

THE DERIVATION OF THE TIBETAN PRESENT PREFIX *g-* FROM *h-*

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According to the *communis opinio* it is arbitrary whether a Tibetan verb takes the prefix *g-* or *h-* in its present stem. This paper instead argues that *h-* [ɣ] originated as a phonetically conditioned variant of *g-*; a pattern that became obscured through the coinage of denominative verbs and analogical developments.

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According to the *communis opinio* it is arbitrary whether a Tibetan verb takes the prefix *g-* or *h-* in its present stem (e.g. Coblin 1976; Beyer 1992: 164–177; Hill 2010a: xv–xxi). Implicitly this view suggests the two prefixes have distinct origins, like the Latin perfect for which some verbs continue the inherited aorist whereas other continue the inherited perfect (Weiss 2009: 409–414). For those subscribing to this understanding of the morphology of the Tibetan present, the task remains to explain the origins of *g-* and *h-*. Here, I explore an alternative, namely that these two prefixes have the same origin and their distribution is originally phonologically conditioned.¹

Before looking at the distribution of *g-* and *h-* across verb paradigms, it is useful to remind ourselves of the pronunciations these letters probably reflect. The pro-

¹ Michael Radich proposed *g-* < **h-* in a document ‘one prefix to rule them all’ (4th of January 2005), which he wrote in the context of a first year classical Tibetan class taught by Cameron Warner at Harvard University. The statistics of the distribution of these two prefixes in Tibetan verbs used here come from Michael’s paper, which in turn were derived from my then draft Tibetan dictionary, later published as Hill 2010a. I have adjusted Michael’s original statistics with reference to Hill 2005a; Jacques 2010; and Hill and Zadoks 2015. Abel Zadoks proposed to me in a conversation from around 2014 that *g-* < **h-* before voiceless fricatives. It was only in 2018 that I brought these two suggestions together and explored this matter further on my own. I hereby extend heartfelt thanks to both Michael and Abel for their insights. I also thank the European Research Council for support via the Synergy Grant ASIA-609823.

nunciation of *g-* has received little attention, probably because all investigators take for granted that it reflects a velar stop (or possibly fricative, see Jäschke 1881: ix) that in *snon-hjug* position assimilates in manner of articulation to the following stop (Hill 2010b: 121). The pronunciation of *h-* has received more attention. The consensus holds that *h* reflects [h̥] or [ɣ] before a vowel² and before consonants it reflects a homorganic nasal (Hill 2005b: 114–115).³ Some scholars believe that syllable final *-h* is an orthographic device without phonetic meaning (e.g. Matisoff 2003: 50, 486 et passim; Jacques 2012: 92), whereas others think that in this position it indicated the same pronunciation as when it appears syllable initially (Simon 1938: 272; Hill 2005b, 2009). The dialect evidence suggests that an orthographic final *-h* reflects a long vowel. Bell (1905: 7) writes concerning Central Tibetan that as a final ‘ㄅ [-h] is not itself pronounced but lengthens the sound of the vowel preceding it’. De Roerich also describes this phenomenon in two Tibetan languages: for Central Tibetan he offers the four examples *bkaḥ* /kā/ ‘order’, *nam mkhaḥ* /nam-khā/ ‘sky’ (1931: 299), *dgaḥ* /gā/ ‘delight’, and *dmaḥ* /mā/ ‘low’ (1933: 17); for Lahul he cites the three examples *nam mkhaḥ* /nam-khā/ ‘sky’, *dgaḥ* /gā/ ‘delight’, and *dmaḥ* /mā/ ‘low’ (1933: 17). Migot (1957: 455) draws attention to the same correspondence between a written final *-h* and a spoken long vowel in dialects of Kham. Sedláček (1959: 216–219) discusses the complicated effects of original final *-h* on tone in Lhasa dialect, and separates this discussion clearly from his treatment of original open syllables. Sedláček additionally implies that final *-h* has a segmental realisation which he symbolises in his phonetic transcriptions as [ː], for example *mnaḥ* ‘might, power’ [ŋaː 55] (1959: 219). Jin (1958: 12) confirms the existence of long vowels in Lhasa Tibetan citing the word *mdaḥ* [daː³] ‘arrow’. As an additional piece of evidence in favour of its reality, final *-h* has a correspondence in Old Chinese which is distinct from open syllables (Hill 2012: 25–26). Some scholars believe the three phonetic uses of *h* are

² Authors expressing this view include: de Kőrös 1834: 5; Schmidt 1839a: 14, 1839b: 9; Foucaux 1858: 5; Desgodins 1899a: 17, 1899b: 893; de Roerich 1932: 166; Dragunov 1939: 292, Note 1; Miller 1955: 481, 1968: 162, 1994: 71; Migot 1957: 445; Róna-Tas 1962, 1966: 129, Notes 142 and 143, 1992: 699; Siklós 1986: 309; Hill 2005b, 2009; Schwieger 2006: 22; Preiswerk 2014: 76; and Gong 2016: 143, Note 16.

³ In conservative dialects such as Golok and Kham, as well as in loanwords to Mongour, orthographic cluster initial *h-* appears as the nasal homorganic to the following stop (Róna-Tas 1966: 143–144; Sprigg 1968: 310); Golok has such examples as *ḥkhor-lo* [ŋkhɔr-] ‘watch’, *ḥgro* [ŋgjo] ‘go’, *ḥcham* [tʃʃham] ‘dance’, *ḥthuñ* [nthɔŋ] ‘drink’, *sku-ḥdra* [-ndra] ‘image’, *ḥjah* [ndʒa] ‘rainbow’, *ḥdod-mo* [ndɔd] ‘wish’, *mdaḥ-ḥben-gyi* [-mpheŋ] ‘of the target’, *ḥbar* [mbar] ‘burn’ (Sprigg 1968: 310). Kham has examples such as *ḥkhol-* [ñkʰol-] ‘to boil’, *ḥgul-* [ñgul-] ‘to shake’, *ḥthag-* [ntʰag-] ‘to bind’, *ḥdod-* [ndod-] ‘to wish’, *ḥdzin* [ndzen-] ‘to seize’, and *ḥbab-* [mbab-] ‘to fall’ (Róna-Tas 1966: 143, Note 264). Examples of Mongour loanwords include *ḥkhor-lo* [ŋkʰuɔrlo] ‘circle’, *ḥdu-khañ* [ndogɔŋ] ‘meeting-house’, *ḥphul-* [mpʰurla] ‘to push’, and *rdɔ-ḥbum* [rɔdʊmbɛn] ‘heap of stones’ (Róna-Tas 1966: 143). In other dialects it occurs as various nasals (Róna-Tas 1966: 144, Note 270). Examples from Derge include *ḥkhyags* [ʰtʃa^k] ‘cold’, *ḥgro-* [ʰdzro-] ‘to go’, *ḥcham-* [ʰchom-] ‘to agree’, *ḥjam-* [ʰdzampo-] ‘soft’, and *ḥthag-* [ʰmthɔpa-] ‘to bind’ (Róna-Tas 1966: 144, Note 270). Even the innovative Lhasa dialect has a nasal within a word, where *h-* has been reanalysed as the final of the preceding syllable, e.g. *dge-ḥdun* [gendün] ‘clergy’ (Siklós 1986: 308–309).

unrelated (Sprigg 1987: 52–53; Coblin 2002: 181–183), but others suppose that they reflect different allophones of the same phoneme or indeed are secondary derivatives of a once unitary pronunciation (de Roerich 1933: 16–17; Miller 1968: 162; Beckwith 1996: 818; Hill 2005b: 126–127).

The redactors of the Tibetan orthography gave this letter the place of a voiced laryngeal in Tibetan alphabetical order (Róna-Tas 1966: 129, Note 142; Hill 2009: 128) and the distribution of a unitary voiced phoneme in terms of the syllable positions in which the letter occurs. The hypothesis that <h> represented [ɣ] in all three positions in Old Tibetan, is able to explain all three reflexes reconstructible on the basis of the modern varieties: /h/ [ɣ] as a cluster initial changed into the nasal homorganic to the following stop, as a plain initial remained [ɣ], and as a final [ɣ] was lost, but through compensatory lengthening induced the lengthening of the preceding vowel. The remainder of this paper will take as given that <g> represents /g/ and <h> represents /ɣ/.

Table 1. Occurrences of verbs with the present prefixes *h-* and *g-*

Root initial	Verbs with prefix <i>h-</i>	Verbs with prefix <i>g-</i>	Percentage with prefix <i>g-</i>
Voiceless acutes			
s	0	8	100
ʃ	0	2	100
ś-	5	7	58
t-	4	5	55.5
c-	9	5	35.6
ts-	10	1	9.1
Other initials			
ź-	3	2	40
z-	4	1	20
g-	15	3	16.6
p-	7	1	12.5
b-	12	1	7.7
d-	10	1	9.1
j	6	0	0
k	4	0	0
dz	3	0	0
r	3	0	0
l	4	0	0

Now that phonetic interpretations of *g-* and *h-* are in mind, we may return to their phonotactic distribution in present tense verbs. Table 1, based on the verb stems

reported in Hill 2010a, gives the number of occurrences of present stems of various root onsets with both prefixes. The pattern that emerges strongly suggests that *h-* is the original initial, which fortified to *g-* before voiceless acute initials.⁴ The major exception to the pattern is the prevalence of the prefix *h-* with verbs of root initial *ts-*. If we assume that *h-* regularly changed to *g-* before voiceless acute initials, this gives us 26 cases⁵ of *h-* before voiceless acutes and nine cases of *g-* before other initials that are in need of explanation. Three examples, one each with root initial *d-*, *p-*, and *b-*, can be dismissed, since a look at the complete inflection shows that *g-* (*d-* before labials) is in fact here not a present prefix but part of the root.

gdañ, gdañs, gdañ, gdoñs ‘open’
dpog dpags dpag dpogs ‘measure, assess’
dbrol, dbral, dbral, dbrol ‘puncture, tear’

I have no explanation for the remaining six examples of the *g-* where it is not expected. Greater philological exploration of the stems as they occur in context is clearly called for.

dgar, bkar, dgar, khor ‘separate’
dgod, bgad, bgad, dgod ‘laugh’
dgroñ, bkroñs, dgroñ, dgroñs ‘kill’
gžar, bžar, gžar, gžor ‘shave’
gžu, bžus, gžu, gžus ‘strike, beat’
gzab, bzabs, gzab, gzobs ‘strive, exert one’s self’

Here are the 28 unexpected examples of *h-*:

hthag, btags, btag, hthog ‘weave’
hthu, btus, btu, thus ‘gather’
hthuñ, btuñs, btuñ, hthuñs ‘drink’
hthog, btogs, btog, hthogs ‘pick, pluck’
hchag, bcags, gcag, chogs ‘walk’
hchañ, bcañs, bcañ, choñs ‘hold’
hchab, bcabs, bcab, hchobs ‘conceal, hide’
hchiñ, bcinñs, bciñ, chiñs ‘bind, tie’
hchib, bcibs, bcib, chibs ‘ride a horse’
hchir, bcir, bcir, chir ‘press, squeeze’

⁴ Table 1 excludes verbs of invariant onset and vowel across their inflection; in these verbs the *g-* or *h-* may be part of the root. Before *-n-* only *g-* occurs, but there is only one example *gnon mnan mnan non* ‘suppress, defeat’. The root initials appearing in Table 1 are orthographic transcriptions (modulo aspiration according to Shafer’s rule, see Hill 2007, 2011: 441–442), except in the case of /ʎ/, which I understand as the root initial in the verbs *klog* ‘read’ and *klub* ‘bedeck’ (de Jong’s rule, see Hill 2011: 441). Note that before *ś*, *ž*, *z*, *r*, and *l* the prefixation of *h* induces dental epenthesis, i.e. **hś* > *hch-*, **hž-* > *hž-*, **hz-* > *hdz-*, **hr-* > *hdr-*, **hl* > *ld-* (Conrady’s law, see Hill 2011: 446–447). For the phonetic term ‘acute’, see Jacobson 1990: 260.

⁵ Both *gso* and *htsho* compete as the present of ‘nurture’, so the 100% statistic for roots in *s-* is not quite true.

hchu, bcus, bcu, chus ‘draw water’
hchol, bcol, bcol, chol ‘entrust, charge with’
hchos, bcos, bco, chos ‘make ready, prepare’
hchags, bśags, bśag, śog(s) ‘confess’
hchad, bśad, bśad, sod ‘tell’
hchi, śi, hchi ‘die’
hchar, śar, hchar ‘rise’
hchor, śor, śor ‘escape, be lost’
hshag, btsags, btsag, tshogs ‘strain, filter’
hshañ, btsañ, btsañ, tshoñs ‘press, squeeze’
hsham, btsams, btsam, tshoms ‘abuse, mistreat’
hshal, btsal, btsal, hshol ‘greet, prostrate’
hshir, btsir, btsir, tshir ‘wring out’
hshem, btsems, btsem, tshems ‘sew’
hshog, btsogs, btsog, hshogs ‘cudgel’
hshoñ, btsoñs, btsoñ, tshoñs ‘sell’
hshod, btsos, btso, tshos ‘cook’
hshol, btsol, btsol, tshol ‘search for’

Joanna Bialek (2018: 317–319) points out that originally the present stem of ‘die’ was *śi* and not *hchi*. She draws attention to three pieces of evidence. First, the Old Tibetan compound *skye-śi* ‘transmigration’ combines the present stem *skye* ‘be born’ with the presumably present stem *śi* ‘die’. Second, in the phrase *myi myi śi hi yul* ‘a land of men who do not die’ (Pelliot tibétain 1134, l. 43) the negation marker *myi*, which can only precede the present and future but not the past, is used with *śi*. Third, in the phrase *ña-la myi bstan-na śir hgro* ‘If [you] will not explain [it] to me, I am going to die’ (Pelliot tibétain 1287, ll. 31–32), because the verb *hgro* selects only for the present and future in infinitive constructions (Garrett et al. 2013: 37), *śi* must not be past. Thus, the verb *hchi, śi, hchi* ‘die’ need not be seen as a true exception to the generalisation that the prefix *g-* rather than *h-* occurs before the voiceless acute root initials.

The verbs *hthu, hthag, hthog, hchu, hchib*, and *hchos* are potentially denominative, respectively from *thu* ‘hem’, *thags* ‘garment’, *thog* ‘tip’, *chu* ‘water’, *chibs* ‘horse’, and *chos* ‘dharma’.⁶ They are analogical creations postdating the change of

⁶ Militating against *hthag* ‘weave’ as denominative is the pair of Chinese cognates 織 *tək ‘weave’ and 織 *təks ‘textile’, which suggest that the relationship between verb and noun in this case, as well as the morpheme *-s may be very old (Schuessler 2007: 615). A reviewer proposes that *chos* is a deverbal noun from the imperative *chos*, noting that otherwise it is difficult to account for the loss of -s in the future stem *bco*. Note, however, that the *Bod rgya tshig mdzod chen mo* (Zhang 1985) gives the future as *bcos* and that *bco* could be analogical, along the lines *bsams : bsam :: bcos : X = bco*. An alternative explanation is to propose that the present *hchos* is itself analogical on the model of the denominatives and that the inherited present had the voiced version of the root seen in *bzo* ‘make’ (< *bdzo, according to Schiefner’s law, see Hill 2014). If we pursue the latter possibility, the inherited paradigm would have been *gzo, *chos*, *bzo*, *chos*, but a relationship with *gzo* ‘show gratitude’ is unlikely.

h- to *g-*. I am not aware of any obvious denominal verbs that take the prefix *g-* in their present. If these denominal derivations for *hth-* and *hch-* are accepted, there remain 19 examples unexplained; of these ten have root initial *ts-*, seven have root initial *c-*, and two root initial *ś-*. It is likely that at least *hchir* ‘press, squeeze’ and *htshir* ‘wring out’ are onomatopoeic.

An alternative explanation for the phonetic conditioning of *h-* > *g-* is to restrict the conditioning environment to only voiceless fricatives. Under this alternative proposal, the 17 examples of *h-* before *ts-* and *c-* become regular, but the 11 examples of *g-* before *t-*, *c-*, and *ts-* become irregular and the 5 examples of *h-* before *ś-* remain irregular. It does not seem judicious at the moment to choose between these two alternative hypotheses, but instead to simply conclude that it is likely that prefix *g-* derives from *h-* and that further philological work (of the type discussed for ‘die’) is required to add clarity to the situation.

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