens count as “pure connec-

tives” and what do not. As a consequence of this methodology, some of the tokens that he excludes are now widely accepted as pragmatic markers, especially *jiéguǒ* 结果 and *hao* (see Miracle’s studies on the latter reviewed earlier). A related issue is his lack of a dynamic view of language. This can be illustrated when we examine again tokens such as *jieguo* and *hao*, where a static lexical analysis would surely exclude them from being considered as DM/P, yet a dynamic view will show that major changes have taken place in these tokens to the extent that there is little dispute as to their DM/P status. All this may be accounted for in terms of the third issue: his lack of actual discourse data. All of his examples are artificially constructed sentences, which is in striking contrast with some of the earlier work preceding him by Biq and Miracle.

Conceptual inconsistency is common to spot in many published works in the Chinese medium (Li 2010; Huang 2021). For example, some works include long expressions such as *nǐ yǐwéi nē* 你以为呢? (What do you think?) (Luo 2021) and *tuì yīwàn bù shuō* 退一万步说 (in the worst-case scenario, lit. retreating for ten thousand steps) (Wang 2021). Others take formulaic expressions such as *zhème shuō ba* 这么说吧 (let’s just say this) (Chang 2021) as DM/P. Still there are others that take special tokens such as click sounds, laughter, exclamations, and onomatopoeia as DM/P, which can be found in studies such as Zhong (2018) on *ze ze ze* 啧啧啧 (alveolar click sound); Yang and Ren (2020) on *hehe* 呵呵 (ha ha); Gao and Chen (2019) on *ha* 哈 (*ha*); J. Wang (2020) on *hǎo jiāhuo* 好家伙 (wow). Finally, rather than examining lexical items and strings in identifying/discussing DM/P tokens, some treat open syntactic constructions as DM/P. This can be found in studies on *X de shi* (it is X that...) (Zhou, Liu 2020) and on *ni VV* (you VV) (Ma 2021). As discussed earlier, there is no inherent size requirement or constraint for an expression to be treated as a pragmatic particle, and it is generally helpful to highlight the formulaic nature of language (Erman, Warren 2000; Tao 2020a) based on word combinations rather than single lexemes, yet such a wide range of variation in the tokens included in the literature points to a somewhat overzealous scope expansion that, if not carefully justified, may easily blur the boundaries of different types of linguistic units in ways that are less productive than intended.

Another important issue in the Chinese literature on DM/P is the type of data used, which varies greatly. Many have used ostensibly written language and gloss them over to the spoken language, while some may have conflated the spoken and written language with no awareness of the issues involved. It is especially common to see, and we must be aware of, studies using spoken data that are scripted or heavily edited. The lack of awareness of the difference between different genres (Tao 1999) can have major consequences. Earlier we have seen that Feng (2008) uses contrived data as the sole object of inquiry, which misses many important features of DM/P in naturalistic talk-in-interaction. Even when spoken discourse data are used, it is also necessary to distinguish between spontaneous talk and artificial or scripted talk (Tao 1999; Tao, Liu 2010). One interesting example is the difference between Miracle’s (1989) and (1991) work on *hao*. As Miracle (1991) states, his earlier work on *hao* was based on radio plays produced from a script. Later, after expanding the database to a larger collection of spontaneous speech produced by native speakers in the Taipei area, he was able to identify a much wider range of functions in different contexts

than the originally proposed two-way distinction between “action closure” and “discourse transition”. While constructed data are rarely found in contemporary studies on Chinese DM, it is not uncommon to see studies using written data, media data, as well as mixed types as primary data in the analysis of DM/P and with little or no justification for their data selection. Clearly, there is a need to underscore and implement genre-based concepts in future research.

3. *Chinese as a Second/Foreign Language*

Parallel to the Chinese L1 field, the role DM/P play in Chinese L2 has increasingly been recognized as a critical component for language acquisition. Research in this area has generally been conducted with the following foci: 1) acquisition patterns, especially patterns revealed through a contrastive lens; 2) DM/P in teacher language; 3) DM/P in course materials; and 4) DM/P in assessments.

Acquisition of DM/P is shown to be a challenging area for learners. Research has consistently demonstrated positive correlations between level of proficiency and fluency and varieties of forms, richness of learner data production, and amounts of DM/P used. Tsai and Chu (2017), using *ranhou*, *na*, *nage*, and *shenme* as the target forms, compare the use of DM/P among learners 1) with and without a heritage background and 2) in a Chinese speaking community (Taiwan) and in foreign countries. Their findings show that in terms of frequency, the production rate of DM/P per 100 speaker turns is 0.43 for L1 teachers, 0.22 for learners living in Taipei, and 0.05 for learners living in foreign countries. Likewise, they also observe that the frequency of DM/P usage strongly correlates with the number of sentences spoken per turn and the richness of spoken content. Comparisons with native speaker college students yields similar results (Ji 2016). M. Li's (2014) work on textual (beginning, middle, and terminal) connectives also demonstrates positive correlations with learner proficiency levels. The key in this topical area, as Romagnoli and Tao (2022) caution, is to use the right kind of metric to gauge proficiency, or skill levels, reliably.

Turning now to investigations of teaching materials, so far they have focused mostly on intermediate and advanced level textbooks produced in mainland China. D. Yang (2012), for example, using the notion of conversation turn-taking as the basis of analysis, compares two sets of textbooks in terms of DM/P's position at turn-beginning, turn-middle, and turn-final positions and shows how coursebooks can differ.

Contrastive analysis of heritage and non-heritage students also shows advantages of heritage learners in their use of DM/P, which resembles native speaker's features more closely than non-heritage students (He 2018).

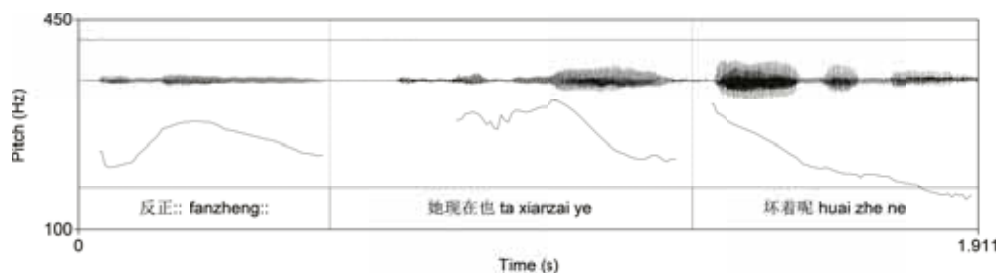
Finally, DM/P's role in assessments is another issue taken upon in various investigations. For example, Lei (2019) notes that there is an increasing presence of DM/P in the HSK standard test while learners (from a Korean high school) perform variably on these items. As a result, suggestions on enhanced pedagogy involving DM/P are made. Similar suggestions have also been provided in studies such as Tsai and Chu (2017) and Romagnoli and Tao (2022).

4. *Looking Forward*

While the previous sections show that tremendous progress has been made in Chinese DM/P research in both the L1 and L2 fields, at this juncture it is important to not only take stock of what has been accomplished but also move forward with new ways to approach DM/P. Here I will highlight a few directions that I believe to be fruitful to pursue.

First, as alluded to earlier, serious attention to distinctions between different genres or registers should be a top priority on the research agenda. As argued in Tao (1999) and Tao and Liu (2010) and the literature cited therein, different genres comprise different grammatical patterns fitted for different types of communicative events and goals. Cross-linguistic investigations have also amply demonstrated the different correlations of DM/P with text types (Fischer 2006). Unfortunately, genre distinctions have not been consistently maintained in the fields of Chinese L1 and L2. Even a casual glance between high frequency spoken items identified in Tao (2015) and those discussed in Liao (1986) will show that spoken and written Chinese genres employ very different kinds of discourse connectives in the organization of texts. A genre/register-based point of view can also enable us to pinpoint some of the issues in applied fields such as L2 learner production, which is illustrated by Romagnoli and Tao (2022), where they note that some written/formal items are disproportionately favored by Italian learners of Chinese in their oral production, which is likely attributable to the textbooks used and the associated classroom activities.

Second, and related to the first issue, is that there is an urgent need to construct multimodal (i.e., audio/video-based) spoken language corpora in both the L1 and L2 contexts. As argued in Tao (2017, 2021) and elsewhere, multimodal corpora provide data that can show how speakers deploy multiple semiotic resources for interpersonal interaction, which in turn can help us gain a deeper understanding of how linguistic devices such as DM/P work concurrently with those other semiotic resources. Accessing such a full slate of resources will enable the researcher to see DM/P in new ways that may have escaped the attention of previous researchers. For example, Gao and Tao (2021) show that *fānzhèng* 反正 (anyway), traditionally considered to be a single affirmative adverb, as a discourse particle functions quite differently depending on whether it is used in an independent prosodic unit or as part of a larger unit: in the case of attached or loosely attached tokens, they are typically used to mitigate (epistemic) stance differences or the lack of expected actions and are thus more subjective, whereas in the case of detached tokens, they most likely correlate with conversation sequence boundaries and are used as conversation management devices (for such functions as shifting conversation topics). A case of an independent *fānzhèng* is shown in Figure 2 (Gao, Tao 2021, 5), where *fānzhèng* is clearly in a separate prosodic unit and functions to pivot the conversation to a different direction (as an instance of conversation management): from a question-answer sequence pivoting to how the baby behaves.

Figure 2 - Prosodic features associated with a detached token *fanzheng*

Thus, without incorporating prosodic features as just illustrated, it would be difficult to identify the separate discourse environments (including prosodic units and conversational sequence) in which arguably different forms of *fanzheng* are used and the distinctive functions associated with these variant forms. Other notable studies paying attention to prosody can be found in Xie and Fang (2016), where they show that, among other things, the DM/P function of conjunctions tend to have longer duration than non-DM/P uses; and in Wang (2017), where functional categories and their prosodic features (including duration, pitch range, and stress) of three discourse markers, *ranhou* (then), *wǒ juéde* 我觉得 (I think/feel), and *meiyou* (no, not) are analyzed.

To be sure, prosodic features, as well as conversational sequential features, have been integral components in the analysis of Chinese DM/P since the 1990s (as seen in Miracle's (1991) attention to conversational turns in analyzing DM/P tokens such as *hao* and Yang's (2006) appeal to prosody in analyzing the different shapes of tokens such as *dui*), multi-modal data can afford us even more helpful perspectives when bodily/visual behaviors are taken into account (Goodwin 2000; Kendon 2004; Stivers, Sidnell 2005).

For example, Li (2016) shows that the discourse conjunction *yīnwèi* 因为 (because) can be deployed by participants in conversation to return to, and continue with, the pre-prior course of action after some intervening sequences, and when this happens, body-spatial displays (primarily gaze in her data) are shown to provide additional cues to the nature of the interactional moves. As a quick illustration of a similar point, in the section below I will offer a brief analysis of a nearly two-minute segment of Premier Li Keqiang's press conference held in March 2022 and show that there is some interesting correlation between major DM/P (connectives), text boundaries, and the use of gesture/visual display forms.

For the press conference, Premier Li sits at a table on the podium the entire time while answering questions from an international press corp. The setting makes only his upper body, including his arms and hands, visible. A review of the data shows that other than his body orientation, most of his gestures/visual displays manifest as formations and movements of his hands and arms. If we use his upper torso as the reference point or reference space, we can divide his arm/hand-based gestures roughly into three types: major ones, or exterior ones (E) for those that are displayed beyond the upper torso either vertically or horizontally (Fig 3), medium ones (M) for those that are displayed close to the interior space of the torso (Fig 4), and the smallest ones, the interior ones (I) for those that are formed around the center of his body (Fig 5). (Some transitory movements are indicated by >, e.g.,

E > M means transition from an Exterior gesture to a Medium gesture. Coding of data for the time being has focused mostly on beginnings of the speech units as transcribed below.)

Figures 3, 4 and 5 - *Sample exterior gesture, sample medium gesture, sample interior gesture*



1. 今年经济确实遇到了新的下行挑战。 <i>Jīnnián jīngjì quèshí yùdào le xīn de xiàxíng tiǎozhàn.</i> The economy has indeed encountered new downward challenges this year.	M
2. 且不说各种复杂环境在变化, <i>Qiě bù shuō gè zhǒng fùzá huánjìng zài biànhuà,</i> Not to mention that various complex environments are changing,	E>M
3. 不确定因素增多, <i>bù quèdìng yīnsù zēngduō,</i> and uncertainties increase,	
4. 就是我们本身要实现5.5%的目标, <i>jiùshì wǒmen běnshēn yào shíxiàn 5.5% de mùbiāo,</i> just our own goal of achieving 5.5%,	I
5. 它的增量, <i>tā de zēngliàng,</i> its increment,	I
6. 也就是中国百万亿级以上GDP5.5%的增量, <i>yě jiùshì Zhōngguó bǎi wàn yì jí yǐshàng GDP 5.5% de zēngliàng,</i> that is, an increase of 5.5% of China's GDP in the order of more than one trillion yuan,	I
7. 就相当于一个中等国家的经济总量。 <i>jiù xiāngdāng yú yī gè zhōngděng guójiā de jīngjì zǒngliàng.</i> is equivalent to the economic output of a medium-sized country.	I>M
8. 如果10年前还是50多万亿, <i>Rúguǒ 10 nián qián hái shì 50 duō wàn yì,</i> If it were 10 years ago, when our total economic volume was still about 50 trillion yuan.	E
9. <X 大概 X> <i>dàgài</i> perhaps	M
10. 六七万亿就可以了, <i>liùqī wàn yì jiù kěyǐ le,</i> an increase of 6 or 7 trillion yuan is enough.	
11. 今年得有八九万亿名义GDP的增长。 <i>jīnnián děi yǒu bājiǔ wàn yì míngyì GDP de zēngzhǎng.</i> And this year, there must be an increase of 9 trillion yuan in nominal GDP.	M

12. 这就好像登山, <i>Zhè jiù hǎoxiàng dēngshān,</i> This is like mountain climbing.	E
13. 如果你要登1000米的山, <i>rúguǒ nǐ yào dēng 1000 mǐ de shān,</i> If you want to climb a 1000-meter mountain,	E
14. 想爬100米 – er- 想爬10%, <i>xiǎng pá 100 mǐ, uhm, xiǎng pá 10%</i> if you want to climb 100 meters, uhm, climb 10%,	E
15. 那100米就可以; <i>nà 100 mǐ jiù kěyǐ;</i> then 100 meters is enough;	E
16. 如果你要登3000米的山, <i>Rúguǒ nǐ yào dēng 3000 mǐ de shān,</i> if, however, you want to climb a 3000-meter mountain,	E
17. 想- 上- 5%, <i>xiǎng shàng 5%,</i> if you want to get 5%,	E
18. 那就是150米。 <i>nà jiùshì 150 mǐ.</i> that's 150 meters.	
19. 而且条件也变了: <i>Érqiě tiáojiàn yě biàn le,</i> Additionally, the conditions have changed:	E
20. 气压低、 <i>qìyā dī,</i> The higher you go, the lower the air pressure,	M
21. 氧气少。 <i>yǎngqì shǎo</i> (and) less oxygen.	M
22. 看似速度放缓了, <i>Kànsì sùdù fàng huǎn le,</i> While/although it seems to be slowing down,	E
23. 实际上分量更重。 <i>shíjì shàng fēnliàng gèng zhòng.</i> the actual weight is heavier.	

Looking at just the major gesture patterns (marked as E for exterior), and if we ignore lines 13-17, where the Premier is trying to come up with a metaphor of mountain claiming and struggles with some of the details, hence the successive use of E gestures consisting mostly of brief pointing gestures outside of his left side of the torso, we can see that the other E gestures are used in connection with some interesting text organizing tokens and text boundaries:

Line 2: 且不说 *qiebushou* (not to mention)

Line 8: 如果 *ruguo* (if)

Line 12: 这就好像 *zhe jiu haoxiang* (this is like)

Line 19: 而且 *erqie* (in addition)

Line 22: 看似 *kansi* ((while/although) it seems)

It appears that nearly all of the connective tokens signal a major or secondary boundary in the text, and mostly it is in these places that the E gestures take place. To wit, in line 2, the Premier begins to lay out some of the specific challenges facing today's Chinese economy; in line 8, he begins to give a series of hypothetical contrastive scenarios between now and ten years ago; in line 12, he begins to make an analogy of mountain climbing (although he struggles a bit in the following units with the details of the metaphor); and in line 19, it is the beginning of a secondary boundary within the mountain climbing metaphor, which is similar to line 22, another secondary boundary within the metaphor segment where he gives an assessment of the new situation.

Thus, this quick gesture-based analysis shows that the major (plus some secondary) discourse boundaries are marked with interesting multimodal features (including prosodic features that corroborate Xie and Fang's (2016) findings but are not analyzed here). This suggests that although at the lexico-grammatical level there may be forms indicating text boundaries, visually (and likely auditorily) there can be attendant cues signaling, and/or helping guide the addressee to, text boundaries. Attention to auditory and visual/spatial resources and their interaction can thus afford us more useful perspectives to understand the choice of DM/P in context.

What would such an expanded approach to DM/P imply for Chinese L2 then? Without divulging too many details, I can only suggest a few areas to contemplate here, and interested readers can consult some previous works that have touched on similar issues (e.g., Tao 2011, 2020b). For example, once genre issues are in focus, teaching materials should explicitly contrast DM/P tokens of different types, and instructors should create opportunities for the learner to compare their usage tendencies and contextual constraints when it comes to synonyms, for which there usually are many (e.g., *wo juede*, I think, vs. *wǒ rénwéi* 我认为, I contend, to express a personal opinion, or *ránhòu*, then, and then, vs. *zhīhòu* 之后, thereafter). In terms of multimodal features, instructors can incorporate useful authentic materials such as video clips of different types even at the elementary level (Tao 2020b), where the learner can be guided to observe how L1 speakers use the multiple resources surrounding DM/P in communication and practice these features in meaningful activities – in both monologs and dialogs, and in both informal talks and formal speeches and writing². Finally, assessment can also be aided with not only the increased quantity of DM/P, but also practical tasks involving DM/P. For example, students can be given a list of DM/P and tasked to practice them in group activities such as expressing epistemic stances (both affiliative and disaffiliative) toward one another. Students can also be tasked to use different types of discourse connectives in informal spoken and formal writing contexts as assignments and/or testing items (again see Tao 2011 for some samples). In short, there is

² Past experiences that the author had at an intermediate-high level Chinese L2 class at a university in Rome in spring 2022 shows that students both are quite receptive to such practices and can excel at doing those activities.

endless opportunities to revamp the L2 curriculum whereby naturalistic DM/P use patterns are consistently reflected and implemented.

5. Conclusions

In this paper, I began with a discussion of some of the basic issues in DM/P, including the conceptual differences between discourse markers and discourse/pragmatic particles, the nature of the unit on which DM/P operate, and the implications of genre differences on understanding DM/P. I then reviewed the state of the art of Chinese DM/P research, including both the L1 and L2 fields. It was pointed out that an impressive amount of work has been conducted in the L1 field since the 2000s, and this benefited Chinese L2 research. I also pointed out some issues in the literature, including conceptualization and identification of DM/P and deficiencies in genre understanding and data selection. I proposed that future research may benefit from reconceptualization of the phenomenon and construction of multimodal corpora, which will afford new perspectives stemmed from diverse semiotic resources (including auditory and bodily/visual features). Finally, I outlined some L2 pedagogical recommendations based on the expanded approach to DM/P to take advantage of findings from naturalistic and multimodal L1 DM/P use. Clearly there is much to be explored in both the L1 and L2 contexts of Chinese discourse markers/particles.

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