# Bound words and the structure of Chinese proper names 

Qi Wang<br>Wuhan University, China<br>wangdpnc@126.com

The linear order of a Chinese full name is that a family name precedes a given name. A Mandarin family name is typically made up of a single constituent, while a given name may contain one or two constituents. The same is the case in Xining Chinese (hereafter XC) full names:
(1) a. Fan Hua
b. Fan Huaxiao
(2) a. Sueng Chueng b. Sueng Chuengfu

In (1a,b), Fan is the family name. The given name in (1a) is Hua which is a single item; in (1b), the given name is composed of two items, which are Hua and Xiao. For XC, the family name in ( $2 \mathrm{a}, \mathrm{b}$ ) is Sueng. In (2a) the given name is a single constituent Chueng while in (2b), two constituents, Chueng and Fu, form the given name. Neither family names nor given names can occur on their own:
(3) a.* Fan hen piaoliang. (Mandarin) b. *Jia ba Chueng qifu zhei. (XC) Fan very beautiful He BA Chueng bully PRT
Hu and Perry (2017) have argued that the Chinese proper name is a special case of Chinese non-compositional compounds. The examples they discuss are from Yixing Chinese (another variety of Chinese) for instance, Zhei Len, a given name. In keeping with the theory of word structure in Marantz 2007, Embick and Noyer 2008 and Borer 2013, Hu and Perry (2017) propose that such a given name, just like any another noncompositional compound, would be composed of two bare roots, which are merged, forming an unlabelled unit, which is then merged with a nominal categorizer. This analysis is appealing in the sense that the lexicalised, noncompositional meaning of a Chinese proper name and the arbitrary linear order among its components can be accounted for. However, in this paper, I will propose a different analysis, which is that Chinese proper names are made up of bound words, a characteristic Chinese phenomenon.

The evidence comes in part from (absence of) reduplication in proper names in XC. Reduplication in XC nouns has been discussed extensively in Wang (2018). According to Wang (2018) and following the theory of word structure in Marantz (2007) and much other recent work, a reduplicated noun in XC is made up of a root and a null nominal categorizer. The rule is that the null categorizer will copy the phonological features of its sister root, which is a purely formal requirement with no semantic effect. Based on this, if the components of a XC proper name are bare roots, then they could, at least optionally, be merged with a nominal categorizer, in which case one would expect to see that reduplication of the name is allowed in XC. However, this is not the case. For example, the reduplication of the family name and the given name in (2a) is not allowed:
(4) a. * Sueng Sueng
b. * Chueng Chueng

Hu and Perry's verdict on Chinese proper names also cannot explain why they cannot occur as single free words in Mandarin, made up of a root and a nominalizer, as shown in (3a) in Mandarin.

The above empirical evidence indicates that proper names cannot be roots in Chinese. Instead I propose that they are bound words. Chinese has a set of lexical items (mainly nouns, but also adjectives and verbs) which can only occur as bound, either in compounds or with an affix (Wang 2018). The bound word wa 'sock' is shown below:
(5) a. *Ta you henduo wa.
she have many sock
Intended reading: 'She has many socks.
c. Ta you henduo mian wa. she have many cotton socks 'She has many cotton socks.'
b. Ta you henduo si wa. (Mandarin) she have many silk sock 'She has many silk socks.'
d. Ta you henduo wa-zi. she have many sock-ZI 'She has many socks.'

Bound words in Wang (2018) are defined as words which are not made up of a root and a categorizer, but are single items which have inherent word category. The reason why they can only occur as bound is a condition (valid in Chinese and possibly much more widely) that a content word must consist of at least two constituents, e.g., a root and a categorizer (ibid). Bound words are not roots, hence do not merge with a categorizer (ibid). They can satisfy the two-constituent condition only by merging with another item (a root, or a word, or an affix) (ibid).
Since bound words are not made up of a root and a categorizer, they cannot be reduplicated in XC (ibid). For instance, the XC bound word nei 'milk' is ungrammatical as a free word but grammatical as part of a compound (nei feng 'milk powder') or when merged with an affix (nei-zi 'milk'). It cannot, however, be reduplicated (*nei nei).

If names are a variety of bound words, this will explain why they cannot occur on their own, as free words, but have to be compounded, as was shown in (1, 2, and 3), and explain why they cannot be reduplicated in XC.

This theory is consistent with the pet name phenomenon in Chinese. Pet names are commonly reduplicated in Chinese:
(6) a. Dian Dian hao keai. (Mandarin)

Dian Dian very cute
'Dian Dian is very cute.'
b. Jia ba San San qifu zhei
(XC)
she BA San San bully PRT
'She bullies San San.'
Non-reduplicated pet names are ungrammatical:
(7) a.* Dian hao keai. (Mandarin) b. *Jia ba San qifu zhei

The pet name in XC can also occur with the suffix $-e$ :
(8) a. Jia ba San-e qifu zhei

Here, the suffix $-e$ merely adds an evaluative-expressive feature to the meaning of the word (endearment). So $-e$ cannot be the head of the pet name, as a head determines the meaning of the word (Wang 2018, among others). Hence, the base San is the head. Thus the base cannot be a root. The ungrammaticality observed in (7) means that the base is not a free word. Hence the base can only be a bound word. A pet name would contain a bound word and a functional head. Pet name reduplication is a procedure where the endearment head, which is categoryless, is merge with a noun and it is thereby different from that of the obligatory noun reduplication in XC.

## References

Borer, Hagit. 2013. Structuring sense, volume III: Taking form. Oxford: Oxford University Press.
Embick, David and Rolf. Noyer. 2008. 'Architecture and blocking'. Linguistic Inquiry 39:1-53.
Hu, Xuhui. and J. Joseph, Perry. 2017. ‘The Syntax and Phonology of Non-
Compositional Compounds in Yixing Chinese.' Natural Language and Linguistic Theory 36: 701-742.
Marantz, Alec. 2007. 'Phrases and words'. In S.H. Choe (ed) Phrases in the theory of grammar. Soeul: Doing-In Publishing Co. 191-222.
Wang, Qi. 2018. The structure of nouns in Old Xining and Modern Standard Chinese. PhD dissertation, Newcastle University.

