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A Conversational Study of the Particle *ne* in Mandarin Chinese

by

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Abstract

In Mandarin Chinese, the particle *ne* has been studied using written text, constructed examples, and hypothetical discourse settings. However, these studies overlooked the interaction and relationships that exist between speakers when considering the usage of *ne*. In this thesis, we analyze the occurrences of the particle *ne* in spontaneous conversational data and individually examine the structural and functional properties of the particle *ne*. The phonetic features of *ne* and its placements, which are based on the phonetic features, are introduced as the structural properties. For our analysis, the functional properties are dichotomized into two subcategories: non-interrogative and interrogative usage. Our analysis uses notions of topicality, information activation, and formulaic language to explain the usage pattern of the particle *ne*, while providing qualitative information on its distribution for each functional subcategory.

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Chapter 1: Introduction

1.1 An overview of discourse particles in Mandarin Chinese

This study focuses on the use of Chinese phenomenon termed as *zhu ci* and *yuqi ci* –*i.e.*, “helping words” and “mood words” (Lü 1980, Zhu 1982, Wang 1985), respectively – as “sentence-final particles” (Li & Thompson 1981), “utterance particles” (Luke 1990), and “final particles” (Wu 2004). The descriptors of this phenomenon suggest that it has received limited attention. For example: many “sentence-final particles” studies focus only on this phenomenon appearing in sentence-final positions. Given that the notion of “sentence” is vague and controversial (see Jespersen 1924:308, Li & Thompson 1981, Tao 1996:16-17 for a discussion of the notion of “sentence”), the term “sentence-final particles” can also exclude particles that appear in “non-sentence-final” positions. It is therefore apparent that only a facet of this language phenomenon is being addressed. On the other hand, *Zhu ci* “helping words” and *yuqi ci* “mood words” reveal that particles do not have referential meanings, which may explain the sparse research on particles because their non-denotative quality make it difficult to provide a generalization for the usage and meanings for each one of the particles (Li & Thompson 1981).

In contrast with the limited treatments, the massive recurrence of particles plays an important role in interactions among Mandarin speakers (Wu 2004). Particles have been shown to serve various pragmatic and semantic functions (see Chao 1968, Li & Thompson 1981); this provided the basic knowledge and typological descriptions of these particles, which is appealing because they are both intuitive and relatively accurate. However, these studies focused on constructed sentences in isolation, hypothetical conversational situations, and written texts (e.g. Wang 1985, Lü 1980, Zhu 1982, Li & Thompson 1981). Given that particles by nature are very discourse-dependent, claims about their functions must be supported by evidence in natural speech—*i.e.*, there must be functional evidence of natural occurrence in speech.

Speakers also use particles to convey emotive nuance and epistemic stance in talk-in-interactions (see Wu 2004 and Kendrick 2010 for studies on Mandarin particles, and Luke 1990 for a study on Cantonese particles). This type research makes a valiant attempt to observe authentic conversation data, but the particles they focus on are also limited by the positions of their occurrence. Additionally, their analysis relies more on external factors, such as the conversation co-participants' responses, instead of the linguistic features of the particles, such as prosodic properties and syntactic relations with surrounding materials. Although it is useful to apply a Conversation Analysis (Atkinson & Heritage 1984, Have 1999) approach to examine what is accomplished by employing/exploiting the particles, studies should investigate whether linguistic features can identify the link between forms and functions.

In Mandarin Chinese, the particle *ne* receives less attention than other particles (see Wu 2004 for a study on particle *a* and *ou*, Kendrick 2010 for a study on particle *ba*). One possible explanation for this is the decreased prevalence of *ne* in speech in comparison to other particles such as *a/ya*, *ou*, *ma*, and so on. This thesis aims at providing a description of the structural properties, as well as the functional categories, of the particle *ne* in spontaneous conversations. The analysis will be in the line with studies that investigated the use of particles to convey emotive nuance and epistemic stance in talk-in-interactions (Wu 2004 and Kendrick 2010)-- i.e., it is discourse-based and interactional oriented. While performing this analysis, we will also consider the linguistic features in detail. Given that that the premise of this study does not focus on the position of the particle *ne*, we assume that “particle” refers to it for the remainder of this thesis.

1.2 Previous studies on the particle *ne*

Traditionally, the particle *ne* has two subcategories determined by its position by reference to morphosyntactic structure: the “sentence-final” and “sentence-middle” positions.

1.2.1 Particle *ne* on sentence-final position

In this subcategory, the sentences preceding the particle *ne* are treated in a dichotomy of declarative and interrogative. When *ne* follows a declarative sentence, studies gave varying descriptive accounts for the semantic functions, such as “denote a continuing state”, “interest in additional information”, “state the fact with some exaggeration”, or “provide mild warning” (Chao 1968, Wang 1985, Lü 1980, and Zhu 1982). We illustrate using four examples from Li & Thompson (1981) in example (1):

- (1) a. men kai - zhe ne
door open - DUR NE

The door is open.

- b. ta hai hui xie shi ne
3sg also can write poem NE

S/he can even write poems.

- c. you yi bai chi ne
exist one hundred feet NE

It's as much as one hundred feet.

- d. zhe dao hen weixian ne
this actually very dangerous NE

This is rather dangerous.

These sentences are syntactically correct without *ne*. Note that in (1a), the continuing state is denoted by the durative aspect marker *zhe* instead of the particle *ne*. Li & Thompson (1981) characterizes these semantic functions as “response to expectations”—i.e., pointing out to the listener that the information conveyed by the sentence is the speaker’s response to some claim, expectation, or belief on the part of the listener.

When *ne* is attached to an interrogative sentence, studies showed its use as an auxiliary or main question marker (Chao 1968, Wang 1985, Lü 1980, and Zhu 1982),

where example (2) shows the latter case:

- (2) wo hui shuo yingyu, ni ne
I can speak English you NE

I can speak English, what about you?

Again, Li & Thompson (1981) characterizes this usage as a “response to expectations”, especially in cases like example (2), which must refer to preceding content in order to interpret the question.

1.2.2 Particle *ne* on sentence-middle position

While this subcategory consists of the considerable use of *ne* in speech, few studies take its presence into account. Lü (1980) and Zhu (1982) point out that particle *ne* in the sentence-middle position can be a topic marker – i.e., “speaking of; as to”, as shown in example (3):

- (3) laoshi ne, xihuan he kafei. wo ne, xihuan he cha.
teacher NE like drink coffee I NE like drink tea

The teacher likes to drink coffee, while I like to drink tea.

The particle *ne* can also be used to mark a hypothetical clause, as shown in example (4):

- (4) yaoshi ni e le ne, jiu ziji zhu dian dongxi chi
if you hungry CRS NE then self cook some stuff eat

If you are hungry, then cook something by yourself to eat.

In addition to serving as a topic and hypothetical marker, Lü (1980) mentions that the particle *ne* can also appear following other elements, but did not specify these elements. Thus this description does not account for cases occurring in natural speech, such as in example (5):

- (5)X: erqie ne,
besides NE

Besides,

zhebian queshi butong.
here indeed different

it is indeed different here.

L: ng.
hm

Hm.

Here, *ne* appears after the conjunction word *erqie* ‘besides’. Studies claim that any other elements appearing before *ne*, which includes conjunction words, can be considered as “the theme” and the elements following it can be considered as “the rheme” (Fang 1994). This is an insufficient explanation in the sense that the conjunction word is not defined rigorously enough to substantiate its role as “the rheme”.

1.2.3 Shortcomings

Previous literature on the particle *ne* still have not addressed all of the open questions surround its use. There is very limited discussion on *ne* occurring in certain positions, and the virtually all of the other occurrences of *ne* have not been addressed. The notion of sentence is by nature controversial (Jespersen 1924:308, Tao 1996: 16-17), therefore the classification of *ne* based on its position in a sentence is not a reliable parameter for observation. Some scholars do recognize the importance of extratextual factors (Alleton 1981, Chu 1984), but their analysis is still performed at the sentence level. Also, the previous studies on the particle *ne* are mainly based on artificial settings involving constructed examples or written text (Chao 1968, Wang 1985, Lü 1980, Zhu 1982, among others). In contrast, King (1986) applied a discourse approach to examine the functions of the particle *ne* at the discourse level, which contains spoken data taped from a lecture. However, it seems that there is a lack of

analyses based on spontaneous conversation between Chinese speakers, which closely characterizes their daily interaction. To make a more exhaustive observation on the use of particle *ne* in spontaneous conversation, we first apply alternative frames to describe the placements of particle *ne*, and further analysis will be based upon this frame.

1.3 Framework of the current study

One view of grammar is that it is a self-contained system that is shaped internally. External factors, such as mental capacity, culture, pragmatics, and the context in which it develops, would “marginally” affect our understanding of grammar, and to broader range of systems: the language at use (Ochs et al. 1996, Schegloff 1989). An alternative view of grammar is that it is one part in the organization of one’s social life, which emphasizes the use of language in everyday interaction (Ochs et al. 1996). This study will take the latter approach, which provides an alternative view that analyzes the usage of the particle *ne* in spontaneous conversations between speakers. It will provide evidence, which is different from the majority of the previous studies, for the function of the particle *ne*.

It might be especially beneficial to study discourse particles in speech acts. One study that addresses scientific text (Alleton 1981) substantiates this argument:

In scientific texts, the fact that final sentence particles are extremely rare (in the case of *le*) or completely non-existent (in other cases) suggest that these are not elements necessary for written scientific communication. ... This very scarcity would tend to reinforce the hypothesis according to which the use of most of the particles is conditioned by the context in which speech takes place, i.e., the inter-subjective relations. (p.95)

In this study we hypothesize that the particle *ne* would be best understood within a framework that emphasizes the role of the speakers within the discourse (King, 1986). A close examination of the conversational use of the particle *ne* reveals that it is not just a sentence-level particle with the functionality claimed by previous

studies, it also plays a role in a larger context of talk-in-interaction. Moreover, as shown in Chapter 3, we will strengthen the opinions by other scholars, whose studies were based on sentences in isolation, using the data, which contains the spontaneous conversations, as evidence. To better understand the mental capacity and cognition that underlie the functions of the particle *ne* while taking the typological characteristics of Chinese into account, we will also apply some notions in the analysis that include topicality (Li & Thompson 1975, 1981, Huang 1973, Chao 1968, Chafe 1975), information activation (Chafe 1975), and formulaic language (Corrigan et al. 2009). We will elaborate on these notions as needed in the discussion in Chapter 3.

1.4 Data and methodology

1.4.1 Data

The database for this study is extracted from 17 spontaneous conversations that were recorded, where each conversation involves 2 speakers whose ages are between 18 and 46. All participants have completed their high school education in Mainland China, and are currently either studying or working in Edmonton, Alberta, Canada. To avoid dialectic accent in Mandarin, the speakers selected are all from provinces or cities on the north side of the Yangtze River. Figure 1 shows the age and gender distribution of the speakers:

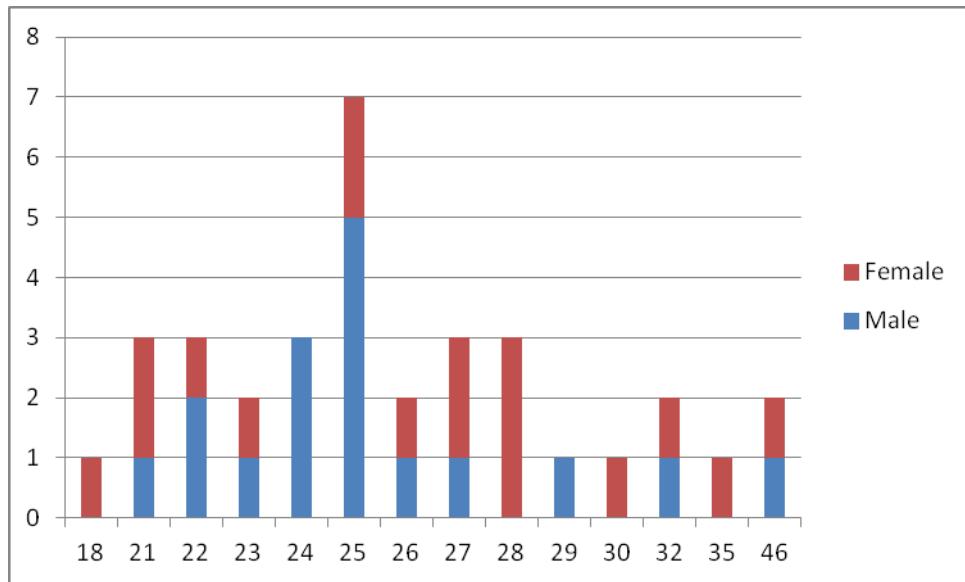


Figure 1: Age and gender distribution of the speakers

To obtain the spontaneous nature of the conversation, the speakers were arranged in a meeting room to have any conversation they desired, without any instruction on the content of this conversation. To summarize, the database for this study consists of 17 spontaneous conversation involving 34 different speakers, with 7 hours conversation in total.

The length of the recorded conversations varies between 18 minutes and 53 minutes each. To avoid possible uneasiness during the first few minutes at the beginning of some tapes, the first and last 5 minutes of the conversations were excluded from the sampling for this study.

1.4.2 Methodology

1.4.2.1 What to include in the observation

Particles including *ne* are said to be unstressed and possess a neutral tone (Li & Thompson 1981). In the flow of speech, the phonetic features of particles are easily influenced by the surrounding phonemes, especially their preceding sound, giving many phonetic variations of a particle in speech. Upon the recognition of some particles, based on the presumption of the correlation between certain particles and certain functions, this can be a source of confusion. This is best illustrated when a

syllable is captured during speech and is believed to be a particle: there may be disagreement on its representation in the writing system, leading to the uncertainty about whether this syllable should be included in the scope of analysis for a certain particle.

The particle *ne*, which is the object of our study, includes all syllables occurring in the speech with the value of the consonant [n] combined with the schwa. This rule can help avoid the possible confusion mentioned in the previous paragraph, as shown in example (6), where (6a) is taken from the present database and (6b) is a constructed example:

(6)

- a. Y: zanmen zher dianying xi de yi ge laoshi,
we PL here film department GEN one CL teacher

A teacher in the Film Studies Department in our university.

wo zhe xueqi [XXX-]
I this term

This term I-

- X: [zanmen zher] hai you dianying xi ne.
we PL here even have film department NE

In our university there is even a Department of Film Studies?

- b. X: zanmen zher hai you dianying xi na.
we PL here even have film department NA

In our university there is even a Department of Film Studies?

Whether a syllable perceived in the speech should be considered as the object of this study relies on acoustic judgement. The last syllable in (6a) has the phonetic value of [nə] and should be included as the object of study. However, the occurrence of the particle *ne* in (6a) is not one of the types discussed in the previous literature that we summarized in Section 1.2.1.

One may argue that the last syllable in (6a) is the particle *na* instead of the

particle *ne*, which is shown in (6b), because *na* and *ne* are acoustically close. *Na* is the variation of the particle *a* in Mandarin Chinese. The variations of the particle *a* are induced by its preceding phonetic environment, as illustrated below:

a → *na/[n]*__

a → *wa/[u]*__

a → *ya/[i]*__

a → *a/other environment*

One widely adopted usage of the particle *a* is to serve as the particle for “confirmation questions” (Li & Thompson 1981). If the last syllable in (6a) is considered as *na*, which is one of the variations of the particle *a*, its occurrence can easily be explained as the particle for “confirmation questions”. This argument is problematic because [na], as a phonetic variation of the particle *a*, only appears when it is preceded by the consonant [n], but in (6a), the last syllable is preceded by the vowel [i]. It follows that the possible variation of the particle *a* in this phonetic environment should be *ya* instead of *na*, but *ya* is so radically different from *ne* that it is not likely to be captured by mistake.

Thus, the only standard for whether to include a syllable as the object of this study is its phonetic value. For example, the last syllable in (6a), although the occurrence of the particle *ne* in this context cannot be well explained by former studies, it is still considered as the particle *ne* based on auditory perception.

1.4.2.2 Searching and transcription

Following the standard set up in 1. 4.2.1, the raw recordings are exhaustively inspected to identify occurrences of the particle *ne*. Also, we identify the two or three Intonation Units (See Section 2.1 for the discussion on Intonation Unit) preceding and succeeding the occurrences of *ne* using the criteria proposed by Du Bois et al. (1993) and Tao (1996). The successions of IUs involving the particle *ne* are then exported as separate sound files for further analysis. Since the conversations are recorded using a

double sound track microphone, we use the Praat program¹ to split the audio into two channels, each with their own file. The main sound track, which involved the utterance of the particle *ne*, in the recording is kept and the other was removed.

The excerpts are transcribed when they are needed for citations in the analysis. To simplify the transcription, only features that are relevant to the analysis were reflected in the transcription. We follow the transcription convention by Du Bois (1993). In general, each line of an example consists a line of Mandarin transliteration in the Romanization system *pinyin*, a line of morpheme-by-morpheme gloss, and a line of the approximate English translation.

For examples that are extracted from the data, each line is based on one Intonation Unit, which may lead to cases where the meaning of each line is too segmented to give a line-by-line translation. Instead of line-by-line in these cases, a line of English translation will be provided in several Intonation Units. For the convenience of analysis, only examples in Chapter 3 are marked with line numbers in the excerpts. The morpheme-by-morpheme gloss follows the convention by Li & Thompson (1981) with some modifications; See Appendices 1 and 2 for the convention of transcription used in this study and a list of gloss abbreviation, respectively.

1.5 The structure of the study

Chapter 1 has so far discussed the background of the study, the framework, the previous studies, the data and methodology. Chapter 2 will describe the structural properties of the particle *ne*, including its prosodic properties and its position in utterances by references to prosodic properties. Chapter 3 will be designated to analyze the functional properties of the particle *ne* including any theoretical background applied in the discussion. Chapter 4 will summarize the observation and analysis in the study. We will also talk about the major limitation of the study and

¹ <http://www.fon.hum.uva.nl/praat/>

directions for future studies.

Chapter 2: The structural properties of the particle *ne*

This chapter is designated to discuss the structural properties of the particle *ne*.

In previous studies of sentence final particles that included the particle *ne*, the study of sentence-final particles usually occurred within the framework of *yuqi* -- i.e., modality -- (Wang 1985, Xing 2001, Alleton 1981). Modality is a complex system involving verb determinants such as adverbs and modal auxiliary verbs as well as sentence final particles (Alleton 1981). A type of modality has to be achieved by one device or a combination of several devices. On the other hand, a single device can function in the creation of different modalities. For example, the particle *ne* can function in declarative, exclamative, interrogative modalities, and so on.

In the study of sentence final particles, modality means that the speaker conveys emotion in the use of language (Wang 1985). There are different opinions among scholars for the number of modalities that exist in Chinese. Wang (1985) provides classified twelve modalities in four groups, while Xing (2001) suggested that there exist roughly four modality categories that include: declarative, exclamative, imperative, and interrogative.

When we therefore study the function of the particle *ne* in conversation, it is inevitable that we have to take into account how the particle *ne* interferes with other devices, such as intonation, and how their combination achieves the uttered modality. Although we do not elaborate on the relationship between the particle *ne* and its intonation, we believe that it is beneficial to briefly overview the prosodic properties of the particle *ne* in conversation, as they are uttered in certain modalities in this study.

2.1 Intonation Unit

The basic unit for analysis is Intonation Unit (IU), which is a prosodic segment that has been taken as the natural unit of discourse; it is defined as “a

sequence of words combined under a single, coherent intonation contour” (Chafe 1987). It is the unit that a speaker packages, and organizes, the flow of their thoughts in speech (Chafe 1987, Du Bois 1987). IUs have proven to be useful in the analysis of many discourse-oriented studies, including ones in Mandarin Chinese (Tao 1996).

Since IUs are perceived auditory units that can be identified in the natural discourse of conversation, we must define criteria to help divide the flow of speech into IUs. Du Bois et al. (1993) provided a set of prosodic properties as the criteria for the identification of IUs, including a unified intonation contour, a possible pause between two IUs, the lengthening of the last syllable in an IU, a sequence of fast-tempo unstressed syllables in a non-turn initial new unit, and a resetting of baseline pitch level. Tao (1996) applies these criteria to the study of Mandarin Chinese, and also proposes some language-specific properties of Mandarin Intonation Units (MIUs). One of the important properties of MIUs is that the Mandarin contour is the algebraic sum of two dimensions of prosody -- i.e. tone and intonation (Chao 1968, Tao 1996). This property is beneficial for reaching a more accurate characterization of the pitch of the particle *ne* in speech. A property of MIUs suggested by Tao (1996) is that although particles do not mark the boundaries of MIUs per se, they correlate highly with the IU boundaries, and constitute an important cue for the identification of MIUs. This property is highly related with the present study and is reserved for further discussion in Section 2.2.

2.2 The position of the particle *ne* in Intonation Unit

As discussed in Chapter 1, most of the previous studies are based on the position of the particle *ne* in a sentence. Since we use the IU as the basic unit in our analysis, it is helpful to first look at the position of the particle *ne* in IUs. 168 occurrences of the particle *ne* were identified in the database. By referencing the particle’s position in the IUs, they can be grouped into two types:

(I) IU-middle *ne*

(II) IU-final *ne*

For group (II), some occurrences of the particle *ne* happen with speaker change in conversation, while some happen without speaker change. Given that speaker change is a significant factor that we consider in the analysis provided in Chapter 3, group (II) is further classified as:

(II-a) IU-final *ne* with speaker change

(II-b) IU-final *ne* without speaker change

These three types of placements (I, II-a, and II-b) of the particle *ne* are discussed in the following sections.

2.2.1 IU-middle *ne*

The first type of placement is within an IU (IU-mid *ne*), as illustrated in example (7) and Figure 2:

(7)	mei	he	le	san	tian	ne	nei	ge	nai	jiu	huai	le.
	NEG	drink	PFV	three	day	NE	that	CL	milk	then	bad	CRS

Within three days since it was used, the bottle of milk went bad.

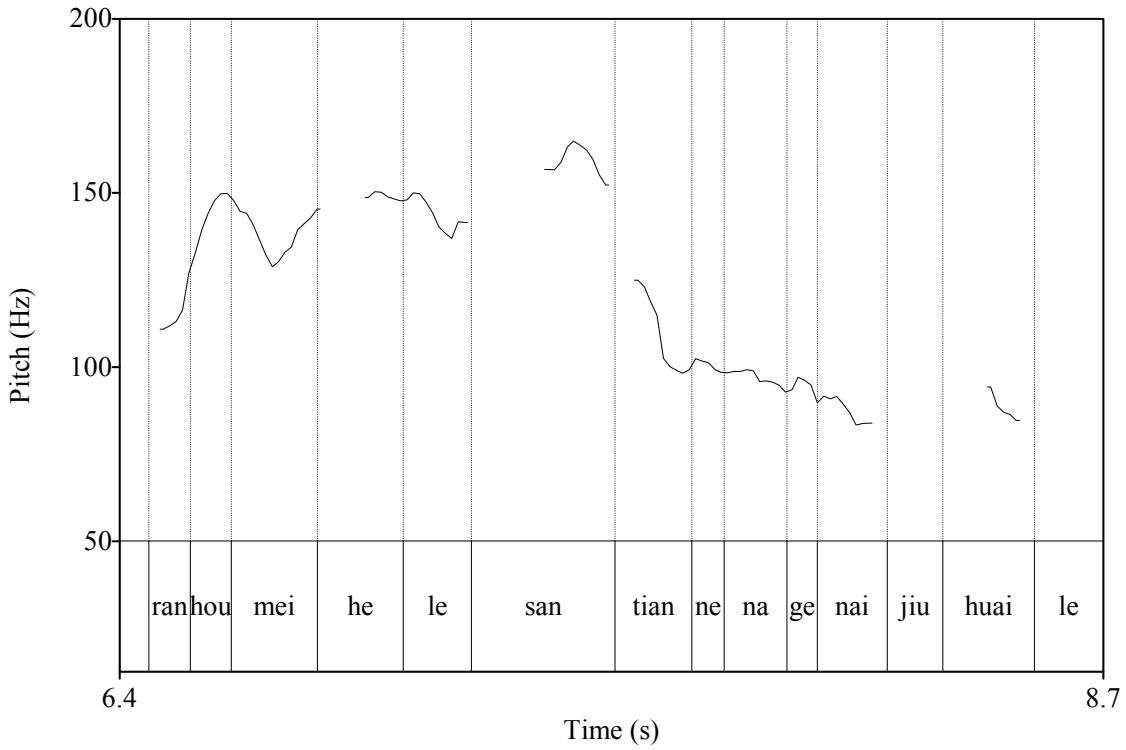


Figure 2: the pitch contour of an IU with an IU-mid *ne*

The classification of the placement type for *ne* is debatable. As mentioned in section 2.1, Tao (1996) suggests that when particles appear, they almost always appear at the end of an IU. The overwhelming majority suggests that MIUs can be identified by referring to the presence of particles. However, in the current data, 17 out of 168 occurrences of the particle *ne* are identified as within an IU, which is quite significant. After carefully evaluating the criteria for identifying IUs, none of these criteria can be applied to situations where the particle *ne* occurs in (7). Even if one insists that the particle *ne* in (7) is the boundary of two IUs instead of within an IU, the two IUs divided by the particle *ne* must be on the margin of the prototypical continuum of IUs. That is: when an IU has a bundle of prosodic features that assist in its classification, it is a prototypical IU; when some of these features are absent, it is less prototypical. In the case of (7), almost all of the prosodic features for identifying IUs are absent -- i.e., there is no pause after *ne*, no lengthening of the last syllable in an IU, no a sequence of fast-tempo unstressed syllables in a non-turn initial new unit,

and no resetting of baseline pitch level. The acoustic analysis in Figure 1 shows that particle *ne* is fused with the preceding and following sounds without any interruption existing.

We preferentially argue that the particle *ne* does appear within an IU. This does not necessarily invalidate the claim made by Tao (1996) because the particle *ne* seems to only consist of a small proportion of particles that appear in natural speech. It is possible that only some occurrences of particle *ne* exist within an IU, and the other particles, which consist the overwhelming majority of all particles, still tend to appear at the end of an IU. In other words, the existence of IU-mid *ne* does not devalue the claim made by Tao (1996) that particles correlate highly with intonation unit boundaries. With this compromise, it seems to be safe to claim that the classification of IU-mid *ne* is justifiable.

2.2.2 IU final *ne* without speaker change

A second type of the placement of the particle *ne* is at the end of an IU but without speaker change, as illustrated in example (8) and Figure 3:

(8) ranhou you lai yi ge ne.
then again come one CL NE

hen ai shengqi.
very love angry

Then another came who was easy to get angry.

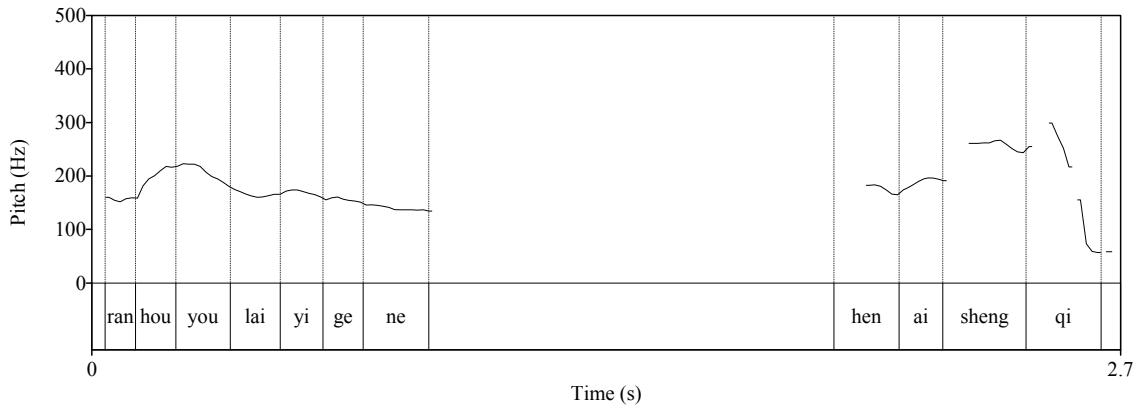


Figure 3: the pitch contour of IUs with an IU-final *ne* without speaker change

As shown in Figure 3, the second IU starts with *hen* ‘very’ and there is a resetting of the baseline pitch. With a baseline pitch resetting in the next IU, the particle *ne* clearly marks the boundaries of two IUs in speech. 99 out of 168 occurrences of the particle *ne* in the data belong to this type.

2.2.3 IU final *ne* with speaker change

The third type of the placement of *ne* is at the end of an IU and also with speaker change, as illustrated in example (9) and Figure 4:

(9)Z: yinwei ertong yiyuan,
because children hospital

Because in children hospital,

renjia kan dao shiba sui ne.
others see until eighteen year NE

they see patients up to eighteen years old.

X: ertong yiyuan,
 children hospital

Children hospital,

wo juede geng zhuanye.
 I feel more specialized

I think it is more specialized.

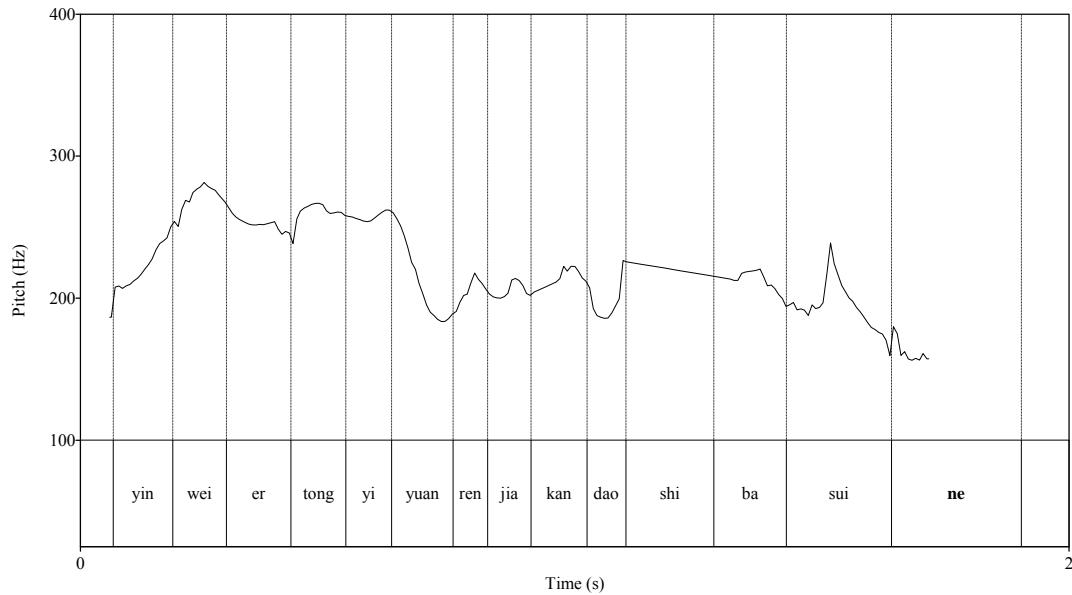


Figure 4: the pitch contour of IUs with an IU-final *ne* with speaker change

As shown in Figure 3, the particle *ne* marks the end of an IU uttered by speaker Z, with the completion of her turn followed by a pause and speaker X utters her initial IU to signify a new turn. 52 out of 168 occurrences of the particle *ne* in the database belong to this type.

In this section, we demonstrated the three types of placement of the particle *ne*. IU-mid *ne* is the minority, but still contributes a significant proportion to the present database. IU-final *ne* consists of the largest proportion of occurrences of *ne*, which

substantiates the observation of the correlation between particles and IU boundaries. Within IU-final *ne*, the occurrences of the particle *ne* can be further classified into two types considering whether it occurs with speaker change or not.

2.3 The pitch of the particle *ne* in speech flow

When the pitch of the particle *ne* is not identifiable, it will be coded as 0. The “identifiable pitch” class is a set of descriptive tagging that includes: “rising”, “falling”, and “high flat”. The visualized baseline pitch of the particle *ne* with the four types of pitch tagging is illustrated in Figure 5. As for the image of high flat pitch in Figure 5, *ne* follows a first tone -- i.e., a high flat tone -- that is the highest sound the speaker would produce in speech. Since the pitch of *ne* is approximately at the same level as the high flat tone, we can identify it as a high flat pitch.

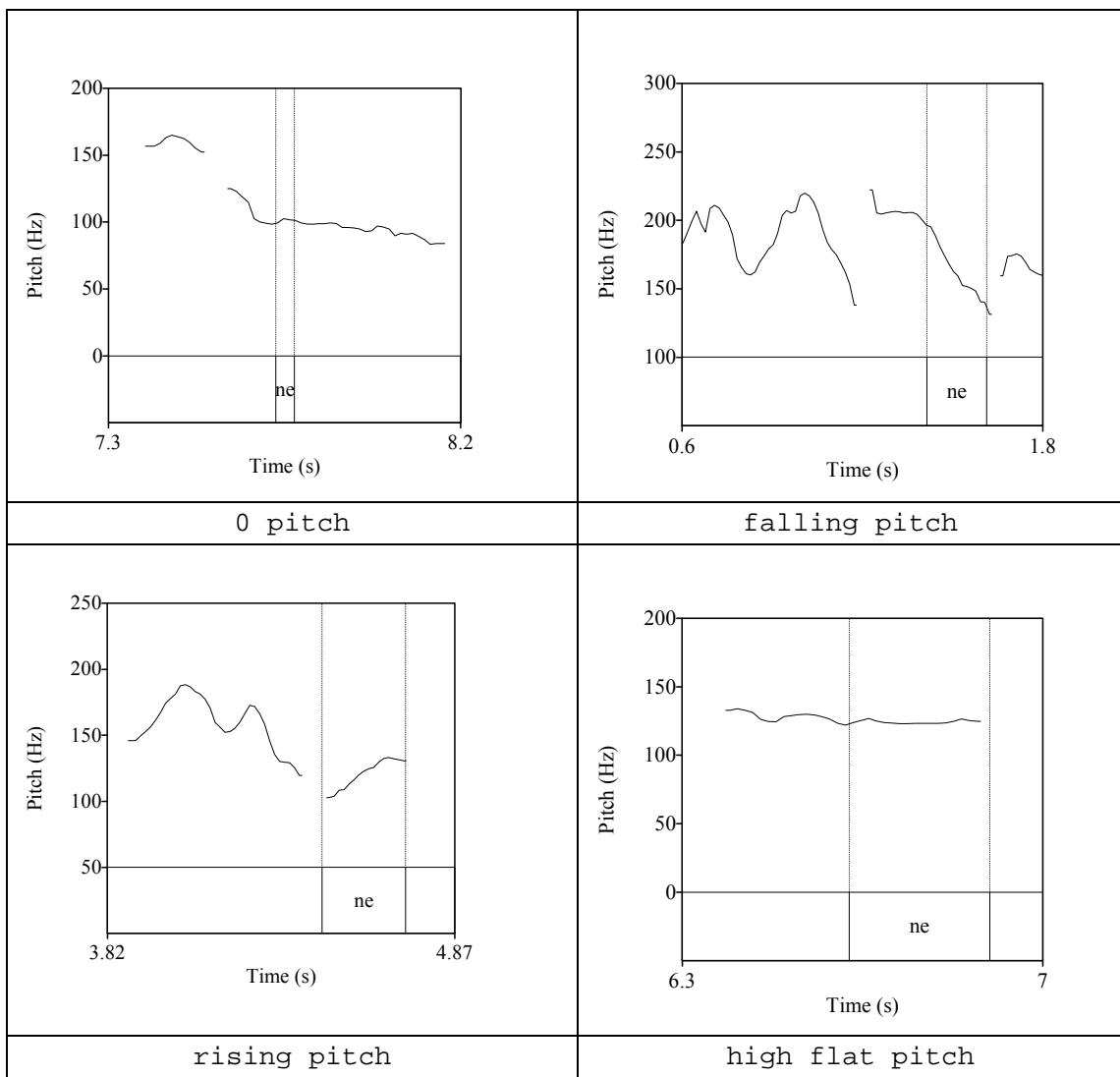


Figure 5: the shape of pitch of the particle *ne* in four types of pitch

In this chapter we have discussed the structural properties of the particle *ne*, including the prosodic properties and its position in IUs. Although not directly integrated in the current study, this discussion is complementary with the functional properties, which will be discussed in the next chapter to form an understanding of the particle *ne* in use.

Chapter 3: The functional properties of the particle *ne*

In previous studies, the functions of the particle *ne* are studied primarily in two forms: questions and declarative sentences (Zhu 1982, Wang 1985, Xing 2001, Chao 1968, Li & Thompson 1981, among others). In this chapter we show that not all of the questions are intended to seek answers from the co-participant in conversation. We therefore use alternative terms to classify the occurrences of the particle *ne*, primarily focusing on its interrogative and non-interrogative usage. Non-interrogative usage takes up a majority (72%) of the occurrences of the particle *ne*, whereas interrogative usage accounts for minority (28%).

There are various devices that can be implemented to form different types of interrogative utterances in Mandarin Chinese, such as: using question pronouns or particles, using an affirmative-negative form, using conjunction words, or simply by using a slightly rising intonation pattern. Since the intonation pattern can act as the sole device for forming interrogative utterances, some occurrences of the particle *ne* in the transcriptions cannot be judged as an interrogative or non-interrogative usage if they are in isolated context, or without intonation information. To illustrate this point, we constructed the following example:

(10)

→ (10-1) xiaozhang ne.
little Zhang NE.

(10-2) ta bu lai.
3sg NEG come

If (10-2) is read in a rising tone, the meaning for the two lines should be “What about Little Zhang? Isn’t he/she coming?” Otherwise, if (10-2) is not read in a rising tone, the meaning for the two lines should be “As for Little Zhang, he/she is not coming.”

Whether the particle *ne* in (10-1) is an interrogative or non-interrogative usage relies on the intonation of the intonation unit succeeding it, or is possibly concluded from a larger context. The majority of criteria for categorizing interrogative and

non-interrogative usage in our study are devices that are read from the transcription of the utterances – i.e., question pronouns, adverbs, particles, etc. – or, from the context that includes several adjacent lines. For a small number of cases, the judgments need to be assisted by intonation information.

The first part of the chapter will present a qualitative analysis of the function of the particle *ne*, and the second part of the chapter summarizes the frequency information of the particle *ne* in each functional category.

3.1 Qualitative analysis

According to the criteria introduced earlier, the occurrences of the particle *ne* in the current data clearly falls into two subsets of interrogative usage and non-interrogative usage, where we first the latter before the prior. Our analysis is based on these two subsets.

3.1.1 Non-interrogative usage

For non-interrogative usage, the particle *ne* is identified to serve four categories of conversational functions, namely: in response to expectations, in semi-fixed phrase with connectives, as topic marker, and with information status. In the following subsections, we address each of these categories.

3.1.1.1 *Ne* in utterances as response to expectation

As discussed in Section 1.2.1, when *ne* is not a question particle, its semantic functions are summarized as a “response to expectation” (Li & Thompson 1981), as cited below:

As the final particle of a declarative sentence, *ne* has the semantic function of pointing out to the hearer that the information conveyed by the sentence is the speaker’s response to some claim, expectation, or belief on the part of the hearer. We will gloss it as ‘Response to Expectation’, or Rex. On the basis of its semantic function, this particle has the effect of calling on the hearer to pay

particular attention to the information conveyed by the sentence because it is a response to the hearer's claim, expectation, or belief. (p. 300)

In our data, a large number of occurrences of the particle *ne* (20 occurrences out of 121, accounting for 16.5%) support this observation. We therefore adopt the usage of the term "Response to Expectation" by Li & Thompson for this functional category. Consider the following example:

(11) Visa: Speaker CK and her husband immigrated to Canada from China. Currently CK's husband is holding a Canadian citizenship and working in the United States, and he no longer has a Chinese citizenship. CK is complaining about the inconvenience caused by the immigrant and visa policy between China and North American countries.

→ (11-1) CK: ta- ta xianzai hui zhonguo hai dei qian
3sg now back China even must issue
zhongguo qianzheng ne.
Chinese visa NE

He even has to apply for a Chinese visa to go back to China.

(11-2) zei gaoxiao le.
very ridiculous PFV

That's so ridiculous.

(11-3) LT: [@@@ @ @ @ @ @ @ @ @ @ @].

(11-4) CK: [@@@ @ @ @ @ @ @ @ @ @ @].

(11-5) LT: o dui o.
oh right oh

Oh right.

(11-6) [haoxiang zhongguo qianzheng hai ting mafan
seem Chinese visa still quite troublesome
qian de].

issue CSC

It seems that it is quite troublesome to get a Chinese visa.

(11-7) CK: [@@@@@@@][@][@][@][@].

Prior to this excerpt, CK mentioned that it is very troublesome to travel to the United States as a Chinese citizen. On the contrary, one would assume that it should be easier for people to travel to their motherland. Although this assumption is not explicitly uttered, CK refers to this being the case, which differs from the general assumption by using the particle *ne*. The personal pronoun *ta* ‘he’ in (11-1) refers to CK’s husband. Although originally from China, because of his immigration status, now he has to apply for a Chinese visa before he can visit his motherland. The particle *ne* calls for LT’s attention to what CK brings up in (11-1), which is a response to a general assumption that LT might have at this point. The fact that CK’s husband has to get a Chinese visa to visit China is counter-intuitive and beyond LT’s expectation. Consequently, both participants follow up this turn with laughter, and LT suggests that the tediousness exceeded her expectation in (11-6).

3.1.1.2 *Ne* in semi-fixed phrase with connectives

Most of the literature has treated the particle *ne* when it is at the end of a clause or a noun phrase (Zhu 1982, Wang 1985, Xing 2001, Chao 1968, Li & Thompson 1981, and others). Few of the previous studies have closely examined the particle *ne* when it appears after certain connectives, including conjunction words and ordinal numbers, illustrated by the following example:

(12) Alcohol: speakers DW and LZ are talking about buying a specific alcohol in Canada and in England.

(12-1) DW: xiang zhe bian ba,
like this side BA

Like in here,

- (12-2) ni yao dao,
 you must to
- (12-3) teding de,
 certain NOM
- (12-4) jiu de shangdian qu mai.
 alcohol ASSOC store go buy
- you have to buy at certain liquor store.

- (12-5) LZ: chao gui.
 super expensiver
- Super expensive.

- (12-6) DW: danshi ne,
 but NE
- (12-7) ni dao yingguo na bian ne.
 you go England that side NE

But if you go to England,

- (12-8) jiu shi chaoshi libian.
 just be supermarket inside
- (12-9) sui ni na.
 free you take

You can buy them freely in supermarkets.

The utterance in (12-6) is a typical example where the particle *ne* occurs with a connective, which, in this case, is *danshi* ‘but’. The previous studies that do mention this usage of the particle *ne* only address vague treatments such as: “used in a pause in a sentence”, “used after some elements” (Zhu 1982), and “used to cause an intentional pause” (Chao 1968).

The lack of attention paid to this usage may lead to the impression that this usage is peripheral among functions of the particle *ne*, however, an observation of the current data reveals the opposite: 37 out of 121 occurrences accounting for 30.6% of

the particle *ne* in non-interrogative usage appear with connectives. The high frequency of this usage reflects the repetitive side of the language (Corrigan et al. 2009). Frequently combined usage of connectives with the particle *ne* forms a conventionalized, pre-fabricated formula that is ready to be accessed by the speaker as a whole, capsulated as follows:

[connectives] + *ne*

Connectives that fill in the square bracket can vary. Table 1 summarizes the connectives appearing with the particle *ne* and their frequency in our database:

<i>suoyi</i> ‘so’	10
<i>ranchou</i> ‘then’	10
<i>erqie</i> ‘and, besides’	6
ordinal numbers	6
<i>danshi</i> ‘but’	5
total	37

Table 1: summary of connectives with the particle *ne* and their frequency

Ordinal numbers with the particle *ne* are used when the speaker needs to enumerate a few items or points, for example:

(13) Linguistics: speaker WG is talking with his friend JR about his opinion that it is an advantage for a linguist to study his or her native language. He has several reasons to support his argument.

(13-1) WG: shouxian wo juede shi,
first I feel be

Firstly I feel that,

(13-2) you huayu quan.
have speech right

you have the power to influence.

(13-3) ye jiu shi [yinwei]zhe shi ni ziji de yuyan.
also just be because this be you self ASSOC language

it is also just because this is your own language.

(13-4) JR: [en].
em

Em.

→ (13-5) WG: er yi ge NE,
two one CL NE

The second one,

(13-6) shi yinwei.
be because

it is because...

(13-7) ni queshi shi dui ni de yuyan,
you indeed be to you ASSOC language

(13-8) shi geng shouxi.
be more familiar

you are indeed more familiar with your own language,

(13-9) jiu xiangbi yu waiyu lai shuo.
just compareto foreign language come say

just comparing with foreign languages.

(13-10) JR: en.
em

Em.

→ (13-11) WG: san yi ge NE,
three one CL NE

The third one,

(13-12) jiu shi shuo shi,
just be say be

that is to say,

(13-13) uh,
 uh

uh,

(13-14) yi yi yijng xue le henduo guanyu waiyu
already learn PFVmuch about foreign language
de yanjiu fangfa.
ASSOC research method

you already learned a lot about the research methods on foreign languages.

Ordinal numbers in (13-5) and (13-11) are similar with other connectives in the sense that they show the connection between what is being said and the context before and after that, which is the reason that they are also considered to be in this category in this analysis.

In the forming of formulae in languages, there are different levels of fixedness (Corrigan et al. 2009, Bybee 2010). As the choice of connectives can be rather random where the particle *ne* follows, this formula can be viewed as semi-fixed phrase.

Taking a step further to inquire about the motivation for the specific case of formulaic language where the particle *ne* goes with a connective, we hypothesize that the connectives are usually assigned with functions to indicate different types of relations, including the relations among utterances. For example (12), there is a contrastive relation between the utterances before and after the connective in (12-6), and in example (13) the connectives show a sequential relation between (13-1) - (13-4), (13-6) - (13-9), and (13-12) - (13-14). The particle *ne* has the function that, by using it, the speaker is appealing to the listener's participation, and the listener is requested to be attentive (Alleton 1981). The particle *ne* can be used to elicit the desired response. This might be the motivation for the phenomenon that the particle *ne* frequently follows a connective.

3.1.1.3 *Ne* as topic marker

Mandarin Chinese has long been recognized as a topic-prominent language (Li & Thompson 1975, 1981, Huang 1973, Chao 1968, and elsewhere). Some scholars have observed usage of the particle *ne* as a topic marker (see the discussion in Section 1.2.2). The notion of a “topic” is generally believed to be what the sentence is about, and that the speaker assumes the listener has some knowledge in what they are referring to. Additionally it is followed by an optional pause, and does not necessarily have a direct semantic relationship with the predicate in the sentences (Li & Thompson 1975, 1981). However, Chafe (1975) provides further observations, along with some examples that we give below, to distinguish the style of English and Chinese topics:

(14) (Chafe 1975: p.49-50)

English:

- (a) The play, John saw yesterday.
- (b) As for the play, John saw it yesterday.

Chinese:

- (c) nei-xie shumu shu-shen da.
those tree tree-trunk big

The trunks of those trees are big.

According to Chafe, ‘the play’ in (14a) is the topic, or is being topicalized with its placement at the beginning of the sentence. Similarly, sentences like (14b) also include an obvious topic. The so-called topics in (14a) and (14b) are the “focus of contrast that has, for some reason, been placed in an unusual position--at the beginning of the sentence. Example (14a) can be uttered in a situation where the listener is assumed to have had a list of certain theatrical events in mind (play, movie, opera, etc) that John may be attending, or has attended at some point, and the speaker is providing the information of a correct pairing which is ‘the play’ and ‘yesterday’. Example (14b) is similar, with the exception that ‘the play’ is explicitly stated as one item from a list of theatrical events that are being paired. An explanation for the topic

– i.e., ‘the play’ -- being placed at the beginning of the sentence might be that it is an item from a list that is being, either implicitly or explicitly, described and ‘yesterday’ is brought in as the new information to pair with it. However, for Example (14c) there is no contrastiveness involved, as it does not coincide with anything in English, unlike examples (14a) and (14b).

As for what the topic device in Chinese is, Chafe suggests that it does not fit precisely into the characterization that “what the sentence is about”. In (14c), the bigness is predicated on the tree trunks, and not on “those trees”. In this case, the topic seems to be to constrain the applicability of the predication to a restricted domain. The bigness of the trunks applies within the domain of those trees. As for what style of topics are deemed Chinese, Chafe (1975) suggests:

Typically, it would seem, the topic sets a spatial, temporal, or individual framework within which the main predication holds. (p. 50)

The elaboration of the notion of the topic in Chinese can help us understand some occurrences of the particle *ne* in the current data. The particle *ne* often occurs with utterances that characterize the correspondence with what is described above as the topics in Chinese. They set the frame for the following conversation, and the particle *ne* appears to be the marker for these topic-like utterances. Consider the following example:

(15) Microwave oven: speaker XC is talking with his friend HM why personally he does not prefer to use microwave oven to heat up food. He is trying to explain his assumption about the mechanism how microwave oven works.

→ (15-1) XC: jiu shi yinwei ni weibolu de hua ne,
just be because you microwave ASSOC saying NE

It is just because for the microwave oven

(15-2) ni ni yao yong de shihou
you need use ASSOC time

when you need to use it,

- (15-3) ni xu-
you need

(15-4) ta shizhishang jiu shi ba,
3sg in fact just be BA

(15-5) na limian de shuifen dou gei ni zheng
that inside ASSOC water all for you vaporizeddry
gan le.
PFV

in fact the water inside is vaporized.

(15-6) HM: shi hou.
be HO

Yeah.

(15-7) XC: ranhou zhe ge guti jiu bian re.
then this CL solid just become warm

Then the solid will be warm.

In this excerpt, (15-5) is about the hydration of the food being vaporized, and (15-7) is about the food getting warm due to a certain mechanism. “What the sentence is about” keeps changing as the conversation continues, and new information is being introduced. However, all of the items that are the focus of the conversation exist within the domain of the microwave oven, which is set up as the topic in (15-1) at the very beginning of this sequence. The particle *ne* attached to ‘the microwave oven’ helps to cause a pause and set it apart from the rest of the utterances, making it recognizable as the topic.

Example (15) shows how the topic, after which the particle *ne* often appears, sets up an individual frame for the conversation. Example (16), given directly below, illustrates how the particle *ne* sets up a topic in a spatial frame:

- (16) Vodka and beeар: speaker DW is talking with his friend LZ about an interesting

phenomenon along the border between Russia and Finland, where Russians buy Vodka across the border in Finland, while Finish buy beers across the border in Russia.

- (16-1) DW: fenlan gen si-eluoside bianjie.
Finland with Russia ASSOC border

At the border between Finland and Russia,

- (16-2) eluosiren kai che guoqu mai futejia.
Russian drive vehicle go buy vodka

Russians drive across to buy vodka.

- (16-3) LZ: en[=]
hum

Hum.

- (16-4) DW: [fenlan] ren kai che guoqu mai pijiu.
Finnish drive vehicle go buy beer

Finnish drive across to buy beers.

- (16-5) LZ: e.
uh

Uh.

- (16-6) DW: yinwei pijiu zai=zai eluosi bu suan jiu.
because beer at at Russia NEG count alcohol

Because beer is not counted as alcohol in Russia.

- (16-7) LZ: en.
hm

Hm.

- (16-8) DW: suan yinliao.
count beverage

It's counted as a beverage.

(16-9) LZ: o.
oh

Oh.

→ (16-10) DW: futejia zai fenlan ne,
Vodka at Finland NE

(16-11) LZ: suan= yinpin.
count beverage

While Vodka in Finland is counted as a beverage.

(16-12) LZ: en.
hm

Hm.

(16-13) DW: bu shang shui.
NEG pay tax

Don't need to pay tax.

(16-14) suoyi ne.
so NE

So...

(16-15) LZ: o.
oh

Oh.

(16-16) [yuanlai shi zhe yang].
turn out be this like

So that's why.

(16-17) DW: [guoqu mai].
go buy

Go across to buy.

We see that excerpt (16-10) provides contrast for the situation that occurs in

the previous conversation, which is about Russian beer attracting Finnish people across the border to purchase it. This makes it more similar to the style of English topics. Moving forward from (16-10), although the conversation is about vodka and Russians buying vodka, it is within the spatial frame of Finland, which is set up in (16-10). Similarly, example (17) shows the particle *ne* appears with a topic that sets a temporal frame for the conversation:

(17) Learning German: a professor LX is talking about her experience of learning German to a student ZY. The professor started to study German in her junior year in university, and she was able to work as a part-time German translator after two years' studying.

(17-1) LX: bie- bie kan wo yi zhou jiu,
NEG see I one week just

(17-2) liang= xiaoshi de deyu ke.
two hour ASSOC German lesson

Although I only had two hour's German class per week,

(17-3) danshi,
but

(17-4) wo= zai yanjiusheng de,
I at graduate student ASSOC

When I was a graduate student,

→ (17-5) jiu shi benke liang nian zhihou ne,
just be undergraduate two year later NE

just two years after undergraduate study.

(17-6) ZY: en=.
hum

Hum.

(17-7) LX: wo jiu yong deyu zuo fanyi le.

I already use German do translation CRS

I already used German to do translation.

(17-8) ZY: [wa=]
 wow

Wow.

(17-9) LX: [jiu= jiu zai],
 just at

(17-10) yinwei zai yiqidazhong ma.
 because at Faw-volkswagen

Because I was at Faw-volkswagen Company.

Starting from (17-1) LX talks about that her German lesson that was not as frequent as one would expect when considering her study outcome, which is the fact that she was able to work as a translator after two years. From (17-6) the conversation seeks to discover what happened two years later. Thus, the focus of the sequence is clearly around the utterance in (17-5). The particle *ne* marks the topic that is essentially a temporal background of the facts being discussed.

3.1.1.4 *Ne* appearing where information status changes

When a conversation occurs, there is information flowing through the consciousness of the speaker, the listener, or between the speaker and the listener.

Chafe (1994) gives an analogy between consciousness and vision:

One way in which consciousness and vision are alike is in the very limited amount of information each can focus on at one time. There is foveal vision and focal consciousness. Surrounding this small area of maximum acuity lies, on the one hand, peripheral vision and, on the other hand, peripheral consciousness, both of which not only provide a context for the current focus but also suggest opportunities for its next move. Beyond peripheral consciousness lies a vast treasury of information, some of which will at some

time be brought into focal or peripheral consciousness, but all of which lies unattended at the moment. (p.53)

This analogy vividly suggests that, just like vision, the mind has focal which is continually shifted from one to another. In identifying the status of information in conversation, an intuitive classification would be “new” and “old”. However, Chafe (1994) discusses an example as (18a) and (18b) below:

(18)

- (a) I talked to him last night.
- (b) I talked to Larry last night.

(Chafe 1994: p. 72)

- (c) I talked to Larry last night. He is the new accountant for my company.

Compared to (18b), the referent of the personal pronoun ‘him’ in (18a) appears to be relatively old information in certain context. On the other hand in (18b), ‘Larry’ is introduced as a proper name instead of a personal pronoun, which appears to be new information. However, it does not necessarily mean that the listener had no previous knowledge about this person Larry, but the idea about Larry, which was previously inactivated, and is activated by the speaker’s utterance at this point of the conversation. Thus, Chafe (1994) concludes that a more accurate characterization of “new information” would be “the information newly activated at this point in the conversation”. Conversely “old information”, or “given information”, would be “information already activated at this point in the conversation”.

Consider another possible scenario in (18c), in which the listener does not have any previous knowledge about this person Larry. What distinguishes example (18c) from (18b) is that the referent to ‘Larry’ in (18c) seems to be information that is inactive prior to this point in the conversation, whereas the referent of ‘Larry’ in (18b) is somewhere between inactive and active. Chafe (1994) labels such information status in (18b) as semiactive. Therefore, if we consider the referent of ‘Larry’ and ‘him’ as the information being conveyed, then after comparing (18a), (18b), and (18c),

the information is all active at the point of these utterances in the conversation. We can have a three-way breakdown as for the status of the information:

- I) the information in (18a) was already active, it is given information at the point when (18a) is uttered;
- II) the information in (18b) is semiactive, it is, as Chafe (1994) labels, accessible information at the point when (18b) is uttered;
- III) the information in (18c) was inactive, it is new at the point when (18c) is uttered.

The semiactive status of information is useful for understanding the fourth category of function of the particle *ne* in non-interrogative usage in the data. This category includes occurrences of the particle *ne* that are frequently associated with activation of semiactive information, or the process of making semiactive information accessible in the conversation. Consider the following example:

(19) Free beer: speaker SX and PB are graduate students in the same department. SX recalls treating a group of friends, including PB, to hotpot on SX's last birthday. Talking about a treat, PB reminds SX about the "free beer" event. SX is soon finishing his Master's degree and leaving to another city to work. As a custom in their department, students who are graduating will usually host a "free beer" party to all graduate students in the department.

(19-1) SX: bu shi qunian guo shengri qing=

 NEG be last year celebrate birthday treat

(19-2) bu shi qing nimen qu chi [na ge],

 NEG be treat youPL go eat that CL

Wasn't it that to celebrate my birthday last year, I treated you to that...

(19-3) PB: [dui a],

 right A

Right.

- (19-4) [dui a].
right A

Right.

(19-5) SX: [na ge shenme],
that CL what

(19-6) chi huoguo dui ba
eat hotpot right BA

To have hotpot, right?

(19-7) PB: en.
hm

Hm.

(19-8) SX: chi le=,
eat PFV

(19-9) zhijie chi le san bai duo,
directly eat PFVthree hundred over

We spent over three hundred dollars.

(19-10) na yi ge yue guo de [wo cao]
that one CL month passCSC I shoot

I spent that month like...

(19-11) PB: [@@@@]

(19-12) SX: [zhao Zhao Ting jie qian guo rizi].
ask Zhao Ting borrow money passday

I had to borrow money from Zhao Ting to get by.

(19-13) PB: [@@@@ @@@@ @@@@ @@@@ @@@@].

(19-14) SX: @@.

(19-15) san bai duo ting shang de wo cao.

three hundred over quite hurt CSC1SG shoot

Three hundred was quite a lot.

(19-16) PB: en.
hm

Hm.

(19-17) ai dui le.
oh right CRS

Oh, right!

→ (19-18) ni hai you (L2 free beer L2) mei gao ne.
you still have free beer NEG do NE

You still haven't done the "free beer".

(19-19) SX: (L2 free beer L2) wo bu gao le.
free beer I NEG do CRS

I won't do the "free beer".

(19-20) PB: bu gao le.
NEG do CRS

Won't do it.

(19-21) SX: mei shijian le.
NEG time CRS.

I don't have time.

(19-22) yinwei wo da wanbian,
because I finish defense

Because after I finish defense,

(19-23) ershi duo hao jiu zou le.
twenty more date then go PFV

I will leave as early as the twenty or later this month.

(19-24) PB: en.
hm

Hm.

(19-25) SX: genben mei shijian gao.
basically NEG time do

I basically won't have time.

The utterance in (19-18) with the particle *ne* brings in the information that is not entirely new to the listener. Both parties of the conversation know that SX hasn't hosted the "free beer" party. Before the utterance in (19-18), some information rests in an area that is peripheral to the focal of the consciousness; the information can therefore be considered as semiactive prior to this. "Haven't hosted the 'free beer'" is related to the context prior to (19-18) in which the speakers talked about a similar event of treating friends and hosting party. Therefore it is being moved naturally from the peripheral to focal consciousness of the speaker, PB. In (19-18), PB's utterance both activates this context by making it a point of discussion in the conversation, thereby changing the information status from semiactive to active. Acoustic observation of line (19-17) shows a noticeably higher pitch than all the other utterances produced by PB in this excerpt, and the exclamatory content *ai dui le* 'Oh, right!' explicitly shows the status when then focal of the consciousness changes to a new one. Hence, the particle *ne* in example (19-18) seems to be associated with semiactive information being activated in the conversation; a similar case arises for example (9) in Section 2.2.3, and it is transcribed with extended context as example (20):

(20) Speaker A is talking about her experience of working in a hospital in China. In that hospital, children under 12 should go to the pediatrics department while those above 12 have to be received in the regular departments. Speaker A worked in the regular clinic, and often received children just slightly above 12.

(20-1) A: jiu cha- youshihou jiu cha name yi
just difference sometimes just difference that one
liang ge yue.
two CL month

Sometimes it's just one or two months' difference.

(20-2) ((sigh)).

(20-3) danshi wo juede,
but I feel

But I feel,

(20-4) qishi haishi yinggai kan erke.
in fact still should see pediatrics

they should still see the pediatrician.

→ (20-5) yinwei ertong yiyuan renjia kan dao [shiba sui] ne.
because children hospital others see to eighteenyearNE

because in the children's hospital they see patients up to 18 years old.

(20-6) B: [dui].
right

Right.

(20-7) ertong- erke wo juede geng zhuanye.
children hospital I feel more specialized

I feel they are more specialized in the children's hospital.

In (20-1) A talks about the cases where the patient is only one or two months over 12 years old and he/she has to visit the regular clinic. The sigh in (20-1) appears to show that she does not think it is appropriate. She explicitly states this opinion in (20-3) and (20-4) by saying that 12-year-olds should still see the pediatrician, and gives further support argument in (20-5). The information provided in (20-5) may, or may not, have been previously known to B. In other words prior to (20-5), it is

possible to be inactive or semiactive information in the conversation. However, (20-6) shows B's response with a token *dui* 'right' before A even finishes her turn; it is therefore reasonable to suggest that the information being introduced is common knowledge to both A and B, which means it is semiactive information. The utterance in (20-5) activates a piece of old common information to support the current issue by speaker A. The particle *ne*, again, is associated with the activation of semiactive information in conversation. Discussion on the information status and activation in this category provides an alternative perspective to previous studies, which do not consider exploring the relationship between the speakers and the conversational information.

3.1.2 Interrogative usage

In Chinese, there are different types of interrogative utterances. As stated earlier, the types of interrogative utterances can vary among scholars. In general, it is agreed that the particle *ne* can go with substance questions² (Alleton 1981, Lü 1999, Wang 1985, Li & Thompson 1981, Zhu 1982, Shi & Zhang 1995) and disjunctive questions³ (Alleton 1981, Lü 1999, Zhu 1982). When the question is in context, the particle *ne* can simply go with a noun phrase to form a question (Alleton 1981, Lü 1999, Wang 1985, Li & Thompson 1981, Zhu 1982, Shi & Zhang 1995). In the current data, one form of the typical interrogative utterances with the particle *ne*, disjunctive questions, is not detected. Therefore, syntactically, the interrogative usage of the particle *ne* in this analysis is divided into two forms: "question + *ne*" and "noun phrase + *ne*".

Although the particle *ne* appears to be within utterances of the interrogative usage category, these utterances are not always used to ask a question. For the interrogative usage category, two other functions were identified; namely the word

² Substance questions are those used to content information, where question words such as where, what, who, etc. are involved.

³ Disjunctive questions are in the "X or Y" form, where the alternatives involve two different verbs or two different complements of the same word.

search function at the discourse level, and the rhetorical question function at the pragmatic level.

Interrogative usage of the particle *ne* will be analyzed through the classification of regular questions, word search, and rhetorical questions. We perform an in-depth analysis of regular questions, which are the largest interrogative usage, through examination of their two main types: question word + *ne* and noun phrase + *ne*.

3.1.2.1 Regular questions

Since we are discussing the utterances in this section that are used by speakers to make an inquiry, we need to consider how the interrogative modality is formed. As mentioned at the beginning of Chapter 3, the interrogative modality can be achieved by a system of devices including question words, intonation, and particles. One issue related to the syntactic labeling of the two forms of regular questions is the role played by the particle *ne* in the formation of interrogative modality. Does it play a primary or secondary role? Is it redundant in making the utterance a question? We will examine the two forms of regular questions below regarding this issue.

(I) Question + *ne*

In this form, the utterance is still interrogative without the particle *ne*, which is removable in the sense that the nucleus of inquiry can still be conveyed without it. Example (21) illustrates regular questions in the form of “question + *ne*”. To see this excerpt in a bigger context, several turns prior to and after this excerpt are provided in English translation.

(21) Moving: one speaker, S, is asking another speaker P, who is traveling to Seattle to take a piece of luggage for him. S is wondering what they can do if the luggage is overweight as carry-on luggage. P suggests that he can check the luggage but S doubts the possibility.

Prior to the excerpt:

S: I'll give you a suitcase. You can take in you carry-on.

But there is weight limitation for carry-on.

P: Right. There should be.

S: Right. But the thing is, usually they won't check the weight of your carry-on.

P: I can also take it as check-in luggage. If it is fragile then I won't check it in.

(21-1) S: ni keyi tuoyun ma.
you can check Q

Can you check the luggage?

(21-2) P: keyi ya.
can YA

Yes.

→ (21-3) weishenme bu neng ne.
why NEG can NE

Why wouldn't I?

Following the excerpt:

S: Because if they buy you Westjet ticket, you can't check it in. Air Canada would allow one piece of check-in luggage for free.

P: I understand. I understand what you mean.

When reading (21-3) in an isolated context, the interrogation remains complete in meaning without the particle *ne*. In other words, S can still understand that P is asking for an explanation as to why they are unable to check his luggage. The interrogative modality is primarily conveyed by the question word *weishenme* ‘why’. However, since the particle *ne* appears to be redundant in the formation of the interrogation, it raises a question as to why it exists in the utterance.

One hypothesis that explains this appearance is that the use of the particle *ne* in this question formation has something to do with the relationship between the speakers, or the speaker's expected response from the listener. An example by Alleton

(1981) leads to a clue for this hypothesis as cited in example (22):

(22) (Alleton 1981: p. 99)

- (a) shei zhidao ne.
who know NE

Who knows?

- (b) shei zhidao.
who know

Who knows?

When Alleton asked native Chinese speakers for their preference between the two utterances used by a teacher in the classroom, their answers involved the consideration of the immediate situation in the classroom. If the teacher says (22a), the question actually calls on the students to use their observational or introspective abilities, where the teacher gives students time to think. If the teacher says (22b), it is usually expected that the students answer with more immediacy.

Consider another example:

(23)

- (a) zhe ge wenti women gai zenme jiejue ne.
this CL problem we PL should how solve NE

How should we solve this problem?

- (b) zhe ge wenti women gai zenm jiejue.
this CL problem we PL should how solve

How should we solve this problem?

The elimination of the particle *ne* in (23b) gives the utterance a very short tone⁴, indicating that the speaker intimates the listener to provide a solution. While in (23a), the utterance with the particle *ne* appears to be more persuasive and encouraging: the

⁴ The tone here does not refer to the pitch of a syllable or several adjacent syllables, but rather the mood or emotion conveyed by the utterances.

speaker encourages the listener to think it over with their participation. It is more natural to imagine that (23b) is spoken in a competitive situation or when the speaker has no solution; consequently, the speaker challenges the listener to find one. On the other hand, (23a) sounds like the speaker already has an idea in mind but seeks active participation of the listener so they can constructively contribute to their own rescue.

Coming back to example (21), to understand the function of the particle *ne*, we need to examine the conversation in a larger sequence. The context of this conversation concerns P's assumption that, if the weight of the luggage exceeds the carry-on luggage limitation, he can always take it as check-in luggage. On the other hand, S is concerned about whether checking his luggage will lead to additional airfare fees for P. In (21-1), S is inquiring whether P "can check in [S's] this luggage (without additional fees)?" Here, P's suggestion of "taking it as check-in luggage" and S's doubtful response as to whether P "Can check-in the luggage?" oppose each other's assumptions. This causes a minor conflict on the common ground of communication insofar that, the function of the particle *ne* is two-fold: firstly, the conversation at this point requires P to deliver his question in (21-3) in a gentle manner. If the question appeared without the particle *ne*, it would show P's steadfastness and surprise as to why S even raises doubts, as was done in (21-1). Such a sequence would likely appear in an argument or fight, where P challenges S to put forth a persuasive argument. With the particle *ne*, P shows a willingness to eliminate conflict by settling their philosophical differences with each other, instead of enforcing their respective stance. In the following turns, we see that S explains his concern and both parties of the conversation achieve the common ground, which allows the continuation of an amicable conversation. Secondly, P appears to be encouraging S to think it over and give reasons, thereby requiring S's participation. This point can be supported by the fact that there is a noticeable pause after (21-3); if P is not expecting S to give reasons, he would continue the conversation without pausing. With P's own steadfastness, he might be curious as to why S was doubtful, as is the case in (21-1). Thus, we can assume that P indeed hopes S to reflect on this

issue and share opinions.⁵

Although the interrogative modality is not created by the particle *ne* in example (21), it subtly affects the relationship and expectation between the two parties of the conversation.

(II) Noun phrase + *ne*

In this form, the particle *ne* is not removable from the question. The particle *ne* is the main question particle, and is required for interrogation; without it, the utterances will no longer stand as a natural question. When the particle *ne* is used to form a question, the context of the previous discussion must be disclosed. If these types of questions do not reference the previous context, the objects in question will not be clear to the co-participants in the conversation, who will be unable to continue the conversation. Consider the following example:

(24) Language study: a professor, LX, and student, ZY, are chatting about the professor's experience in learning foreign languages. The professor is fluent in both English and German as foreign languages. After talking about how the professor used to learn English, the student is curious to know how the professor learned German.

→ (24-1) ZY: deyu de ne.
German NOM NE

What about German?

(24-2) : LX: jiu xiang wo xue yingyu yiyang.
just like I learn English alike

Just like how I learned English.

Example (24-1) is uttered immediately after the professor discloses how she studied the English language, and the student's actual inquiry is regarding "the way you [the

⁵ (21-3) is not considered as a rhetorical question because the speaker P is expecting an answer from the S, while rhetorical questions usually don't require answers. The discussion of the particle *ne* in rhetorical questions will be discussed in 3.1.2.3.

professor] studied German". It is therefore inferred that the same topic is now transferred to German. In an isolated context, example (24-1) is making a vague inquiry about German, which could involve the population speaking German, the textbooks on German, the teachers of German, etc. However, by referencing the previous conversation, the current topic, which is the best way study German, is clear. The formation of questions using the particle *ne* is not self-complete is characterized even further in the following example:

(25) Home university: two friends are talking about each other's home universities, where they spent seven years and obtained Bachelor's and Master's degrees. In speaker H's home university, the campus gate was re-constructed and the university president was changed during the seven years she was there. The following conversation happens after H talks about the campus gate re-construction and the university president change.

→ (25-1) H: nimen xuexiao ne.
you PL school NE

What about your school?

(25-2) ni zai de shihou mei gai ma.
you at CSC time NEG change Q

Did it change when you were there?

→(25-3) L: ni shuo men haishi xiaozhang.
you say gate or president

Are you talking about the school gate or the president?

(25-4) xiaozhang shi ma.
president be Q

President, right?

(25-5) [yiqi.] @@@@
together

Both?

- (25-6) H: [men he xiaozhang]
gate and president

The gate and the president.

- (25-7) L: xiaozhang yizhi dou na yi ge.
president always all that one CL

The president had always been the same.

In previous conversation, H talks about both the campus gate and university president at her home university. When she therefore asks about L's home university in (25-1), the discussion becomes ambiguous. H is aware of this ambiguity in (25-2), and clarifies that her question is about "the change". L addresses this ambiguity in (25-3) by asking H about the type of change she is referring to. Referencing the previous conversation, either the campus gate or university president can be the focus of the current question. This shows that using the particle *ne* in the formation of a "noun phrase + *ne*" cannot form a self-complete question, and the focus of question must be inferred from previous conversation.

Although the usage of the particle *ne* as the main question particle following a noun phrase has been pointed out by many scholars (Li & Thompson 1981, Lü 1999, Wang 1985, and others), we can better understand its functionality through examination of speakers' interaction at an utterance-by-utterance level.

3.1.2.2 Word search

In a conversation, word searches (Lerner 1996, Sacks 1992, Goodwin and Goodwin 1986) are specially designed for the speaker to phrase or rephrase his utterance, or for the listener's conditional entry. In some interrogative usages of the particle *ne*, speakers do not use utterances to inquire. Instead, the particle *ne* seems to assist the function word search, as illustrated by the following example:

- (26) Groceries: two friends are talking about T & T market and Lucky 97 market,

which are two grocery markets they used to go.

(26-1) L: jiu shuo.
just say

Just to say.

(26-2) W: en.
en

en.

(26-3) L: jibenshang,
basically

Basically.

(26-4) ganjue,
feel

I feel,

(26-5) jiu shi mai haixian qu (L2 T & T L2).
just be buy seafood go T & T

just that to buy seafood, go to T & T Market.

(26-6) W: en.
en

En.

(26-7) L: mai cai jibenshang jiu,
buy veggies basically then

To by veggies,

(26-8) jiu shucuai [a],
just veggies

just to buy veggies,

(26-9) W: [a].
ah

Ah.

- (26-10) L: qu (L2 lucky L2) 97 haishi bijiao [pianyi].
go lucky 97 indeed relatively inexpensive

it is relatively inexpensive to go to Lucky 97 Market.

- (26-11) W: [dui].
right

Right.

- (26-12) (L2 Lucky L2) 97.
Lucky 97

Lucky 97,

- (26-13) zenme shuo ne.
how say NE

how to put this?

- (26-14) L: danshi,
but

But,

- (26-15) (L2 Lucky L2) 97 de cai you yi ge tedian.
Lucky 97 GENveggies have one CL characteristics

veggies in Lucky 97 Market have one characteristic.

- (26-16) cun bu zhu.
storage NEG hold

Can't be storaged.

- (26-17) W: en.
Hum

Hum

- (26-18) L: zhuajin chi.

Hurry eat

Hurry up to eat.

- (26-19) zhuajin chi.
Hurry eat

Hurry up to eat.

- (26-20) zhenshi.
really

really.

- (26-21) W: guo ji tian jiu hei le.
pass several day then black PFV

It will turn black in several days.

In this extract, L mentions what she typically buys at the T&T and Lucky 97 markets, and W responds with tokens to show that he is engaged in the conversation. After L mentions Lucky 97 market, W responds with an agreement token *dui* 'right' and wants to express his opinion about Lucky 97 market. However, while he is still phasing his utterance, L takes back the turn to say what she thinks about Lucky 97 market. From (26-11) to (26-13), L says is what W was trying to, which can be showing by his agreement in (26-17), and his complement L's turn by saying (26-21). In example (26-13), the particle *ne* allows the time for W to phrase his thoughts.

3.1.2.3 Rhetorical questions

When talking about the emotions conveyed in a conversation by the speakers, Xing (2001) mentioned the usage of the particle *ne* in rhetorical questions. This claim can be further support by evidence in the current data. In interrogative usage, the occurrences of the particle *ne* in the current data involve utterances that appear to be a question, but either a) the speaker, or b) both parties, know(s) the answer, thereby removing the need for an explicit answer. These questions are termed as rhetorical questions by Xing (2001) and others, and to some extent, can be viewed as an

extended usage of the particle *ne* in regular questions, which were discussed in Section 3.1.2.1.

In interrogative usage, the particle *ne* serves to soften the tone of the question, and to call on observation and reflection on the side of the listener. These functions are very similar to the functions of rhetorical questions: since the answers are already known by the speaker(s), the rhetorical question is likely to convey a tone that is encouraging, engaging, and thought provoking. The similarity in usage might explain the frequent concurrences of rhetorical questions and the particle *ne*. The situation a) and b) described in the previous paragraph will be illustrated by example (27) and (28), respectively.

(27) Geography: speaker M is talking to his friend W, a geography student, about the reason for studying the geographical structure and movements of Tibet. W explains that the Himalayas are the only major mountain chain in the world that is still undergoing significant changes.

(27-1) W: xiang zanmen xianzai kan dao zhe ge luoji shanmai.
 like 1PL now see to this CL Rocky Mountains

Just like the Rocky Mountains we see now,

(27-2) haiyou,
 and

And,

(27-3) aerbeisi shanmai.
 Alps mountains

the Alps Mountains.

(27-4) dou shi=
 both be

They are both

(27-5) e=

uh

uh,

- (27-6) hen duo baiwan nian qian
very many million year before

many million years ago,

- (27-7) yijing tingzhi zao shan la.
already stop form mountain LA

the mountain forming process has already stopped.

- (18-8) danshi xizang shi yi ge zui nianqing de.
but Tibet be one CL most young NOM

- (18-9) ranhou yiran zai jinxing de zao shan dai.
then still DUR process CSCform mountain ridge

but Tibet is the youngest mountain bridge that is still under the mountain forming process.

- (18-10) M: na chule xizang jiu mei le bei.
then except Tibet then NEG PFV BEI

then there is nothing like this except Tibet.

- (18-11) W: en.
en

En?

- (18-12) M: chule xizang jiu mei le.
except Tibet then NEG PFV

Nothing is like this except Tibet.

- (18-13) W: dui.
right

Right.

(18-14) suiran mei you le.
although NEG exist PFV

Although nothing is like this,

(18-15) danshi,
but

but,

(18-16) ni jiu hui juede,
you then will feel

then you will feel,

(27-17) yinwei yanjiu zhe ge,
because research this CL

because you do this research,

(27-18) yinwei biede mei you le
because else NEG exist PFV

because nothing is like this,

→ (27-19) you ... you hebi yao yanjiu ta ne.
exist exist necessity must research 3sg NE

why it is necessary to research it?

(27-20) danshi.
but

But,

(27-21) xizang de xianzai jiu shi,
Tibet GEN now just be

the current time for Tibet

(27-22) hen duo shanmai de guoqu,
very many mountains GEN past

is the past of many other mountains.

(27-23) dui bu dui.
 right NEG right

Is it right?

It seems that W asks a question in (27-19), but he is prepared to answer this question by himself. In this case, only one of the two participants, the speaker W, knows the answer to the question. W tries to predict what question M has in mind at this point of the conversation. This shows a mutual understanding between the speaker and the listener, which helps to facilitate the communication. Another case of rhetorical questions marked by the particle *ne* is when both the speaker and the listener know the answer of the question, as in the following example:

(28) Emergency: A is talking about her experience when working as a doctor in China. A man sued the hospital for his father's death. Despite that the hospital was not responsible for the death, the hospital had to pay the family "humanitarianism indemnity".

(28-1) A: jishi women mei you cuowu.
 although we PL NEG have fault

Although we did nothing wrong,

(28-2) zhiyao ni si le,
 only you die PFV

as long as you died,

(28-3) women jiu dei gei ni rendaozhuyi
 we PL then have to give you humanitarianism
 peichang.
 indemnity

we have to pay humanitarianism indemnity.

(28-4) na na nei ge,
 then then which CL

then whichever,

→ (28-5) nei ge ren dao zuihou ta bu shi .
which CL person till ultimately 3sg NEG be
yi si ne
one death NE

which person won't die in the end?

In this excerpt, both conversation participants know the answer to the rhetorical question in (28-5), which is referring to humans' mortality. Paying for a death that is inevitable is not the responsibility of the hospital, which is strong statement that underscores the unfairness directed at the hospital. Obviously this utterance is not intended to seek certain answers. The rhetorical value of the particle *ne* in this utterance lies in that it makes a statement about an obvious fact by an interrogation.

3.2 Quantitative analysis

Table 2 summarizes the occurrences of the particle *ne* in interrogative usage and non-interrogative usage.

	Interrogative	non-interrogative	Total
Occurrences	47 (28%)	121 (72%)	168

Table 2: Summary of interrogative and non-interrogative usage of the particle *ne*

From the table we can see that non-interrogative usage accounts for a bigger proportion of occurrences of the particle *ne* (72%), whereas interrogative usage comprises a smaller proportion (28%). Table 3 indicates the functional category distribution within the non-interrogative usage.

Functional categories		Occurrences		
In response to expectation		20 (16.5%)		
In semi-fixed phrases with connectives		37 (30.6%)		
As topic marker	individual frame	23	40(33.1%)	
	spatial frame	4		
	temporal frame	13		
With information status changes		7 (5.8%)		
Other		17 (14.0%)		
total		121		

Table 3: Functional category distribution of the particle *ne* in non-interrogative usage

Table 4 reflects the functional category distribution in interrogative usage.

Functional categories	Occurrences
regular question	29 (61.7%)
word search	8 (17.0%)
rhetorical question	8 (17.0%)
Ambiguous	2 (4.3%)
Total	47

Table 4: Functional category distribution of the particle *ne* in interrogative usage

In the analysis of regular question, “question + ne” and “noun phrase + ne” were further distinguished as two forms. Table 5 shows the frequency of each of the two forms in regular questions.

Form	Occurrences
Question + ne	23 (79.3%)
Noun phrase + ne	6 (20.7%)
Total	29

Table 5: Form distribution of the particle *ne* in regular questions

Chapter 4: Conclusion

4.1 Summary

This study examines the structural properties and functional categories of the particle *ne* in Mandarin conversation. For structural properties, most of the occurrences of the particle *ne* are at the end of IUs, where a small part of the occurrences are within IUs. This corresponds with the findings of previous studies (Tao 1996) on the position of discourse particles. The pitch of the particle *ne* itself can be identified as four types: zero pitch, which is a barely-noticeable pitch, falling pitch, rising pitch, and high flat pitch.

The functions of the particle *ne* are examined under the classification of non-interrogative usage and interrogative usage. In non-interrogative usage, the particle *ne* shows a usage pattern in the cases of response to expectation, semi-fixed phrase with connectives, and information status. The presence of these patterns in our conversational data provides evidence to support some of the claims made in previous studies. In interrogative usage, the particle *ne* was most frequently used in regular questions, with the other usage patterns including word search and rhetorical questions.

4.2 Limitations of the study and directions for future studies

Since our work is in the preliminary stages, there are many limitations on the current study. One limitation of the current study is lacking of a variety genres of spoken data, which might affect the frequency and usage of the particle *ne*. A second limitation is that we did not thoroughly investigate the relationship between the structural properties and functional categories for the particle *ne*. This study has not yet reached the stage where we can integrate all of the observed phenomenon.

For future studies, one aspect that should be addressed is the integration of

both form and function of the particle *ne*. In other words, in what way do the structural properties interact with the functions? Future work should also try to provide cognitive explanations for the functions of the particle *ne* in conversation; especially the epistemic stance taken by the speaker when they use the particle *ne*.

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Appendix 1: Convention of transcription

[]	overlap
XXX	unrecognizable speech
-	interrupted word
@	laughter
(L2 L2)	code switch
(())	description; notation
=	lengthened word
...	pause

Appendix 2: Abbreviation used in gloss

DUR	durative aspect (<i>zhe, zai</i>)
NE	the particle <i>ne</i>
3sg	third person singular pronoun
CRS	Current Relevant State (<i>le</i>)
GEN	genitive (<i>de</i>)
CL	classifier
PL	plural
NA	the particle <i>na</i>
A	the particle <i>a</i>
PFV	perfective aspect (<i>le</i>)
NEG	negative
NOM	nominalizer (<i>de</i>)
ASSOC	associative (<i>de</i>)
BA	the particle <i>ba</i>
Q	question (<i>ma</i>)
YA	the particle <i>ya</i>
LA	the particle <i>la</i>
HO	the particle <i>hou</i>
CSC	complex stative construction (<i>de</i>)
BEI	the particle <i>bei</i>