

Reduplication in Language Games*

Language games (also known as secret languages, ludlings, and so forth) systematically alter elements of words and disguise them in order to obtain unintelligibility for the purpose of entertainment or to privatize conversations (Davis 1994:1981; Bagemihl 1995:698; Sherzer 1976:31). Such language games are said to use mechanisms similar to those in ordinary languages to form game-words. For example, there is a set of game-words whose formation process can be described in terms of the theories developed to explain the phonological properties of reduplication in ordinary languages. Although language games are functionally a unique case of linguistic systems, a close look into this reduplication-like game-word formation might possibly yield insight that can be incorporated into the general discussion of reduplication. This article examines reduplication approaches to game-word formation. More specifically, it outlines two reduplication analyses of a game known as Fanqie, which is based on various Chinese dialects.¹ To simplify the illustration, the article focuses on May-ka, a Mandarin-based Fanqie, as exemplified below:

(1) May-ka game-word formation (Yip 1982:640; Bao 1990:318)

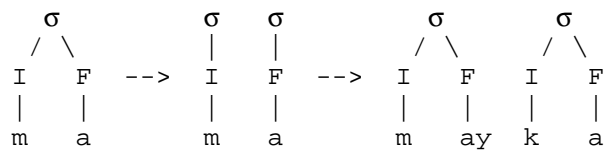
- a. ma 'mother' --> may-ka
- b. pey 'north' --> pay-key

In order to set a background for the reduplication accounts of May-ka formation, let us first examine the traditional approach to Fanqie formation.

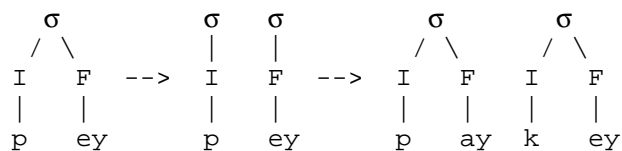
The syllable-splitting approach

In traditional Chinese phonology, it is a common practice to divide a syllable into an Initial (I) (initial consonant, optional) and a Final (F) (the rest of the syllable) (Lin 2001:29; Zhu 2001:148). Following this traditional view, word formation in Fanqie has been analyzed as involving the following process: (i) a syllable is split into I and F; and (ii) a fixed F is added to I and a fixed I to F (Chao 1931 as cited in Yip 1982:642 and Bao 1990:318-319). According to this analysis, the May-ka words *may-ka* and *pay-key* are derived as follows (the fixed F and I in May-ka are *ay* and *k* respectively):

(2) ma --> may-ka



(3) pey --> pay-key (Yip 1982:642)

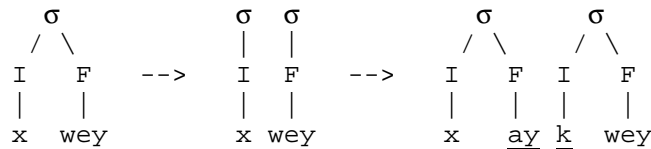


* We would like to thank Marie Meili Yeh of National Hsinchu University of Education and National United University in Taiwan for providing us with information on the relevant literature and on the historical aspects of Fanqie.

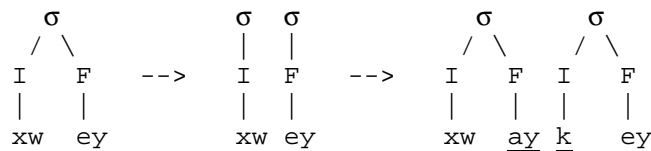
¹ Fanqie was originally developed in the Han Dynasty in order to specify the pronunciation of an unknown character through two known ones (Pulleyblank 1995:5-6; Yeh p.c.).

Although this traditional analysis predicts derivation of many May-ka words, it runs into problems when applied to some other words. For instance, it fails to explain the behavior of medial glides in the formation of words such as *xway-kwey* from *xwey* 'meeting' (Yip 1982:643-647). On the one hand, if the medial glide *w* is assumed to be a part of F as in traditional Chinese phonology, the syllable-splitting analysis predicts an ill-formed word **xay-kwey* as in example (4). On the other hand, when it is assumed to be a part of I, it leads to yet another wrong form **xway-key* as in example (5):

(4) *xwey* --> **xay-kwey* (Yip 1982:644)



(5) *xwey* --> **xway-key* (Yip 1982:644)



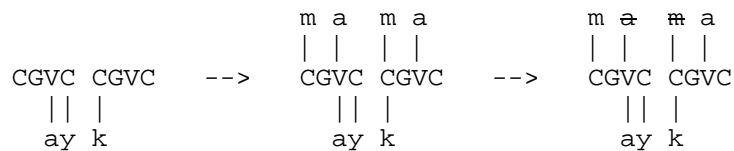
The first reduplication approach was proposed by Yip (1982) in order to solve the problems of the traditional syllable-splitting approach.

The reduplication approaches

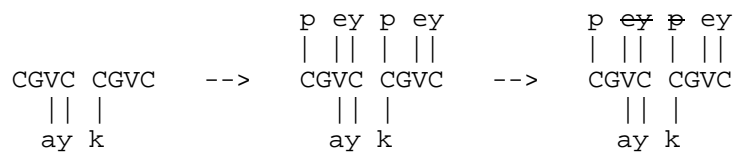
Yip (1982)

In Yip's analysis, any Fanqie language is considered to have its own bisyllabic CV skeleton and prespecified segments. Furthermore, based on Marantz's (1982) theory of reduplication, Yip argues that formation of Fanqie words follows the following sequence: (i) the bisyllabic nature of the skeleton triggers copying of the melody of a source word; and (ii) the melody is associated with the CV skeleton, with precedence given to prespecified segments (642). In this view, the May-ka words *may-ka* and *pay-key* are derived in the following manner (in May-ka, the bisyllabic skeleton is CGVC CGVC, and the prespecified segments are *a*, *y* and *k*):

(6) *ma* --> *may-ka* (Yip 1982:643)

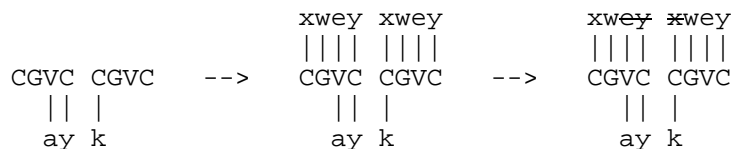


(7) *pey* --> *pay-key*



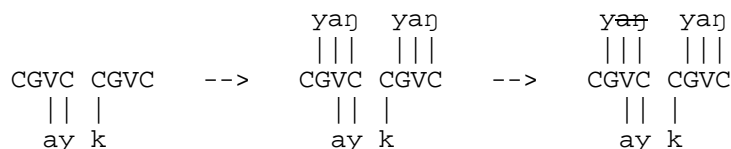
This approach successfully solves the problem of the traditional syllable-splitting analysis with regard to medial glides described in examples (4) and (5) above. It correctly predicts the May-ka word *xway-kwey* to be derived from *xwey*:

(8) *xwey* --> *xway-kwey* (Yip 1982:644)

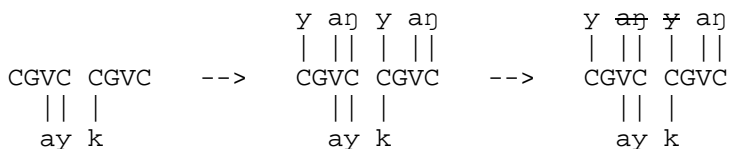


Though Yip's copy-and-association model provides an account of the derivation of May-ka words with medial glides, it is not without shortcomings. For example, it does not explain some phenomena of initial glides (Bao 1990:324-325). As in examples (9) and (10) below, in order to attain the correct May-ka words *yay-kyaŋ* (>*yε-tɕyaŋ*)² from *yaŋ* 'sun' and *way-kan* from *wan* 'curved,' the front-glide *y* should be associated with G and the back-glide *w* with C; otherwise, incorrect forms **yay-kaŋ* and **way-kwan* result:

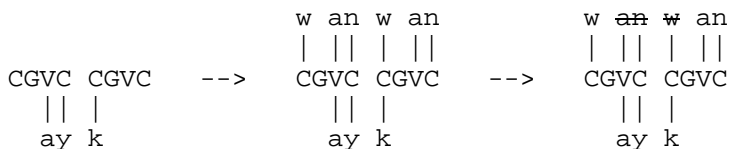
(9) a. *yaŋ* --> *yay-kyaŋ* (>*yε-tɕyaŋ*) (Bao 1990:324)



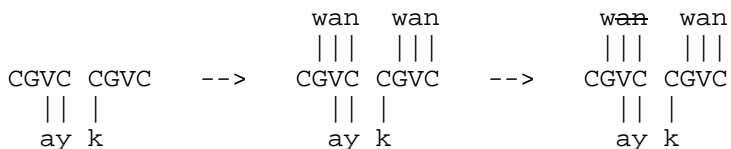
b. *yaŋ* --> **yay-kaŋ* (Bao 1990:325)



(10) a. *wan* --> *way-kan* (Bao 1990:325)



b. *wan* --> **way-kwan* (Bao 1990:325)



² In Mandarin, *ay* becomes *ε* by reason of the rule of rime reduction, and *k* palatalizes when preceding *y* (Bao 1990:324).

Despite these discrepancies, there is nothing in Yip's theory to prevent *y* from being associated with *C* or *w* with *G*. The second reduplication approach proposed by Bao (1990) attempts to compensate for the problems raised in Yip's approach.

Bao (1990)

Based on Steriade's (1988) theory of reduplication, Bao argues that Fanqie formation involves the following process: (i) the source syllable is copied in its entirety, including its syllable structure and suprasegmental substances such as tone; and (ii) the language-specific substitution operation is assigned to a given syllable (329-330). Within this approach, the May-ka words *may-ka* and *pay-key* are formed as follows (in May-ka, the rime is replaced by *ay* in the first syllable, and the onset-initial is replaced by *k* in the second syllable):

(11) *ma* --> *may-ka*

ma --> *m.a-m.a*³ --> *m.ay-k.a*

(12) *pey* --> *pay-key* (Bao 1990:331)

pey --> *p.ey-p.ey* --> *p.ay-k.ey*

This analysis can explain the behavior of medial glides in the derivation of words such as *xway-kwey*, which was previously problematic under conditions of the traditional syllable-splitting analysis as illustrated in examples (4) and (5) (also see example (8) for Yip's account):

(13) *xwey* --> *xway-kwey*

xwey --> *xw.ey-xw.ey* --> *xw.ay-kw.ey*

Moreover, in order to solve the problems of initial glides in Yip's approach described in examples (9) and (10), Bao argues that the front-glide *y* and the back-glide *w* are placed in different positions within a given syllable. That is, *w* is an onset-initial itself, while *y* is preceded by # (zero-initial) (334).⁴ On the assumption of such syllable structures, the non-uniform behavior of initial glides can be explained, and the May-ka words *yay-kyan* (>*yε-tcyan*) and *way-kan* can be successfully derived as a result of Bao's model:

(14) *yan* --> *yay-kyan* (>*yε-tcyan*) (Bao 1990:334)

#y.aŋ --> *#y.aŋ-#y.aŋ* --> *#y.ay-ky.aŋ*

(15) *wan* --> *way-kan* (Bao 1990:334)

w.an --> *w.an-w.an* --> *w.ay-k.an*

This short article has outlined approaches to May-ka, one of the Fanqie languages. It has demonstrated how the approaches proposed by Yip and Bao make use of the theories developed to explain the phonological aspects of reduplication in ordinary languages. Of course, depending on one's theoretical standpoint, one of the approaches may appear more plausible than the other, or other reduplication (or even non-reduplication) approaches may be proposed. In any event, however, further investigations into Fanqie formation may well contribute to a more complete picture of the theories of reduplication.

³ A dot indicates the onset-rime boundary.

⁴ Bao notes as evidence that in actual speech a glottal stop can freely precede *y*, but not *w* (333 fn 12).

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Further Recommended Readings

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