

The Preference for Bisyllabicity in Mandarin and Cantonese -- A Summary

0. Introduction

Mandarin and Cantonese both show a marked preference for bisyllabicity. In this brief paper I review the literature on the subject, buttressing the argumentation with additional data as appropriate. Both core and external evidence are considered.

1. Mandarin

1.1 Core Evidence

1.1.1. Word Formation

The overwhelming majority of words in Mandarin are bisyllabic. Basic word formation involves the juxtaposition of two monosyllabic morphemes, thus /mei/ (beautiful) + /li/ (beautiful) -> [meili] (beautiful). Given the pronounced constraints on syllable structure in Mandarin (C(G)V^(T)(N)), it is not surprising that the language has evolved this superficially redundant pattern of word formation. Were monosyllabic words preferred, the consequent homophony would result in extensive lexical ambiguity.

Another lexical level results from the compounding of truncated words: two bisyllabic words may be truncated to one syllable/morpheme each, and then may be combined, again resulting in a bisyllabic output. Thus [meili] + [yishu] (skill-technique) -> [meishu] (fine arts). This and more examples follow.

| | | |
|---|----|--------------------------------------|
| [mei+li] + [yi+shu] (beautiful+beautiful) + (skill+technique) beauty + art | -> | [mei shu] fine arts |
| [nai+you] + [ka+fei] (breast+oil) + (coffee) milk + coffee | -> | [nai ka] creamed coffee |
| [shi+fan] + [da+xue] (teacher+mold) + (big+study) teacher's school + university | -> | [shi da] teacher's university |
| [gong+gong] + [ma+lu] (public+common) + (horse+road) public + road | -> | [gong lu] public road |

Besides nominal compounding, there are several types of verbal compounding, subject-predicate compounding, verb-object compounding, adjectival compounding, etc. Outputs are always bisyllabic.

1.1.2. zi-Suffixation

The common phenomenon of *zi*-suffixation usually involves monosyllabic nouns which acquire surface bisyllabicity with the dummy-suffix *zi*. Note that when these monosyllabic nouns occur in compounds, *zi* never surfaces.

| | | | |
|--------|----|-----------|----------------------------|
| /xie/ | -> | [xie zi] | (cf. [pi xie]) |
| shoes | | | skin shoes (leather shoes) |
| /zhuo/ | -> | [zhuo zi] | (cf. [fan zhuo]) |
| table | | | food table (dining table) |
| /ping/ | -> | [ping zi] | (cf. [hua ping]) |
| bottle | | | flower bottle (vase) |
| /bao/ | -> | [bao zi] | (cf. [rou bao]) |
| bun | | | meat bun |
| /mao/ | -> | [mao zi] | (cf. [xiao mao]) |
| hat | | | little hat (cap) |

1.1.3. Prefixation

Prefixation is rather rare in Mandarin. One instance of prefixation occurs with family names, indicating the social relationship the speaker bears to the listener. Thus someone surnamed Ming might be called "xiao Ming" by an intimate or an elder (where [xiao] means "little", or "lao Ming" by a junior (where [lao] means "old, honorable"). While most family names are monosyllabic, a small class of bisyllabic names exists (e.g., Duanmu, Ouyang). Prefixation is unavailable for such names, indicating that surface bisyllabicity is preferred.

| | | |
|-----------|----|-------------------------------|
| ming | -> | [xiao ming], [lao ming] |
| (surname) | | "little", "old, honorable" |
| but | | |
| duanmu | -> | *[xiao duanmu], *[lao duanmu] |
| ouyang | -> | *[xiao ouyang], *[lao ouyang] |

A similar pattern emerges with the prefix [a-], indicating familiarity. [a-] may be prefixed to a monosyllabic given name [a-Lan] ((familiar) Lan), or [a-gou] ("doggie"). Bisyllables may never take [a-], however.

1.1.4. Reduplication

Reduplication is productive in Mandarin, though possesses certain idiosyncratic lexical restrictions. Reduplication is always full, and involves an array of morphological categories. Almost always, the output of reduplication is a simple copy of the base, thus resulting in bisyllabicity.

| | | |
|-----|----|---------------------|
| hao | -> | hao hao (very good) |
|-----|----|---------------------|

good

chang -> chang chang
often quite often

kan -> kan kan
look look a bit

Bisyllabic forms may also be reduplicated. Sometimes, each morpheme of the base is reduplicated independently.

jian dan -> jian jian dan dan
(simple + single) quite simple
simple

gao xing -> gao gao xing xing
(high + mood) quite happy
happy

Other times, the entire base is copied.

tao lun -> taolun taolun
(discuss + discuss) discuss a bit
discuss

yan jiu -> yanjiu yanjiu
(grind + study) reasearch a bit
research

While these various patterns of reduplication may be subject to a number of interpretations, the least costly analysis involves the preference for bisyllabicity attested elsewhere in the grammar.

1.1.5. Stress

(Hoa (1983) and Shih (1991) discuss stress in Mandarin. I'm very skeptical about this stuff and only mention it here for completeness' sake. If you want the full refs., let me know.)

1.2. External Evidence

1.2.1 Loanwords

Research into Mandarin loanword phonology is scanty. Hsu (1993) finds that form-final stops are deleted in forms perceived as polysyllabic (e.g. Edward -> [ai te hua], England -> [ying ke lan]), but salvaged by epenthesizing a rightward vowel if the input is perceived as monosyllabic (e.g. Ford -> [fu ta], Mark -> [ma ke]). These findings, though not fully regular, are consistent with the more consistent patterning found in Cantonese loanword phonology

| | | | |
|-----|---------|----|---|
| sAy | (small) | -> | (very slow) sAy sAy tey (rather small DE) |
| | | -> | sAy sAy (very small) |

In a variation on this theme, a reduplicated form with *yat* (one) intervening on the surface may be optionally truncated to a plain reduplicated form.

| | | |
|-----------------------|----|--------------------------------|
| tok yat tok | -> | tok tok |
| (measure one measure) | | (to measure (once)) |
| kwAng yat kwAng | -> | kwAng kwAng |
| (stroll one stroll) | | (to walk around (for a while)) |
| t'iw yat t'iw | -> | tiw tiw |
| (jump one jump) | | (to jump (once)) |

Yip (1990a) argues the the bisyllabic element in Cantonese is specifically iambic in quality. For arguments against this approach, see Silverman 1993.

2.2 External Evidence

2.2.1. Loanwords

(See Silverman (1992), especially Sections 5.1-5.3 (pp.315-320). This also discusses Yip's analysis.)

2.2.2. Secret Languages

(See above.)