The Syntax Phonology Interface of Mood Particles in Mandarin Chinese

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ABSTRACT

The present thesis focuses on the syntactic study of the position of mood particles in Mandarin Chinese. The most popular mood particles in Mandarin Chinese are six: “ne”, “a”, “ma”, “ba”, “le” and “de”, used at the end of the sentences, traditionally believed to denote interrogative, declarative, imperative, and exclamative moods. This thesis argues that the mood particles don’t carry any lexical meanings themselves, and as sentence affixes, they are adjoined to the head complementizer at the end of the sentence in head final language of Chinese at the sensorimotor interface after the spellout in PF level. Therefore, mood particles are not computed in the internal grammar but in the externalization process of the computation.

Keywords: Mood particle, sentence affix, syntactic position, externalization

1. INTRODUCTION

The syntactic position of the question particles is supposed to be affixed to the head C at the end of the sentences in archaic Chinese [1-5], and the question particle “ne” in modern Chinese is not an interrogative operator [6], nor a head complementizer [1-5]. The question whether the mood particle “ne” carries interrogative meaning or not is disputable. So it is not
appropriate to take the disputable “ne” as a complementizer [7-8]. The question particle is actually a sentential clitic instead of a complementizer [2-5, 8-9].

The affixal nature of the interrogative particle “ne” is supported by the following 7 points [5, 9-10]:

1) The question particle is lack of lexical interrogative feature.
2) It does not introduce any complement and does not mark the locutionary force of the interrogative sentence.
3) Omission of the question particle does not affect the interpretation of the sentence and does not impair the syntactic operation and meaning interpretation.
4) In archaic Chinese classic work the Bamboo Slips of Laozi, no interrogative markers such as “ne” or any others can be found.
5) The particle used as a sentential affix is phonologically conditioned. Its use is more related with phonological factors rather than syntactic factors.
6) There are empirical evidences that affixes or clitics can be omitted.
7) The use of “ne” might be related with language external factors such as pragmatic context or phonological factors.

It is also true in the story of the topic markers, which are also adjoined to the head topic position as an affix [11]. The questions particles and the topic markers are both included in the category of mood particles, also called modality particles in Chinese. Mood particles are usually those particles used at the end of the clause to indicate the mood of the clause, which are syntactically affixal and phonologically prominent. They appear in the externalization of the clause at the sensorimotor interface after the spell-out as they are not interpretable in LF.

In this thesis, the author mainly focuses on the mood particles at the end of the clauses including “ma/ ne/ a/ la/ ya/ ba/ na/ ha/ me/ de/ le”, among which the most popular ones are six particles “de/ le/ ma/ ne/ me/ ba”. They are usually used at the end of the sentences to denote mood or in the middle of the sentences to indicate a pause. There are 2 grammatical features for them: one is to be attached to the end of the sentences or other words to indicate certain grammatical functions; and the other is to be used simultaneously with the intonation of the clause to indicate the mood.

In the present article, however, we’ll focus our analysis on the six basic mood particles “ne”, “a”, “ma”, “ba”, “le” and “de”, which are used together with intonations. As it has been argued in the above paragraphs, the wh-question particle “ne” is actually a sentential clitic instead of a complementizer [2-5, 8-9], what about the other mood particles? Are they also sentence affixes cliticized at the end of the sentences?

2. METHODS

First, data collection. The examples of the mood particles denoting mood at the end of the sentences are collected from the online articles or from the author’s intuition.

Secondly, analysis of the data. The examples are analyzed in terms of their syntactic features and grammatical functions.
Thirdly, theoretical explanation. The mood particles in the examples are further elaborated in light of the syntactic theories.

Fourthly, the discussion of the syntactic behavior of the mood particles in the examples given in the above sections.

Finally a conclusion is made on the syntactic behavior of the mood particles.

3. THEORY

The syntactic computation process, following the Minimalist Program [11-13], is illustrated in (1) below.

(1) Computation

```
<table>
<thead>
<tr>
<th>Spellout</th>
<th>LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td>--</td>
</tr>
</tbody>
</table>
```

This process of operation can be further illustrated as in below.

(2) Operation

```
<table>
<thead>
<tr>
<th>Operation</th>
<th>merger</th>
<th>spellout</th>
</tr>
</thead>
</table>
```

```
<table>
<thead>
<tr>
<th>LF operations</th>
<th>LF representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF operations</td>
<td>PF representation</td>
</tr>
</tbody>
</table>
```

Computation may be defined as the initial point of the structure construing process in which a set is formed by selecting constituents from the lexicon.

Spellout is the point at which the information related with phonetics is separated from other information in the derivation of selection and merger. This process forms two structures from the computation: one is LF, and the other is PF, as shown in (1) or (2).

In the process of derivation, if the operation satisfies Full Interpretation Principle, the derivation converges.

By converge it is meant that the information included in LF and PF must both satisfy the Full Interpretation Principle. If an LF representation or a PF representation satisfies Full Interpretation Principle, the representation should converge at the level. If the representation in LF and PF both satisfies the Full Interpretation Principle, the whole derivation converges, and the structure is acceptable. If the representation in the derivation does not converge, it clashes and the structure is not acceptable.

Full Interpretation Principle requires that a representation of a phrase must contain all the features related with the interpretation of the representation at all relevant levels, and only those features can determine the interpretation of the representation. The logical form of a certain phrase at LF level must contain all the semantic features and only those semantic features can
determine the meanings of the phrase. Similarly, the phonetic form of the phrase at PF level must contain all the phonetic features and only those phonetic features can determine the pronunciation of that phrase.

4. RESULTS

The mood particles in Mandarin Chinese can be classified into three levels and they can be used overlappingly in the sentence following the sequence of the level they are in. The overlapping of the mood particles will be dealt with in other articles in the future. In the present article, the mood particles are found to carry no lexical meaning themselves, and they are sentence clitics attached to the end of the sentence. The process of affixation of the mood particles to the head C is carried out not in the internal computation operation but rather in the externalization of PF at the sensorimotor interface. Mood particles in Mandarin Chinese are argued to be sentence clitics adjoined to the head C rather than complementizers located in the head position of C.

5. DISCUSSION

The six basic mood particles may be classified into three levels according to their usage. Level 1 of the mood particles includes only one named “de” with its grammatical meaning indicating that’s the way it is, is used in example (3).

(3) Ni hui xihuan jufaxue de.
You can like syntax Part.
“You’ll like syntax.”

Level 2 of the mood particles also includes one named “le” with its grammatical meaning of indicating that a change has taken place, and in imperative sentence functioning as the end of the sentence. In the following examples the mood particle “le” in (4) indicates a change has taken place, while in (5) it indicates the sentence is terminated.

(4) Wo kan shu le.
I read book Part.
“I begin to read a book.”

(5) Buyao chidao le.
Don’t late Part.
“Don’t be late.”

Level 3 includes 7 of the mood particles “ne”, “ba”, “ma” and “a/ya/na/wa”. the first mood particle is used in declarative sentences as in (6) indicating a fact without doubt, and in interrogative sentences as in (7) indicating slight exaggeration or questioning.
(6) Hao ji tian mei kanjian ni ne.
   Good few days no see you Part.
   “I haven’t seen you for a few days.”

(7) Ni du shenme shu ne?
   You read what book Part.
   “What book do you read?”

Particle “ba” is used in interrogative sentences or imperative sentences to indicate a mood of guess or negotiation.

(8) Chi le ba?
   Eat Part. Part.
   “Have you eaten?”

(9) Chifan ba.
   Eat Part.
   “Let’s have a meal.”

Mood particle “ma” is used at the end of yes-no questions indicating questioning as shown in (10).

(10) Ni xue guo jufaxue ma
    You learn Aspect syntax Part.
    “Did you learn syntax?”

The mood particles “a/ya/na/wa” are used interrogative sentences as in (11), imperative sentences as in (12), exclamative sentences as in (13) and declarative sentences as in (14) to indicate emotion and relief.

(11) Ni zai nali a?
    You in where Part.
    “Where are you?”

(12) Qiqi zou ya.
    Together go Part.
    “Let us go together.”

(13) Kan na!
    Look Part.
    “Look!”

(14) Women shenhuo hen hao wa.
    Our life very good Part.
    “Our life is very beautiful.”
The mood particles can be used together, usually with the ones in level 1 in the front position and the ones in level 3 in the last position, indicating different moods, whereas the focus of the mood is on the last mood particle in the sentence. The overlapping use of the mood particles are not combined directly, but located at different levels of the sentence structure. For example, the sentence “Chifan le ba!” should first be analyzed as “Chifan le ba!” and then further analyzed into “Chifan le”. As the overlapping use of the particles is not the concern of the present article, let’s leave them aside for future research.

As it is shown in the table above, the phonetic sound of “a” is changed when it is affected by the terminal sound of the front syllable. The sound changes may be illustrated in the following.

When the last sound of the front syllable is [a] [uo] [o](excluding [ao] [iao]) [e] [ê] [i] [ü], the sound [a] is usually pronounced into [ya]. For example:

(15) Ni shuo shenme ya!
    You say what Part.
    “You said what!”

(16) Kuai huiqu ya!
    Fast go-back Part.
    “Go back quickly!”

When the last sound of the front syllable is [u] including [ao] and [iao], the sound [a] is usually pronounced into [wa]. For example:

(17) Ta zhang de zhen gao wa!
    He grow DE real tall Part.
    “How tall he grows!”

(18) Nin zai nali zhu wa?
    You in where live Part.
    “Where do you live?”

When the coda of front syllable is [n], the sound [a] is usually pronounced into [na]. For example:

(19) Shenme ren na!
    What man Part.
    “What a man!”

(20) Zhe ge ren ke bu jiandan na!
    This Cl. man may no simple Part.
    “This man is not so simple.”

When the coda of the front syllable is ended with [ng], the sound [a] is usually pronounced into [nga]. For example:
(21) Women yiqi chang a!
   We together sing Part.
   “Let’s sing together.”

(22) Jintian hao leng a!
   Today good cold Part.
   “Today it’s so cold.”

When the ending sound of the front syllable is the back tip vowel [i] or [r] and [er], the
sound [a] is usually pronounced into [ra]. For example:

(23) Zhe shi shenme shi a!
   This is what matter Part.
   “What matte is it!”

(24) Ni daoshi chi a!
   You in-contrast eat Part.
   “You eat it!”

When the ending sound of the front syllable is the front tip vowel [i], the sound [a] is
usually pronounced into [za]. For example:

(25) Ni lai Tianjin ji ci a?
   You come how times Part.
   “How many times have you come to Tianjin?”

(26) Zhe shi shei xie de zi a?
   This is who write Part. character Part.
   “Who wrote this character?”

The phonetic change of [a] further proves that the mood particles are externalized at the
sensorimotor interface in PF after the spell-out, and they are not linked with LF. This syntactic
behavior of the mood particle “a” may be illustrated in the same way with the wh-question
particle “ne” as it has been done in the previous literature [1-10]. The question particle “ne” at
the end of the sentence does not carry any lexical meaning of interrogation; therefore it cannot
be an interrogative head.

This understanding of the syntactic behavior of particle as nonhead also follows Kayne
[14] and Tang [15]. The mood particle is not a head complementizer, instead it is attached to
the null head complementizer in PF, as illustrated in (27) below.

(27) CP
    Spec C’
        IP C
The tree diagram of (15) is demonstrated in (27). In (27), the mood particle is adjoined to the head C position at the end of the sentence. As “ya” is the phonetic change of the sound [a], the mood particle “a” and its other variants in (16-26) also behave similarly with the mood particle “ya” in (27). (28) is the tree diagram of (26).

(28) CP
   Spec   C’
      IP   C
          spec I’  C  a
          zhe I  VP
              shi spec V’
                  shei V  DP
                      xie  de  zi

The tree diagrams of other examples in (16-26) will not be discussed here for lack of space, as they are similar with those in (27-28).

In the following we’ll deal with the syntactic behavior of other mood particles besides “ne” and “a/ ya/ wa/ na”. The question particle “ma” is similar to that of “ne” except that “ma”
is used in yes-no questions while “ne” is used in wh-questions, alternative questions and A-not-A questions.

(29) Ni shang ke ma?
    You attend lecture Part.
    “Have you attended the lecture?”

In (29), the mood particle is attached to the end of the yes-no question. As is shown in (30), without the question particle “ma” at the end of the sentence, the sentence can be read with a rising intonation, which can also be interpreted as a yes-no question.

(30) Ni shang ke?

Therefore the mood particle “ma”, similar to “ne”, is lexically meaningless. It is not interrogative in nature. The so believed interrogative feature of the question particle, is actually borrowed from the syntactic structure that it is affixed to, as is illustrated in the tree diagram of (31).

(31) CP
     Spec C’
     IP C
     spec I’ C ma
     I VP
     spec V’
     Ni V DP
     shang ke

As it is shown in (31), the question particle is attached to the head C at the end of the sentence as a clitic. The widely claimed interrogative feature of the mood particle “ma” is carried by the weak head complementizer instead of the mood particle. The particle here is only a sentence affix as the above mentioned particles of “ne” and “a”.

Another mood particle denoting “a sense of guess or negotiation” is shown in sentence (32). In (32) the mood particle “ba” is attached to the end of the interrogative sentence or imperative sentence.

(32) a. Ni zai shang ke ba?
    You in attend lecture Part.
    “You are attending the lecture, right?”
    b. Women yiqi shang ke ba!
We together attend lecture Part.
“Let us attend the lecture together!”

Like the above three mood particles, the mood particle “ba” carries no lexical meaning itself. Its so called sense of guess in (a) and sense of negotiating in (b) is resorted to the syntactic structure which it is attached to as an affix at the end of the sentence, as illustrated in (33).

(33) a. CP
  Spec C’
    IP C
    spec I’ C ba
    Ni I VP
    zai spec V’
    V DP
    shang ke

b. CP
  Spec C’
    IP C
    spec I’ C ba
    Women I VP
    spec V’
    adv V’
    yiqi V DP
    shang ke

In (33) the head C in (a) carries the interrogative feature which shows the speaker’s guess and in (b) the head C carries an attitude of negotiating with the listener. The redundant mood particle “ba” is affixed to the end of the sentence as a phonological element in the sensorimotor interface in PF in the externalization of the derivation, similar to other mood particles in the above paragraphs.
The mood particles “de” and “le” can both be used in declarative sentences. Similar to the above mentioned mood particles, they carry no lexical meaning themselves. The so called “indicating that’s the way it is” sense of “de” is taken from the head C in the syntactic structure in (34a), and the so called “denoting a change takes place” of the particle “le” is obtained from the head C in (34b), as shown in the tree diagram of (35a) and (35b) respectively.

(34) a. Women you jufa ke de.
   “We have syntax lecture Part.
   “We have syntax lectures.”

b. Women shang jufa ke le.
   “We attend syntax lecture Part.
   “We attend syntax lectures.”

(35) a. CP
    Spec C’
    IP C
    spec I’ C de
    Women I VP
    spec V’ V DP
    you jufake

b. CP
    Spec C’
    IP C
    spec I’ C le
    Women I VP
    spec V’ V DP
    shang jufake

As it is shown in (35), the mood particles in declarative sentences are also attached to the sentences after the spellout in PF at the sensorimotor interface in the externalization. So is the
mood particle “le” when it is used in imperative sentence, which is meaningless in lexicon but adjoined to the head C in PF after the spellout, as shown in (36) and its tree diagram in (37).

(36) Shang jufa ke le.
    Attend syntax lecture Part.
    “Let us attend syntax lectures!”

(37) CP
    Spec C’
    IP C
    spec I’ C le
    I VP
    spec V’
    V DP
    shang jufake

As is shown in (37), the mood particle is also adjoined to the head C at the end of the sentence, which occurs in the externalization process of the computation.

To summarize, the present article deals with the syntactic position of the mood particles in Mandarin Chinese. There are several mood particles in Mandarin Chinese, among which the most widely used ones are only six of them: “ne”, “a”, “ma”, “ba”, “le” and “de”. Since these particles are lack of lexical meanings, and after them no complement structure is introduced, no do they carry any locutionary force, they are not used as complementizers located in the head C position, but rather as sentential clitics affixed to head C at the end of the sentences. The mood they carry are transferred from the head complementizer they are adjoined to in the process of externalization in PF after the spellout at the sensorimotor interface.

6. CONCLUSIONS

There are many mood particles in Mandarin Chinese, but only six of them are most popularly used at the end of the sentences. The present thesis mainly deals with the syntactic position of these six basic mood particles. Although they can be layered in different levels when they are overlapped, the overlapping use of them are left open for future discussion. As the lexical meaning of these mood particles is vacuous, their locutionary force is probably obtained from the head complementizer they are adjoined to. Meanwhile, mood particles are used together with intonations, this is an evidence that mood particles are not processed in LF but in PF. The phonological externalization of these particles is their phonological attachment to the head complementizer located in the C position at the end of the sentence. Besides, mood particles never introduce any complements, and their omission will not affect the locutionary
interpretation of the sentence, therefore they are not heads in C position but rather attached to the head C in phonological computation. Mood particles are components of phonology but not constituents of internal grammar.

References