

## Tibetan \*-as > -os

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Abstract: Both Jacques (2010) and Zeisler (2015) propose explanations for the synchronically unexpected past *zos* of the Tibetan verb 'eat'. After evaluating their proposals, this essay suggests that *zos* is the regular outcome of a sound change \*-as > -os, the results of which were erased through analogy in almost all other verbs.

Tibetan verbs showing stem ablaut typical have -o- in the present and -a- in the past, e.g. 'kill' with present *gsod*, past *bsad*, future *gsad*, and imperative *sod*. The verb 'eat' with the stems *za*, *zos*, *bzah*, *zo* has the opposite pattern showing -a- in the present and -o- in the past. Following Meillet's (1925: 25) principle that irregular morphology preserves archaisms, Guillaume Jacques (2010) proposes that *zos* is a fragment of erstwhile agreement morphology in Tibetan. His proposal has not proven popular. Randy LaPolla (2012: 120) objects to the importance that Jacques places on this one verb.<sup>2</sup> LaPolla's objection is misplaced for two reasons. First, single verb forms are sometimes of paramount significance for an entire family; witness Vedic *sáye* 'lies' (Clackson 2007: 146). Second, 'eat' is not the only Tibetan verb to show this pattern. Hill (2014) draws attention to three further verbs that appear to show a vowel -o- in the past, viz. *ḥ deñ*, *doñ*, —, — 'disappear', *ḥ चाह*, *ḥ chos*, *ḥ चाह*, *ḥ cho* 'chew, gnaw', and *lañ*, *loñ s*, *lañ* 'finish' (cf. Hill 2010: 89, 148, 279).

In addition to LaPolla, Zeisler (2015) also rejects Jacques' explanation of *zos*, instead arguing that *zos* is borrowed into the paradigm of 'eat' from the cognate *potentialis* verb 'be able to eat'. Of the additional verbs that Hill (2014) notes, Zeisler (2015: 43–44), points to the confused and contradictory reports of the indigenous lexicographical tradition for 'disappear' and 'finish' to speculate that Hill conflates separate verbs. Zeisler finds 'chew' "most interesting, particularly as it seems to display the same pattern as the verb *za* 'eat' " but regrets that it is "not very well attested" (2015: 44). She notes two attestations of a present stem *ḥ cha*, both in the phrase *rus-pa gle ḥ cha* 'the bones, fodder for the *gle*' (Pt 1194, ll. 62–3 and IOL Tib J, r68).

Zeisler fails to consult the *Wörterbuch der tibetischen Schriftsprache*, which provides ample attestations of this verb. The *Wörterbuch*, a research project of the Bayerischen Akademie der Wissenschaften, started in 1954, began publication in 2005, and at the time of writing in July 2015 has grown to 24 fascicles,

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1 I would like to thank Abel Zadoks for first proposing to me that Tibetan -a- changes to -o- in (some) closed syllables.

2 For his part, LaPolla offers no alternative explanation for *zos*.

reaching *bsñol*. This dictionary supersedes all previous Tibetan lexicographical work in coverage and scientific rigor. To showcase the excellence of this resource I quote the three relevant entries *in extenso*.

*bcaḥ* fut. zu ↓ <sup>2</sup>*ḥ chaḥ* beißen, kauen, essen; ~ *ba* Nahrung, Getränk, Saufen; *bzaḥ* ~ Speisen und Getränk, Essen.  
*bzaḥ* ~ *dañ ni na bzaḥ* ... *gsol* (metr.) „er gab Speisen und Getränk sowie Kleider“ (Anav 1: 89,15); *bzaḥ ba dañ* ~ *ba gya nom pa* „üppiges Fressen und Saufen“ (Prav 187,7); *bzaḥ ba dañ btuñ ba dañ* ~ *ba rnam pa sna tshogs* „verschiedenartige Speisen, Getränke, und Nahrung (skt. *bhojya*)“ (Suv 95,21); *bzaḥ* ~ *de bžin btuñ ba ñid .. rab tu bzaḥ* (metr.) „Essen und ebenso auch Triken soll man zu sich nehmen“ (Hev 1.6.20a); *so yi dag byed* ~ *bar bya* (metr.) „mann soll [die Zweige] zum Reinigen der Zähne kauen“ (Ahs 1.2.3b); *mgo bo na bas ḥ di mi* ~ (metr.) „bei Erkrankungen des Kopfes soll man dies nicht essen“ (Ahs 1.2.4b); *bzaḥ ba dañ* / ~ *ba* ... *kyis yañ dag par tshim par byas nas* „als er sie mit Speisen und Getränken völlig zufriedengestellt hatte“ (ViśṬ 76,36).  
Lex. *bzaḥ ba dañ* ~ *ba ma ḥ oñ s par lhuñ bzed mi bzed* ≅ *nānāgate khādaniye bojanīye pātram upanāmayiṣ yāmah* „solange die Zeit zu essen oder zu trinken nicht gekommen ist, werden wir nicht die Bettelschale hinhalten“ (Mvy 8569); *gžib pa ni sos* ~ *ba lces ḥ jib pa* „*bžib pa*: mit den Zähnen beißen, mit der Zunge saugen“ (Kloñ D 736,6).

<sup>2</sup>*ḥ chaḥ* fut. ↑ <sup>2</sup>*bcaḥ* knabbern, kauen, essen; vgl. ↓ <sup>2</sup>*ḥ chos*.  
*rtsa ba ḥ bras bu* ~ *ba dañ* (metr.) „Wurzeln und Früchte knabbern“ (Prav 51.21); *rus la* ~ *baḥ i rus kyañ dkon* (metr.) „Knochen sind selten, sogar für diejenigen, die sie essen“ (gZer 510,6).  
Lex. ~ ≅ *sos ldad pa sogs* (Dagy).

<sup>2</sup>*ḥ chos* essen, kauen; vgl. ↑ <sup>2</sup>*ḥ chaḥ*  
~ *sam zos na žes bya ba ni lkog mar kham gis mid naḥ o* „gekaut oder gegessen bedeutet: man schluckt die Speise den Hals hinunter“ (K5 297a6).  
Lex. *khādita* „gekaut“ (in Mvy 7040); ~ *pa* ≅ *carvita* (Ak 288.60); ~ *pa* ≅ *myañ s paḥ am zos paḥ i don du ḥ añ snañ* „wahrgenommen oder erscheint auch i. S. v. gegessen“ (brDa); ~ *pa* ≅ *zos pa* (TTC).

As the reader sees, the *Wörterbuch* falls short of labeling *ḥ chos* the past of *ḥ chaḥ* but the equation of *ḥ chos-pa* with *zos-pa* in the sources cited provides evidence that *ḥ chos* is a past stem.

A few passages from the Kanjur further confirm that *ḥ chaḥ*, *ḥ chos*, and *bcaḥ* belong to the same verb and are respectively present, past, and future.

*dge-sloñ -gis rnam-pa gsum dben-par bya-ste* / *bśañ -ba-dañ* / *gci-ba-*

*dañ / so-siñ bcaḥ -baḥ o / dge-sloñ -gis so-siñ ḥ chos-nas / de  
bzin-du mi dor-gyi chus bkru-bar bya /*

A monk shall go into isolations for three purposes, defecation, urination, and chewing on toothpicks. After a monk has chewed a toothpick, he is to wash with water which has not been thus discarded. (K8, Vol. 13, 310a)

*yañ dge-sloñ -ma gañ dus ma yin-par bcaḥ -baḥ am bzaḥ -ba ḥ chaḥ -  
ḥ am za-na ltuñ byed-do*

Also, if a nun chews and eats what is to be chewed and eaten when the time is not full, this is a transgression. (K4, Vol. 9, 14b)

The Kanjur also attests the imperative, which the *Wörterbuch* omits.

*tshe-dañ ldan-pa ḥ di ḥ cho sig / ḥ di zo žig ces bya-ba ni bcaḥ -ba-  
dañ bzaḥ -baḥ o/*

When (someone) says, 'O venerable sir, chew this! Eat this!' the (offering) is to be chewed and to be eaten (K3, Vol. 7, 148a)

These citations from the Kanjur and the occurrence of *bcaḥ* and *ḥ chos* in the *Mahāvvyutpatti* (Mvy), published before 814 CE, taken together with Zeisler's own citation of *ḥ cha* in Dunhuang documents, guarantee that the entire paradigm is of hoary provenance. The conjugation of 'chew' *ḥ chaḥ*, *ḥ chos*, *bcaḥ*, *ḥ cho* that these citations establish is parallel to 'eat' *za*, *zos*, *bzaḥ*, *zo*.

Zeisler's explanation that *zos* and *ḥ chos* are borrowed from a *potentialis* paradigm is possible, but poorly motivated. The postulated independent verbs \**zo* 'to be able to eat' and \**ḥ cho* 'be able to chew' are as far as I know unattested. It is unclear why speakers would target the past stem and not some other form for this replacement by borrowing from a *potentialis*. It seems unlikely that an inherited *bzas* would yield to such a borrowing, since analogical pressure (e.g. *bsams*, *bsgrubs*, etc.) reinforces it as the expected form. The distribution of *zos* in peripheral dialects versus *bzas* in the center (Zeisler 2015: 46) suggests that *zos* is the archaism. In addition, syllable structure weighs against Zeisler's proposal of borrowing the *potentialis* as a past stem. In an earlier paper, where she first draws attention to the *potentialis*, Zeisler (2002) notes the *potentialis* verbs *chod* 'able to cut', *sod* 'able to kill', *lon* 'able to take', and *sñogs* 'able to catch'. These verbs are all closed syllable whereas the two verbs that show *-o-* ablaut in the past have open syllable roots. Perhaps this distribution is coincidence, but, perhaps not. An account of this distribution is a plus for any explanation of the ablaut seen in 'eat' and 'chew' and Zeisler's explanation does not garner this plus.

Presuming that Jacques would see *ḥ chos* as additional evidence for erstwhile agreement, his explanation accounts for the attested phonological distribution. He offers three concrete possibilities for the phonological development of the -

*os* in *zos*; 1. \**zaus* > *zos*, 2. \**zau* > \*-*zo* with *-s* added by analogy, 3. \**zasu* > *zos*, presumably with an intermediate phase such as \**zosu* (2010: 47). None of these laws leads to *-o-* in closed syllable roots. Consider the verb  $\sqrt{\text{lañ}}$  'take' *len*, *blañ s*, *blañ*, *loñ s*; the three proposals all produce the attested past: 1. \**blañ us* > *blañ s*, 2. \**blañ u* > \**blañ* → *blañ s*, 3. \**blañ su* > *blañ s*. These proposals require one to consider all transitive past stems ending in *-as* as analogical developments. Thus, in the verb 'do' *byed*, *byas*, *bya*, *byos*, the innovative past *byas* replaced inherited \**byos*, which was lost without a trace. A verb such as 'think' *sems*, *bsams*, *bsam*, *soms* serves as an analogical model for *byas*, viz. *bsam* : *bya* :: *bsams* : X = *byas*.

Each of Jacques' proposals has ramifications for Tibetan historical phonology in general. The first proposal requires a sound change \*-*us* > *-s*, that operated after \*-*au-* > *-o-*, to avoid \**zaus* developing to \**zas* instead of *zos*. This sound change leaves unexplained why some words still contain *-us*, such as *rus* 'bones'. The second and third proposal require the loss of final *-u*, a not implausible change per se, but one which gives rise to the problem that words such as *bu* 'son', *su* 'who', and *ḥ bru* 'grain' did not undergo the change. Zeisler reasonably objects to the third proposal that if \**asu* becomes *-os* then one might expect \**isu* to develop to \**esu* or another outcome other than the *-is* seen in verbs such as 'do' *bgyid*, *bgyis*, *bgyi*, *gyis* (2015: 46). Each of Jacques' proposals is rather complicated and partly unmotivated in its details. Ockham's razor favors abandoning the insistence on a \*-*u-* suffix and accepting a simpler sound change, namely \**as* > *-os*.

The proof of a phonological account for the forms *zos* and *ḥ chos* is whether the account explains idiosyncrasies other than those that served as its motivation. A change \*-*as* > *-os* has the advantage of explaining the invariant verb *ltos* 'look to, attend to' as the inherited past of *lta*, *bltas*, *blta*, *ltos* 'look at'.<sup>3</sup> An original paradigm *lta*, *ltos*, *blta*, *ltos* closely parallels *za*, *zos*, *bzah*, *zo* and the innovative past *bltas* parallels the innovative past *bzas*. Postulating an inherited paradigm *zlo*, \**zlas* > *zlos*, *bzla*, *zlos* similarly reconciles the two verbs *zlo*, *bzlas*, *bzla*, *zlos* 'say, repeat' and *zlos* (invariant) 'repeat'. The pair of verbs *dgaḥ* 'be happy' and *dgos* 'need, want', both of invariant conjugation, suggests an intransitive verb with the conjugation *dgaḥ*, *dgos*, lacking a distinct future and imperative as non-volitional verbs do. In a more complicated case, for the verb *smra*, *smras*, *smra*, *smros* 'say' we predict an inherited past stem \**smros*. Although \**smros* does not exist as a separate verb, there is an invariant verb *smos* 'say, call' which the *Dag yig gsar sgrigs* sees as additionally an alternative present (sic) of *smra*. One may legitimately speculate that *smos* is a regular phonetic development from

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<sup>3</sup> The ensuing discussion proceeds with the hypothesis \*-*as* > *-os*, but most of the argument still holds *mutatis mutandis* using Jacques' more complicated phonological proposals.

\*smras.<sup>4</sup>

Just as Jacques' proposals must either account for words ending in *-u* or *-us*, so too the proposal *\*as* > *-os* must account for all instances of *-as* in the language. Analogy within a paradigm explains verb forms ending in *-as*,<sup>5</sup> but cannot explain the case markers or nouns that have this rime. The case markers *-las* and *-nas* pose no particular problem. They are derived by the suffixing of *-s* to the case markers *-la* and *-na* (Simon 1941: 385). This suffixation occurred after the change *\*as* > *-os*. Nouns that end in *-as* arose after the application of this sound change, whether through borrowing or through derivation. For example, a nominalizing *-s* forms the noun *ltas* 'omen' from the verbal root  $\sqrt{lt}$  'see'; compare *skyems* 'beer, libation' from  $\sqrt{skyem}$  'be thirsty' (Beyer 1992: 118). The supposition that *\*-as* > *-os* is an old change answers the objection that *ltas* 'omen' does not relate to 'look' transparently enough to suggest a recent formation. Similarly *zas* 'food' derives via suffixation from  $\sqrt{za}$  'eat'. Such nouns as *skas* 'stairs', *las* 'deed', *nas* 'barely', *śn as* 'pillow', and *ras* 'cotton' lack recognized cognates elsewhere in the family.<sup>6</sup> Tibetan *ḥ bras* 'rice', deriving from *\*ḥ mras* according to Simon's law (Hill 2011: 448-449), has a Chinese cognate 糲 *ljejH* < *\*[m]ə-r<sup>6</sup> ats* (21-26g) 'rice'. In this case, Tibetan final *-s* likely originates from the *\*-ts* cluster seen in Chinese.<sup>7</sup> If this explanation is correct, then final *\*-ts* simplified to *-s* only after the change *\*-as* > *-os*. The anteriority of *\*-as* > *-os* to *\*ts* > *-s* provides further support for an early operation the former. The Kurtöp cognates *bū* 'do', *ḡū* 'borrow', *zū* 'eat', *chū* 'devour' the generalized past forms cognate to Tibetan *\*byos* (replaced by *byas*), *\*rños* (replaced by *brñas*), *zos*, and *ḥ chos* further support an early date for the change *\*as* > *-os* since it must have occurred prior to the split of Tibetan and the East Bodish languages (Hyslop 2011: 55-56, 1247, 143).<sup>8</sup> In sum, the comparative evidence poses little obstacle to, and potentially supports, the proposed change *\*-as* > *-os*.

The inherited paradigms proposed here, together with brief remarks on

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4 The relationship between *smra*, *smos*, and the additional *verbum dicendi* with the stems *rma*, *rmas* requires further attention.

5 There are a few verbs which synchronically speaking have a root final *-s* (*mkhas* 'know' (v.), *glas* 'change one's residence', *ḥ gas*, *bkas*, *dgas*, *khos* 'split (vt.)', *ḥ gas*, *gas* 'split (vi.)', *ḥ gras* 'feel revulsion, be unhappy', *brñas* 'ridicule, belittle', *ḥ thas* 'hard, firm', *gdas* 'speak', *gnas* 'stay (v.), place (n.)', *spras*, *spras*, *spras*, *spros* 'adorn, decorate', *bas-pa* 'finished, complete', *gzas* 'prepare to, be about to'), but the possibility remains that this *-s* was originally a past tense suffix in these conjugations.

6 The words in rime *-as* in Zhang (1985) not yet mentioned here are: *klas-pa* 'boundless, huge', *gras* 'class, type', *gzas* 'song', *śas* 'some, sharecropper field', *ślas* 'retinue'.

7 Sagart (2014) points to a similar correspondence in the pair Tibetan *rus*, 'bone' and Chinese 律 *lwit* < *\*[r]ut* (31-18c) 'pitch pipe', with the complication that Chinese is missing final *\*-s*.

8 Gong's (2002[1995]: 115) proposal to relate Tibetan *rdzas* 'thing, object' to Chinese 事 *dzriH* < *\*[m-s-]rəʔ-s* (0971a) 'serve; service, affair' is neither semantically nor phonetically compelling.

subsequent developments, are as follows:

√za 'eat'

pres. *za*

past. *zos* (exists alongside analogical *bzas*)

fut. *bzah*

imp. *zo*

√h cha 'chew'

pres. *h chah*

past. *h chos*

fut. *bcah*

imp. *h cho*

√lta 'look at'

pres. *lta*

past. *ltos* (continues as separate invariant verb 'look at, attend to', replaced by analogical *bltas*)

fut. *blta*

imp. *ltos*

√zla 'say, repeat'

pres. *zla*

past. *zlos* (continues as separate invariant verb 'repeat', replaced by analogical *bzlas*)

fut. *bzla*

imp. *zlos*

√dga 'be happy'

pres. *dgah* (continues as separate invariant verb 'be happy')

past. *dgos* (continues as separate invariant verb 'need, want')

√smra 'say'

pres. *smra*

past. *smos* (continues as separate invariant verb 'say, call', replaced by analogical *smros*)

fut. *smra*

imp. \**smos* (obsolete, replaced by analogical *smras*)

√bya 'do'

pres. *byed*

past. \**byos* (replaced by analogical *byas*, but compare Kurtöp cognate *bū* 'do')

fut. *bya*

imp. *byos*

√rña 'borrow'

pres. *rña*

past. \*rños (replaced by analogical *brñas*, but compare Kurtöp cognate *ɲu* 'borrow')

fut. *brña*

imp. *rños*

## Abbreviations

Ahs = Vogel (1965)

Ak = Vidyābhūṣaṅga (1911)

Anav = Hofiinger (1982–1990)

brDa = Dge bśes chos kyi grags pa (1957)

Dagy = Dagyab (1966)

Dag yig gsar sgrigs = Tsan chung (1979)

gZer = Tenzin Namdak (1965)

Hev = Snellgrove (1959)

K = Derge Kanjur,

<http://thlib.org/encyclopedias/literary/canons/kt/catalog.php#cat=d/k>

Kloñ D = Chandra (1973)

Mvy = Ishihama and Fukuda (1989), but following the numbering of Sakaki (1916)

Prav = Eimer (1983)

Suv = Nobel (1944)

TTC = Zhang (1985)

ViśT = Schneider (1993: 74–270)

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