# Brief Introduction to Chinese Morphology

#### LIN ZI

#### I. The basic unit of Chinese Morphology

Since there is no white space between Chinese characters, it is generally hard to tell words from phrases. In order to segment words and explore the procedure of meaning formation within words, we have to find the basic unit of Chinese morphology, i.e. the smallest meaningful or grammatical unit participating in word formation operations, or morphemes in terms of linguistics.

#### A. Definition of Chinese morpheme

One might argue that Chinese characters themselves are qualified for this job, because all the words are composed of one or more characters. This is true in most cases. However, things are tricky. For example, the character " $\pi$ " contains two different meanings: one for negation, another for "need". In this case, a single character bears two meanings. And how about the word " $\overline{m}$  $\overline{a}$ " ? It is quite confusing to explain what " $\overline{m}$ " or " $\overline{a}$ " means individually, because two of they as a whole represent the meaning of "grape". Thus, we see the usefulness and necessity of morphemes: in the aforementioned examples, the single character " $\pi$ " is composed of two morphemes, while the two-character word " $\overline{m}$  $\overline{a}$ " contains only one.

#### B. Classifying Chinese morphemes

The first basic characteristic of a morpheme is whether it is free or bound. In English, we know that the English word "friendly" is composed of friend and –ly. "friend" can be a word, but the affix -ly cannot. It is the same in Chinese. For instance in the word "人民", "人" can stand independently. we can say "这个人", "那个人". However, when it comes to "民", we would never regard it as a dependent word, but we can sense its meaning. Of course, I'm talking about modern Mandarin. In ancient Chinese, it is a different story.

In a nutshell, Chinese morphemes can be classified into two parts like the English. The free morpheme and the bound morpheme. As a corollary, if a morpheme is free, it is also a word.

The second basic characteristic of morphemes is whether it is content or function. In that way, Chinese morphemes can be divided into roots and affixes. In the word " $\# \vec{+}$ ", we would find the morpheme " $\vec{+}$ " does not have any intrinsic nominal, verbal, or adjectival meaning on its own. But it does have grammatical function, that is it turns the verb "扣" into a noun. An affix must be a bound morpheme, but a root can be either free or bound.

In fact, there are a limited number of affixes in Chinese. That's exactly why, the most common way of Chinese word formation operations is compounding instead of derivation.

Now we have known the basic unit of Chinese morphology, the smallest meaningful and grammatical unit, morpheme and its characters. Let's take a look at how these small units create our Chinese vocabulary.

#### II. The way of Chinese word-formation

According to the amount of the morphemes, Chinese words can be divided into two categories, the simple word and the compound word.

# A. the Simple word

The Simple word contains only one morpheme. Any free morpheme can be a simple word. Apart from that, we should notice that there are other kinds of the simple word which may contain more than one character. Like the twin simple word (联绵词)"葡萄、蝴蝶、犹豫、徘徊", the loan word, like "沙发、麦克风" and the onomatopoetic word like "轰隆隆、叽叽喳喳" etc.

#### B. the Compound word

Chinese exhibits great richness in the area of compounding. A compound word is composed of two or more morphemes.. According to 现代汉语词汇 (Fu), there are two main ways to form word.

1) Derivation: The first one is derivation which means the word is composed of roots and affixes. As for the prefix, we have "老、阿、第". The first two is often used to express some emotions like making a nickname or addressing somebody respectfully. For example, "老师、老李、阿斗". And the last one often indicates the order. As for the suffix, we have "子、儿、头" which shows the word is a noun.

There is a debate on the range of Chinese affixes. Someone argues that morphemes like "性、化" can also be defined as affix. For instance, "酸性、弹性、积极性" , "僵化、泛化、现代化". In English, we use the suffix "-ity" to make word acidity, elasticity and positivity. However, unlike English, their positions in the word is not fixed. They can also locate in some other part of the word without changing its meaning. For example, "性 质、性状、性能" etc. So it is difficult to position these productive morphemes. But we can conclude that there is a gradual process to make these morphemes look like affix. We see that the morpheme "化" means "变化" which is a verb in the very beginning, but on condition that 化 often occurs behind other morphemes and its meaning becomes more and more abstract. i.e. 化 is on its way to become a suffix, and this is called grammaticalization. We've mentioned this in the last lecture. Maybe one day 化 can never be seen in other positions and become a qualified suffix.

As we can see, Chinese morphology is quite different form English. Chinese affixes are very few, but it does not mean that Chinese affixes are less important. Actually, Chinese suffixes are much more productive than other morphemes.

2) Compounding: The second way to form word is compounding which means the word is composed of roots. There are two popular approaches to the categorization of compounds in Chinese. The first one is to categorize compounds in terms of the morphosyntactic categories like our textbook does. The other is to categorize compounds in terms of the syntactic and semantic relations which hold between the subcomponents of the compounds. I will make primary use of the second approach. According to 语法讲义 (Zhu), Chinese compounds can roughly be categorized into the following types:

# I. Subject-Predicate compounds

• One root is the subject, while the other root functions as the predicate. For instance, 日出, 年轻, 脸 红, 地震 etc.

### II. Verb-Object compounds

 One root refers to the predicate, while the other root a thematically related object, like patient(受 事), location, instrument, etc. For instance, 出版, 防风, 结婚 etc.

# III. Modifier-Head compounds

• One root modifies –or restricts –the other root. Like 黑板, 飞机, 热爱, 重视 etc.

# IV. Verb-resultative compounds

• One root denotes the action, and the other root refers to the result. Like 改良, 证明, 推翻, 削弱 etc.

# V. Parallel compounds

• The two roots carry similar, related, or contrary meanings. Examples of words are 雷电, 矛盾, 是非, 理论 etc.

Larger nominal compounds are also possible. A Nested structure can be used to analyze more complex word, like 洗衣机, 计算器. In the example of 洗衣机, the outer structure of the word is Modifier-Head, the group of morphemes 洗衣 modifies the morpheme 机. Now we can take a look at 洗衣, it is Verb-Object, that is 洗 refers to the predicate while  $\bar{\alpha}$  is an object. In that way, we can produce more sophisticated words by making use of these five basic structures.

To some extent, Chinese compounds are similar to phrases. In other word, Chinese morphology is similar to syntax. But there are still some problems which are difficult to solve. For example, you can find some words which are hard to tell the structures, like  $\mathcal{K}$ 真, 名堂, because the semantic connection between the morpheme is too weak to sense.

3) **Other ways:** There are many other ways to form Chinese words. Some are unique in Chinese and some are similar to English.

# I. Overlapping

• Chinese has its own way of word-formation called overlapping, like 妈妈, 姐姐, 哥哥. It is common with kinship terms. We can also find some adjectives and nouns using overlapping, like 悄悄, 白白, 星星 etc.

# II. Shortening

 We know that shortening is a secondary way to produce English word. While in Chinese, we can also find some abbreviations. Like the most familiar word 北大 is shortened from 北京大学, while 人 大 is from 人民代表大会. But whether dictionary includes these abbreviations mostly depends on the frequency of use, acceptability and popularity.

#### III. CONCLUSION

To sum up, by using morpheme as basic unit, we have several ways to form words. As I mentioned, apart from simple words, we have ways like derivation, compounding and shortening, like English. We also have our own way like overlapping.

Though the amount of Chinese affixes is very limited, Chinese affixes make huge contribution to our vocabulary. I once made a graph showing the productivity of Chinese morphemes. In the graph, each node represents a morpheme and the productivity can be seen though the size. As a result, among thousands of morphemes, there are some nodes apparently large, like  $\neq$  and  $\stackrel{*}{\rightarrow}$ which are Chinese affixes. We can also find that some large nodes represent the morphemes whose meanings are very common and frequently-used, like  $\bigwedge$ ,  $\oplus$ ,  $\mp$ ,  $\mp$ . This fact has aroused interest of linguists in exploring the connection between the meaning and productivity of morphemes. Moreover, there are still many things in Chinese morphology waiting to be explored.

#### References

- [1] 陆志伟,汉语的构词法(修订本),科学出版社.
- [2] 朱德熙, 语法讲义, 商务印书馆. 第二章, 词的构造.
- [3] 符淮青,现代汉语词汇(增订本),北京大学出版社,2004.第二章,词的构造.
- [4] C.-T. James Huang, Y.-H Audrey Li and Andrew Simpson, The Handbook of Chinese Linguistics. Part 1 Syntax, Semantics, and Morphology.
- [5] WILLIAM S-Y. WANG and CHAOFEN SUN, The Oxford Handbook of Chinese linguistics. Part 4 Morphology.