Multisyllabication and Phonological Simplification Throughout Chinese History

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DISCUSSION 5

MULTISYLLABICATION AND PHONOLOGICAL SIMPLIFICATION THROUGHOUT CHINESE HISTORY
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Most combinations of morphemes in early Chinese are generative. Therefore, the morpheme is the basic grammatical unit. In other words, morphemes and words are not distinguishable in early Chinese. In modern Chinese, however, combinations of morphemes may be generative or non-generative. Morphemes in non-generative combinations are not basic units but rather constituents of basic units.

From an evolutionary perspective, the basic units of the Chinese language developed from a single tier (morpheme/word) to a double tier (morpheme and word) constitution (Wang 2015). Interestingly, some researchers have correlated monosyllabic to multisyllabic [1] change, phonological simplification, and language contact. Scholars like Wang (1958) hypothesized that the latter two cause the syllabic change.

Conversely, Zhang (1939) argued that the simplification of phonology does not cause an increase of homophones if the vocabulary is limited. He suggested that the great lexical expansion during the Western Zhou dynasty and the Spring and Autumn period activated multisyllabication. Additionally, Lü (1963) supported this theory based on twentieth-century observations of a significant increase of disyllabic words that were void of preceding phonological changes.

Commenting on the above theories, Sampson (2015) points out that "if it should be that the shift from monosyllabic to disyllabic words took place *before* the contrast-eliminating sound changes, those changes would not have created much homophony between words when they occurred, so Chinese would not be an exception to the generalization about homophony avoidance" (emphasis his). However, he rejects this possibility based on indirect evidence (for more details please refer to his paper). One example is that the type of synonym compounding seems to be 'pointlessly redundant' if it arose earlier than phonological mergers.

In fact, synonym compounding contributed greatly in at least two aspects of expression. First, synonyms often have several meanings, yet compounds are monosemous. According to Wang (2000), the constituents of the six examples in Sampson's paper have the following numbers of meanings.

疲	乏	防	守	放	棄	朋	友	民	族	墳	墓
1	2	3	5	3	2	6	2	2	5	2	1

Only two of the twelve characters are monosemous, while the others are polysemous. For instance, the character *péng* (朋) has six meanings. However, all of the six compounds are monosemous. Therefore, such compounding is a means of de-ambiguity.

Second, compounding synonyms is a means of semantic generation. For instance, *péng* (朋) and *yǒu* (友) indicate different types of friends. The former indicates friends sharing the same teacher, while the latter means friends sharing the same ideal.[2] The compound generalizes the meaning as 'friend'. The characters *fén* (坟) and *mù* (墓) indicate different kinds of tombs. The former indicates a mounded tomb, while the latter means a flat tomb. The compound is generalized as 'tomb'. These two functions—de-ambiguity and generalization—are certainly important for linguistic expression.

In Sampson's words, "Nevertheless, it seems unlikely that in general the shift to disyllabic vocabulary could have preceded the loss of phonemic contrasts." Below, I provide direct evidence to show the likelihood that a shift from monosyllabic to disyllabic words took place

before the loss of phonemic contrasts. The data of multisyllabic words in Chinese across time are taken from Li (2011). Only those documents with confirmed dates have been selected. The percentages of multisyllabic words (shown below as % of MW) in those documents are listed in the following tables.

Table 1   Multisyllabic Words in Old Chinese

	尚書 SS	尚書$_2{}^3$ SS$_2$	毛公鼎 MGD	左傳 ZZ	論語 LL	孟子 MZ	荀子 XZ	荀子$_2$ XZ$_2$	韓非子 HFZ	韓非子$_2$ HFZ$_2$
Years BP	3000	3000	2800	2400	2400	2300	2300	2300	2250	2250
% of MW	19.4	23.8	15.7	24.5	15.9	27.7	31.7	47.4	48.3	50.8
Total Words	1924	915	248	5606	1339	2134	3495	4553	4220	4632

Table 2   Multisyllabic Words in Middle Chinese

	焦氏易林 JSYL	列女傳 LNZ	論衡 LH	吳越春秋 WYCQ	世說新語 SSXY	洛陽伽藍記 LYQLJ
Years BP	2030	1980	1910	1920	1560	1453
% Of MW	49.2	42.6	47.2	47.5	52.1	60.5
Total Words	5111	2843	3362	2227	4698	4050

Table 3   Multisyllabic Words in Chinese since the Tang Dynasty

	唐傳奇 TCQ	朱子語類 ZJYL	元雜劇 YZJ	水滸傳 SHZ	紅樓夢 HLM	毛澤東選集 MZDXJ	現漢二版 XHEB
Years BP	1200	800	700	600	240	50	20
% of MW	65	64.2	78.3	79.3	78.7	84.6	87.2
Total Words	8415	5072	11045	10849	11119	6379	50993

The data in the three tables may be summarized in the following diagram. Y-axis indicates the proportion of multisyllabic words, while X-axis indicates years before present. For standard dating purposes, 2000 CE is taken as the present.
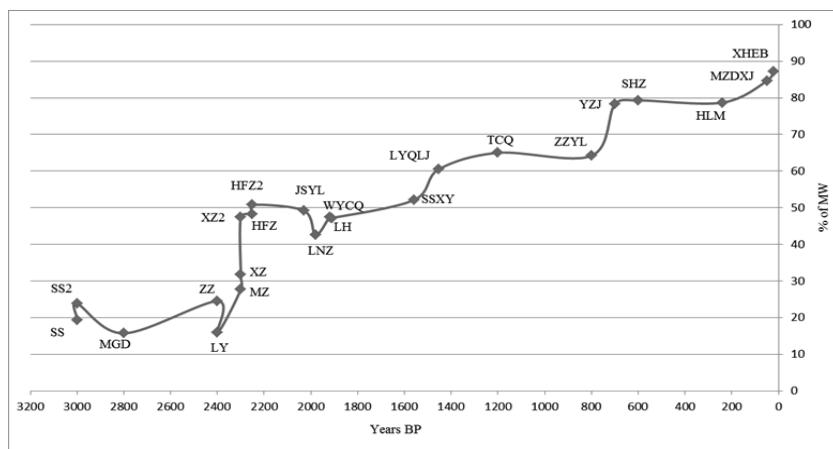
Figure 1   Rise of Multisyllabic Words in Chinese

Figure 1 shows that multisyllabic words have increased continuously with time. There were two significant leaps during this process. The first dramatic increase occurred from 2400 BP to 2200 BP—the Warring States period. The second leap occurred from 800 BP to 700 BP, which was the end of the Song dynasty and the beginning of the Yuan dynasty. After the first leap, multisyllabic words constituted about half of the total at that time. As for phonological changes in Chinese history, the first great simplification occurred from 2200 BP-1800 BP—the Qin-Han period (Ho 2006). The second one happened from 1200 BP-1000 BP, which was the end of the Tang dynasty and the beginning of the Song dynasty (Wang 1985).

In conclusion, a focus on the earliest changes in lexicon and phonology reveals that an increase of multisyllabic words in Chinese preceded phonological simplification. That is to say, the multisyllabic Chinese lexicon allows homophony in monosyllabic morphemes. If data were available on functional loads[4] of syllables in different periods ranging from Old Chinese to Modern Chinese, the estimation of the correlation between multisyllabication and phonological simplification would be more accurate. Such calculation would require a tremendous—and unfortunately currently unavailable—database.

NOTES

1. The majority of multisyllabic words are disyllabic, therefore, many

scholars use 'disyllabication' to refer to this phenomenon.

2. In *Liji* (禮記), it is said that '同門曰朋，同志曰友.'

3．Henceforth the affix '2' after the name of a historical document indicates that a second source of calculation is being cited.

4. Functional load refers to Wang (1967).

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