

Reconstructing Old Chinese uvulars in the Baxter-Sagart system (ver. 0.97)

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1. Uvular stops were first reconstructed for OC by Pan Wuyun (1997) as the source of MC "laryngeals":

- ☐ *q > ʔ (影母)
- ☐ *qh- > x (曉母)
- ☐ *G- > ɦi (喻三)

2. Advantage: phonetic series which mix these initials can be treated as showing normal phonetic alternations between stops (B-S 0.97 reconstructions from here onward):

- ☐ 于 *G^w(r)a > hju > yu2 'go; at'
- ☐ 汙 *qq^w(r)a > 'wae > wa1 'impure, vile'
- ☐ 訖 *q^{wh}(r)a > xju > xu1 'great'

compare:

- ☐ 咀 *[dz]a > dzjoX > ju3 'chew'
- ☐ 沮 *[ts]a-s > tsjoH > ju4 'marshy ground'
- ☐ 且 *[ts^h]A > tshjaeX > qie3 'moreover'

As observed by Pan, stops and fricatives of the same place of articulation (like t and s) do not normally mix in phonetic series.

3. uvulars and labio-uvulars.

It is necessary to reconstruct both plain uvulars:

*q-, *q^h-, *G-

- ☐ 遏 *qqat > 'at > è 'repress; cease'
- ☐ 歇 *q^hat > xjot > xie4 'cease, rest'
- ☐ 褐 *[GG]at > hat > hè 'coarse cloth'

(note: in the B-S system, singleton consonants note type-B/division-III initials, while doubled consonants note type-A/non division-III initials)

and labio-uvulars:

*q^w-, *q^{wh}-, *G^w-

- ❑ 顙 *q^{wh}at-s > xjwojH > huì 'beard'
- ❑ 穢 *q^wat-s > 'jwojH > huì 'bad weeds; filth'

Shi Jing rhyme-words from the 歲 series rhyme as OC -at, not -ot; so that the labiality in MC words of that series listed above cannot be explained as due to a rounded vowel.

4. Middle Chinese reflexes of *G^w-, *GG^w- and *GG-.

The Middle Chinese initial *hj- (喻三) occurred primarily in words with a rounded vowel and words with medial -w-. Its OC precursor must have been inherently labial or labialized. Baxter and I agree with Pan that it is the MC reflex of *G^w-. It corresponds to g- in WT:

- ❑ 王 *G^waŋ > hjwang > wáng 'king' (WT gong 'a superior one')
- ❑ 胃 *[G^w]ə[t]-s > hjw+jH > wèi 'stomach' (WT grod-pa 'stomach')
- ❑ 于 *G^w(r)a > hju > yu2 'go; at' (WT Hgro 'go')
- ❑ 越 *[G]wat > hjwot > yuè 'transgress' (WT Hgrod-pa 'to go, to travel')
- ❑ 袁 *[G]wa[n] > hjwon > yuán 'long robe' (WT gon 'garment')

*G^w- is a type-B initial. Its type-A counterpart is *GG^w-. Baxter and I also agree with Pan that the MC reflex of *GG^w- is hw- (匣):

- ❑ 皇 *GG^waŋ > hwang > huáng 'sovereign'
- ❑ 畫 *[GG]^wrek-s > hweaH > huà 'draw'
- ❑ 緩 *[GG]^wa[n]? > hwanX > huǎn 'slack'

We think OC *GG- goes to MC h- (匣):

- ❑ 后 *[GG](r)o? > huwX > hòu 'sovereign' (WT mgo 'head', WB u 'head')
- ❑ 褐 *[GG]at > hat > hè 'coarse cloth'

5. Distinguishing velar and uvular series.

OC *GG^w- and *GG- are difficult to distinguish from *gg^w- and *gg-, which also evolve to MC h-. We propose basing the decision on the phonetic series. We observed that when a particular rhyme category has two competing series with the same velar initials, it is usually the case that only one of those two also includes MC reflexes of OC uvulars: '- (glottal stop), x- or h-. Here are some paired phonetic series with vowel -o-:

rhyme	just velars	Mixed: velars + '-/x-/h-
-o	GSR 109 葍	GSR 108 句
-o	GSR 113 侯	GSR 112 后
-oŋ	GSR 1172 工	GSR1173 公
-ok	GSR 1225 角	GSR 1226 殼

The pure velar series we reconstruct with OC velars: 菁 kk-, 侯 gg-, 工 kk-, 角 kk-; and the mixed velar+"laryngeal" series we reconstruct with OC uvulars: 句 q(q)-, 后 GG-, 公 qq-, 殼 qq(^h)-.

We think 后 and 褐 have uvular initials because they occur in such mixed series.

6. Why are there velars in uvular series ?

We assume that OC uvular stops evolve to MC velars when preceded by minor syllables, consisting of a consonant plus ə, as in these examples of word families from one phonetic series:

- to rest
 - 歇 *q^hat > xjot > xiē 'cease, rest'
 - 惕 *Cə.q^hrat > khjet > qì 'to rest'
- empty
 - 虛 *q^h(r)a > xjo > xù 'empty'
 - 虛 *Cə.q^h(r)a > khjo > xù 'ruins'
- shadow
 - 影 *qraŋʔ > 'jaengX > yǐng 'shadow'
 - 景 *Cə.qraŋʔ > kjaengX > jǐng 'bright; image'
- old man
 - 公 *Cə-qqoŋ > kuwng > gōng 'father; prince'
 - 翁 *qqoŋ > 'uwng > wēng 'old man'

7. What is the MC reflex of *G- ?

We think it is y- (喻四). That is, MC y- has two distinct OC sources: (1) OC *l-, and (2) OC *G-.

Examples of MC y- from OC *l- are found in phonetic series with MC d- and/or th- (but no t-), and correspond to TB l-:

- 余 *la > yo > yú '1sg.' (prob. a polite form. Mikir la 'here, where the speaker is')
- 以 *mə-ləʔ > yiX > yǐ 'take, use' (Jingpo la 'take')
- 揚 *laŋ > yang > yáng 'lift, raise' (WT lang 'rise, get up')
- 葉 *l[a]p > yep > yè 'leaf' (Jingpo lap 'leaf')
- 易 *N(ə)-lek-s > yeH > yì 'easy' (WT legs 'good, happy, etc.')
- 用 *loŋ-s > yowngH > yòng 'use' (WT longs 'to use')

Examples of MC y- from OC *G- are found in phonetic series without MC d- and/or th-, but with velars and/or laryngeals initials. They often correspond to TB words in y- or g-y-:

- 羊 *G(r)aŋ > yang > yáng 'sheep' (Matisoff PTB *yang 'sheep')

- ❑ 洋 *[ɣ](r)aŋ > yang > yáng 'a great expanse of water' (WT yangs-pa 'wide, broad, large')
- ❑ 祥 *s-[ɣ]aŋ > zjang > xiáng 'auspicious' (WT g-yang 'happiness, blessing, prosperity')

Note that all three examples above are from the phonetic series of 羊 (GSR 732), from which Karlgren arbitrarily excluded

- ❑ 羌 *Cə.q^haŋ > khjang > qiāng 'Western tribes'
- ❑ 姜 *Cə.qaŋ > kjang > jiāng 'a family name'

More examples of MC y- from OC *G-:

- ❑ 亦 *[ɣ](r)Ak > yek > yì 'armpit' (Benedict TB *(g-)yak 'armpit')
- ❑ 夜 *[ɣ]ak-s > yaeH > yè 'night' (Benedict TB *ya 'night')

Although this phonetic series (GSR 800) has no velars or laryngeals, the word 亦 'armpit' has a related words with a MC velar initial:

腋 *kkak (or *Cə.qqak ?) > kak > gē 'armpit'.

8. word-family contacts between MC y and laryngeals/velars.

Our proposal that OC *G- > MC y- makes sense of phonetic series and word-family contacts between MC laryngeals/velars and y-:

- ❑ 舉 *Cə.q(r)a > kjoX > jǔ 'lift, raise'
- ❑ 與 *G(r)a > yoX > yǔ 'give; for; and'
- ❑ 益 *qek > 'jiek > yì 'increase'
- ❑ 溢 *[ɣ]ik > yit > yì 'overflow'
- ❑ 衍 *[ɣ](r)a[n]? > yenX > yǎn 'overflow'
- ❑ 愆 *Cə.q^h(r)a[n] > khjen > qiān 'exceed, err'

If the only source of MC y- was *l-, the voiceless members in the above examples would need l-clusters, for instance Sagart (1999) had 舉 ^bk-la, Zhengzhang (2003) has 益 qleg, 公 kloong. These l-clusters, however, are not supported by comparative evidence (for 公, compare WB hông 'old'). With our proposal, there is no need of l-clusters in these words.

References

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