Deltacism of laterals in Sino-Tibetan and elsewhere

James A. Matisoff
University of California, Berkeley

The whole world stands on the tip of the tongue! [Yiddish proverb]

***

1.0 Introduction

The apical consonants [l], [d], and [n] are quite similar in articulatory terms, all voiced sounds involving the occlusion of the tip of the tongue against the alveolar ridge or the back of the upper teeth. Many languages show dialectal variation among these sounds. There is, e.g., a well-known tribe of American Indians known variously as Dakota, Lakota, or Nakota. A number of Sino-Tibetan (ST) etymologies show interchange between [l] and [d], for which the conditioning factors are rather obscure, in a manner reminiscent of the so-called "sporadic" cases of d ≠ l in Indo-European.

The question of the directionality of such alternations is not easy to answer. Which is more likely to occur, a "hardening" of [l] to [d], or a "softening" of [d] to [l]? Although both types of development are attested, the best-known cases in Indo-European are softenings of *d to l:

1.1 Indo-European

(a) Other Indo-European  d > Latin  l

<table>
<thead>
<tr>
<th>Other IE</th>
<th>Latin</th>
</tr>
</thead>
</table>
| 'Ulysses (Homeric hero)' | Gk. odysseus | ʊlɪɛs

---

1This paper was originally presented at the 23rd International Conference on Sino-Tibetan Languages and Linguistics, University of Texas at Arlington, Oct. 3-6, 1990, under the title "The Dinguist's Dilemma: deltacism of laterals in Sino-Tibetan." A Chinese translation by Lin Ying-chin and Li Yue-ru is in preparation. The meaning of the made-up word "dinguist" will become clear below.

2In Yiddish: Di gantse velt shteyt oyf der shpits tsung. The meaning of this proverb is that "the words one utters can have profound effects on one's life".

3Interchange between [l] and [n] is beyond the scope of the present paper. It is a notable phenomenon in Chinese dialectology (e.g. in Southwest Mandarin), and is also characteristic of child language (Greenlee & Ohala, 1980). A famous example of the exceptional appearance of [n] where a dental stop would be expected is Chinese 鳥 'bird' OC tið, but Mandarin nião (GSR 1116a). As Karlgren observes, this "is irregular, quite a riddle".

---
'tongue' PIE *dnghū- lingua⁴
PGmc tungōn

'tear' (n.) PIE *dakru- lacrima
PGmc *taxru-

'brother-in-law' Lithuanian daiwer lēvir

'long'⁵
Slavic dlin- longus

(b) Latin d > French l

Latin French

'cicada' cicāda cigale

(c) Latin d > Spanish l

Latin Spanish

'tail' cauda cola

(d) Internal -d- ≠ -l- variation within Latin

Latin odor 'a smell' ≠ oleo 'emit an odor''

No convincing explanation has ever been given for these sporadic phenomena. Among the various ad hoc suggestions in the literature is "Etruscan influence" on Latin.⁶

---

⁴Hence the original title of this paper. If it were not for this Latin development, we would all be called "dinguists" nowadays! It is perhaps no accident that the word for "tongue" itself shows d ≠ l variation, both in IE and ST (see below). Speakers must be universally (although dimly) aware of the similarity of their tongues' movements in the articulation of these apical sounds.

⁵This root might involve a proto-cluster *dl-.

⁶That this has nothing to do with the Etruscans is evident from the fact that a similar development is occasionally observed in modern IE languages. John Ohala reports that Danish postvocalic -d is sometimes interpreted as -l by native listeners.
1.2 Sino-Tibetan

In Sino-Tibetan, the direction of development seems rather to be *l > d.\(^7\) One influential view maintains that Old Chinese (OC) non-palatalized *l-developed into MC d--:\(^8\)

<table>
<thead>
<tr>
<th>Non-palatalized *l-</th>
<th>Palatalized *ly-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OC</strong></td>
<td><strong>MC</strong></td>
</tr>
<tr>
<td>Karlgren(^9)</td>
<td>d' &gt; d'</td>
</tr>
<tr>
<td>Li Fang Kuei</td>
<td>d &gt; d</td>
</tr>
<tr>
<td>Schuessler</td>
<td>d(_l) &gt; d</td>
</tr>
<tr>
<td>Pulleyblank</td>
<td>l &gt; d</td>
</tr>
<tr>
<td>Bodman</td>
<td>l &gt; d</td>
</tr>
</tbody>
</table>

On the Tibeto-Burman side, l \(\neq\) d interchange is attested directly in several good etymologies (section 3.0 below).

1.3 The search for physiological explanations

As John Ohala maintains, such phenomena as deltacism are not due to "human laziness", but rather to "inherent anatomical, physiological, and neurophysical constraints characteristic of all vocal tracts -- even those of hardworking speakers" (Ohala 1974).\(^10\) Diachronic tendencies involving laterals may be characterized in general terms as involving hardening, epenthesis, or frication:

·[d] is the "most vocalic" of the voiced stops, with a much more pronounced formant structure than either [b] or [g].

·Vowels and glides tend to be fricativized in the environment of yod [-j-], because close vowels give rise to a higher velocity of the oral airflow, thus inducing greater turbulence and frication of the segment. The same universal tendency for *l(j)- or *j- to develop into ž- or dž- is noticeable both in Romance and Tibetan:

---

\(^7\)A convenient term for this phenomenon is deltacism, using the Greek letter delta by analogy with the established term "rhotacism" (from the Greek letter rho) for the introduction of an r-like sound. The opposite development of a dental stop to a lateral (as in Latin, above), we could then call lambdacism.

\(^8\)See Bodman 1985:160.

\(^9\)OC reconstructions cited in this paper are in Karlgren's system ("GSR", 1957), unless stated otherwise.

\(^10\)My colleague Ohala's sensible approach to phonological developments in terms of universal articulatory constraints in further developed in Ohala 1983.
**Romance**

Latin caballus 'horse' > Iberian Romance *cabalio > Spanish caballo (Standard Sp. /kabalo/, but Argentine Sp. /kabalo/)

Latin ĭ > Italian dž, French ž

'youth' Latin juvenās > Italian gioventú [džoventu], French jeunesse [žœnes]

**Tibetan**

<table>
<thead>
<tr>
<th>Proto-Tibeto-Burman</th>
<th>Written Tibetan</th>
</tr>
</thead>
<tbody>
<tr>
<td>'wind' *g-lay</td>
<td>rdzi</td>
</tr>
<tr>
<td>'heavy' *s-lay</td>
<td>ltśi-ba, ldźi-ba</td>
</tr>
<tr>
<td>'four' *b-lay</td>
<td>bźi</td>
</tr>
<tr>
<td>'bow/sling' *d/s-lay</td>
<td>gźu 11</td>
</tr>
<tr>
<td>'flea' *s-lay</td>
<td>ldźi-ba, ḥdźi-ba</td>
</tr>
<tr>
<td>'tongue' *s-lya</td>
<td>ltše</td>
</tr>
</tbody>
</table>

Several similar etyma have good Chinese cognates with dental stop initials (see below).

The "hardening" or "frication" of the lateral in such cases may perhaps be viewed as a type of *epenthesis*, i.e. the insertion of a phonetic segment between two sounds that are difficult to pronounce in sequence. This seems to occur most frequently in the environment of nasals or liquids, with several familiar subtypes:

(a) nasal + fricative > nasal + stop + fricative

   e.g. Eng *warmth*, often pronounced [wɔrmθ]  
        *sense*, usually pronounced [sents]

(b) nasal + liquid > nasal + stop + liquid

   e.g. Latin *cam(e)ra* 'room' > French *chambre*

---

11For discussion of the WT vowel reflex in this root, see Matisoff 2003:50, 192.
(c) lateral + fricative > lateral + stop + fricative

e.g. Eng. else, often pronounced [ɛlts]
      Eng. false, often pronounced [folts]

(d) fricative + liquid > fricative + stop + liquid

e.g. Sanskrit sravati 'flow', but Eng. stream, Russian ostrov 'island' (all < PIE *sreu-)

(e) Slavic has a rather strange epenthesis rule, whereby the cluster bj- becomes blj-, e.g. Russian ljublj 'to love', but ljublju 'I love'. Here the lateral is the epenthetic element, not the environment for its insertion.

In view of all these tendencies, perhaps we might also hypothesize that the phenomenon of deltacism is also at least partially epenthetic in nature, i.e.:

lateral + yod > lateral + apical stop + yod (with a possible subsequent reduction to apical stop):

lj > ldj > dj > d

1.4 Predictability vs. sporadicity

As this paper tries to show, deltacism is sporadic, both in Indo-European and in Sino-Tibetan. Strange as it may sound, this is a probably a consequence of its basis in universal articulatory fact. Sound changes which are based on universal articulatory tendencies may be activated at any time, so may paradoxically appear to be sporadic in their operation.

2.0 Evolution of liquids within Chinese

No aspect of OC phonology has given rise to as much controversy as the status of the simple liquids *r- and *l-, and the numerous putative proto-clusters involving liquids.\[12\] This is not the place to go into detail about the often contradictory opinions of the many scholars who have wrestled with these

questions, but a few citations will suffice to illustrate the complexity of the problem:

"Archaic Chinese (= OC) has initial l- for both Proto-Sino-Tibetan *r- and *l-, as in liŋk "six", PTB *d-ruk. Early Chinese loanwords in Thai retain original *r-; cf. Proto-Tai *hrok 'six', and *graam 'indigo', Archaic Chinese glăm, Written Tibetan rams."¹³ (Benedict 1972:171)

Schuessler takes a contrary view:
"I keep OC initial *l- and *r- strictly apart, and take MC l- to come from OC *r- only, and MC ji- to derive from l-... It seems most likely, on balance, that both OC *l- and *lj- merged into MC ji-. (Schuessler 1987:xii)

As for liquid clusters, MC retroflex initials are generally thought to descend from OC clusters with *r-. Li Fang Kuei reconstructs both OC *r- and *l-clusters, *r- in 2nd Division words (an idea first proposed by Yakhontov) and *l- in xiesheng series where l- alternates with stop initials.¹⁴ Schuessler recognizes only medial *r-, differentiating between these two sets of words by positing a difference in syllable structure, sesquisyllables in Division II (e.g. *goran) vs. monosyllables in the xiesheng series (e.g. *gran). (Schuessler, ibid.)

3.0 Lateral ≠ stop interchange in Tibeto-Burman and/or Chinese

Benedict recognizes the sporadic nature of the deltacization of OC *l- in MC:
"Under conditions of palatalization (not fully worked out), ST *l- tends to be replaced in Chinese by j- or di/i- ... There is evidence for further evolution of ST *l to other dental stops, voiced or unvoiced" (STC:171, n. 458). On the Tibeto-Burman side he is more reluctant to admit such variation, and typically treats the lateral forms as reflecting separate etyma from the stop-initial forms.

Be all this as it may, it is clear that many ST etyma show interchange between laterals and dental stops, either synchronically or diachronically, either

---

¹³In this view, OC is as useless in differentiating between PST *r- and *l- as Sanskrit is in distinguishing the two liquids in Indo-European. Examples of OC *lj(j)- corresponding to PTB *r- include ल र ल र 'join; bring together', OC *ljan [Karlgren 1957: 213a, 214a] / PTB *ren 'line up, be equal' [Benedict 1972:#346]. Karlgren 1957 and Benedict 1972 will henceforth be abbreviated to "GSR" and "STC", respectively.

¹⁴Pulleyblank once set up clusters with the voiced interdental fricative -Ø- in some of these series (1961-62:115-119), but has now apparently gone back to *l-.
internally on the Chinese or the TB side, or externally, with one branch of the ST family reflecting a lateral while the other reflects a stop.

For convenience we list these etyma in the alphabetical order of their English gloss:

**arm/hand/wing/cubit/armpit**

The widespread PTB root *l( y) ak 'hand' (e.g. WT lag - pa, WB lak) is reflected by an allofam15 with d- , y- , or tš- in Northern Naga (Konyak) languages (e.g. Tablung yak, Banpara tšak, Namsang dak, Moshang yok). Jingpho has the curious form lətə?, which can be explained as the result of a development like *lak > *lyak > *dyak, after which a new prefix lə- was added, by analogy with words like logõ 'foot'16 Still another variant meaning 'armpit' or 'cubit' (a traditional measurement from the elbow to the hand) is reconstructible as PTB *g-yak, with reflexes like Lushai zak, Written Burmese gyak-koli 'armpit', Lahu jä? 'cubit'. On the Chinese side there are two good comparisons: 腋 'armpit' OC zi jiāk (GSR #800m) and 翼 'wing', reconstructed as OC gi jōk in GSR 954d, revised by Benedict to di jōk because of the presence of 走 + 異 t′i jōk 'sound of marching' in the same phonetic series (954g-h).

**arrow**

Two PTB variants are well-attested, one with a lateral root-initial, and one with a voiced dental stop, reluctantly treated as distinct etyma in STC (n. 313): *b/m-la (cf. Bahing bla, Tangkhul məla) [STC #449] and *m-da (WT mda, Jingpho (Hkauri dialect) niŋda. The Chinese comparandum is reconstructed with a stop: ighter OC di jōk (GSR 918a-b) 'shoot with arrow with string attached'.

**butterfly**

PTB lep (cf. WT phy-e-ma-leb); OC 蝶 d'iap (GSR 633h).

**flat/straight/full**

I have shown at length (Matisoff 1988) how two PTB roots reconstructed separately in STC, *dyam ≠ *tyam 'full' (#226) and *dyam 'straight/flat' (#227), are really one and the same etymon, with meanings referring to perfection in one, two, or three dimensions (straightness, flatness, or fullness), respectively): cf. Bahing dyam 'be full, be straight'; Written Tibetan ldem-pa 'straight', ltam-pa, them-pa 'full'; Nung ədam 'plain (level ground), flat'.

---

15 The term "allofam", meaning "a variant within the same word-family", was introduced in Matisoff 1978.
16 Many other Jingpho nouns and verbs referring to the limbs or actions with the limbs have the lə- prefix, undoubtedly a reduction of the original morpheme *lak. See Matisoff 2003:130.
To these forms I would now like to relate PTB *\textit{lyap} 'flat' (STC #212), represented by WT \textit{leb-mo} 'flat', \textit{gleb-pa} 'flatten' and WB \textit{lyap} 'very thin', thus positing variation between final homorganic stop and nasal in this root (see Matisoff 2003:51).

On the Chinese side, Nicholas Bodman (p.c., 1986) has cited scattered forms in southern dialects, including Zhongshan Cantonese \textit{tim} 'straight'(written with a locally adapted character) as well as Samheung (S. Min) \textit{tiam} 'straight, direct (e.g. of roads); to straighten', both pointing to a MC prototype \textit{*diam} (B2). Gong Hwang-cherng (2000) has recently proposed another excellent Chinese member of this word family, \textit{OC d'iap} (GSR 633g) 'tablet'. This word now means 'official document, certificate', the probable semantic association being 'a flat object written upon'.

\textbf{four}

Most TB languages reflect a lateral root-initial (usually preceded by a prefix) for this numeral, justifying the PTB reconstruction \textit{*b-loy} (e.g. Jingpho \textit{məlι}, WB \textit{lê}). As we have seen, WT \textit{bzi} shows frication of the lateral before this front vowel. However, many Naga languages have developed dental stops in this root, including Angami \textit{da}, \textit{die}; Chokri \textit{da}; Kezhama \textit{pedi}; Liangmai and Maram \textit{madai}; Mao \textit{peadei}; Mzieme \textit{m(a)dai}; Nruanghmei \textit{peadei}; Sema \textit{bidhi}; Tangkhul \textit{mati}; Zeme \textit{medai}.

Chinese 四 (OC \textit{sjod}) shows a strange sibilant initial, perhaps pointing to a variant \textit{*s-loy}, with preemption by the prefix.

\textbf{good/beautiful 17:}

Allofams with both lateral and dental stop initials may be securely set up at the PTB level:

\textit{*l(y)ak} \textit{≠*l(y)an} (> e.g. WT \textit{legs-pa} \textit{~ lags-pa} (Ladakhi) 'good, elegant; beautiful'; \textit{yag-po} \textit{~ hdzag-po} 'good'; Lushai \textit{lian} \textit{~ len} 'good')

\textit{*m-d(y)ak} (> e.g. WB \textit{tak-tak} \textit{~ tyak-tyak} 'very'; Lahu \textit{dà} 'good, beautiful' \textit{~ qha-dè} 'properly'; Lalo \textit{dîq} 'good'; Tiddim Chin \textit{tak} 'right, correct')

There are several solid Chinese comparanda: 麗 \textit{OC lieg} (GSR 878a-b) 'elegant, beautiful, refined, good'; 良 \textit{OC lian} (GSR 735a-d) 'good'; 易 \textit{OC diêk} (GSR 850a) 'at ease, well-ordered'.18

---

17See Matisoff 2003:51, 327.
18For this last comparison, see Bodman 1980.
heavy

The basic PTB reconstruction is *s-lay (> e.g. WT lṭśi-ba, ldţi-ba; WB lê; Jingpho ltí), but many languages show a dental suffix, often with nominalizing force, e.g. Jg. lít 'a load'; WT ldźid-pa 'heaviness, weight'; Lushai rít 'heavy'; Bodo illit, gillit 'heavy'.

The likely Chinese cognate reconstructs with a voiceless dental stop: 轻 OC tji bè (GSR 413e) 'heavily weighed down (as a carriage low and heavy in the front)'.

iron

This etymon, suspected to be an ancient loan into PTB, is to be reconstructed as *s-lyak or *l-tyak, with such reflexes as WT lṭsags 'iron', Cuona Menba lek53 'id.', and WB jak 'bit of a bridle'.

The obvious Chinese cognate 鐵 is reconstructed as MC t'ti'e/Mand t'tie19 in GSR 1256b, but this has been revised to OC *s-lek/MC thiet in the Bodman/Baxter system (see Handel 1998, Ch. 5).

ladder/bridge

The comparison between Chepang hlay? 'ladder' and Chinese 梯 OC *t'jër (GSR 591-L) 'wooden steps, staircase' was made already in Bodman 1980:102, 104), who reconstructs OC *hlaj, and credits Pulleyblank (1961/2:114) with being the first to call attention to "a well-known correspondence between WT lh- and OC th-."20 The PTB etymon is set up as *s-lay ≈ *s-ley in Matisoff 1985 (n.78, p. 44), where additional reflexes are cited:

*s-lay > Chepang hlay?; Tangkhul šay 'small bridge', šay-ton 'ladder'
*s-ley > Lushai lei; Tiddim lèi; Lakher hlei-ri

leaf

This etymon has two major TB allofams, one with an open vowel *s-la (which sometimes means 'tea'), and one with a stop final, *s-lap:

*s-la > WT lo-ma; Meithei la; Magar hla; Dhimal hla-ba; Mikir lo (all 'leaf'); WB la; Lahu là 'tea'
*s-lap > West Tibetan lob-ma; Kanauri lab; Takpa blap; Nung šalap

Still another WT form has a prefixed dental stop initial: ḡdаб-ma 'wing, broad leaf'. This is very similar to the Chinese etymon 葉, reconstructed as OC dîap in GSR 633d.

---

19Karlgrren does not reconstruct an OC form for this word.
20For an example of WT lh- corresponding to OC th-, see take off/remove/loosen/free, below.
leech

The well-established PTB etymon *m/s-li:t 'water-leech, horse-leech' reflects both the *m- and *s- prefixes, e.g. Mikir inlit; Ao Naga melet; Lushai hliit; Lepcha hlet-bū. The Chinese cognate reconstructs with a voiceless palatal stop, 蛞 OC ti̯ ét (not in GSR 413).

moon/month

This TB etymon was originally reconstructed *s-la (STC #144), based on forms like WT zla-ba, Nung səla, WB la'), with the remark that the dental stops in Jingpho šotā and Kadu sōda "cannot be explained" (cf. also Nocte 3da). Lushai thla and Meithei tha were assigned to another allofam *g-la.21 Later (n.137), STC revised this reconstruction to *s-gla, reinterpreting the alternate prefixes as cooccurring in linear order, claiming that this better explained the Jingpho form. However, the posited development *s-gl > *s-ly > *s-d > šotā (with regression of the palatal element to the prefix, since Jingpho lacks a dy- or ty- cluster). This etymon is one of those where the Man Ÿo dialect of Karenni (=Red Karen =Kayah) has developed a dental stop from a *lateral (Man Ÿo ttaa 'moon'). Other examples include ManŸo ta 'leaf' < *s-la, ti 'four' < *b-ley, and pti 'tongue' < Proto-Karen *ple (STC, p.137).

navel

STC sets up two separate roots for 'navel/center', one with lateral initial (#287) and one with a voiceless dental stop (#299):

*la:y > Lushai laai 'middle, center; navel', Tiddim laai 'middle'
*s-tay > WT lte-ba, Jingpho šodāi 'navel', Garo ste 'abdomen'

In light of all that has been said, these two roots should certainly be considered co- allofams of one and the same etymon.

It is interesting to note that the name of the Central Chin language known as "Lai" /laay/, spoken in such towns as Hakha and Falaam, means 'central; middle', and is evidently cognate to the name of the Southern Chin language called "Daai" (see Hartmann 2001). Coincidentally, the Kadai language of Hainan known in Chinese as Lí-yú 黎語 is called "Hlai" by its native speakers, a name evidently cognate to the ethnonym T(h)ai.

---

21 Lushai regularly developed thl- or tl- from *velar-plus-l clusters.
22 Cf. the development of secondary yod in Lepcha through the influence of prefixal *s-, pointed out by Benedict long ago (1943).
nephew/grandchild/young man

A root with meanings referring to younger male relatives, or young men in general is PTB *b-lay > Inscriptional Burmese mliy > WB mřē 'grandchild'; Jingpho məlī 'young man'; Mikir phili-po 'nephew'. The likely Chinese cognate 姨 'nephew, niece', OC d'iet ~ d'ī ēt (GSR 413o-p), is reconstructed with a voiced dental stop, and carries a suffix -t which also occurs in other kinship terms.23

take off/remove/loosen/free

*g-lwat > WT glod-pa 'loosen, relax, slacken'; WB kywat ~ lwat 'free'; Jingpho lōt 'free'
*s-lwat > WT hlod-pa 'loose, relaxed'; Jingpho šəlôt 'set free'; WB khywat ~ hlwat 'loosen'; Lahu ṭē 'slip, slide; smooth, fluent'

The obvious Chinese cognate is 脫 OC t'wât ≠ d'wât (324m) 'peel off, take off (as clothes)'; also, in the same phonetic series, 蜕 OC diwât (324e) 'exuviae of insects or reptiles' (i.e. the outer skin which is shed or moulted).

Note that both TB and Chinese have voiced and voiceless allofams, representing an old simplex vs. causative opposition.

For another example of a voiceless lateral in a TB language (Chepang) corresponding to OC th-, see bridge/ladder, above.

Li Fang-Kuei does not relate Proto-Tai *thōot 'remove, take off (as clothing)' [HCT pp. 102-3] to this etymon, though it certainly looks like a loan from Chinese.

tongue/lick

 Appropriately enough, this morphophonemically and semantically intricate word-family shows heavy interaction between the apical sounds l and d. A "pan-allofamic formula" of roughly the following structure may be set up for this complex TB word-family, for which at least half a dozen variants must be posited: *m-lay ~ *s-lay ≠ *m-lyak ~ *s-lyak ≠ *s-lyam ≠ *s-lya:w ≠ *s-lay ~ *s-ley):

\[
\begin{align*}
\text{s-} & \quad -y \\
\text{m-l} & \quad -w \\
\text{a} & \quad -t \\
\text{(g-)} & \quad -k \\
\text{(-m)} & \quad \text{-}
\end{align*}
\]

One well-established sub-root is *m-lyak ≠ *s-lyak 'lick/cause to lick' (STC #211). Here again Jingpho has the puzzling reflex mətā?,24 for which I would

24This form is mentioned in my note 102 in STC, but is otherwise ignored in that work.
simply posit the development *m-lyak > *m-dyak > *m-dak > mɔtá?. Very similar, but hard to explain except by epenthesis, is the deltacized WT form ldag 'lick' (ignored in STC), a co-allofam of WT ltse 'tongue' (< *s-lay) and WT ldžags 'tongue' (respectful) < *s-lyak. A good candidate for cognacy is Chinese 食 'eat', OC Ḃ'jak (GSR 921a), with alternative reconstructions offered in Baxter 1992 and Schuessler 1987 (*m-lōk and *mljok, respectively).

STC relates Chinese 舌 'tongue', OC Ḃ'iat (GSR 288a), to PTB *g-lyat, and 舔 'lick, taste', OC t'iam (not in GSR) to PTB *s-lyam 'tongue/flame'. The Chinese word 甜 'sweet', OC d'iam (also not in GSR) is also cited, but as if it represented an entirely different etymon from 'lick'. I would like to claim that the Chinese words for 'lick' and 'sweet' (Mand. tiān and tiǎn, respectively), are in fact members of the same word-family, with the semantic link being furnished by substances like sugar-cane.25

Interestingly enough, an etymon meaning 'tongue' also displays l ≠ d variation in Indo-European: PIE *d̞ęghū- > e.g. Proto-Germanic *tungōn, but > Latin lingua (above 1.1).

***

It is time to rethink the nature of apical interactions in Sino-Tibetan, both synchronically and diachronically, both language-internally and across languages/

**Symbols and Abbreviations**

A ≠ B A and B are co-allofams; A and B are members of the same word-family
GSR Karlgren 1957
HCT Li 1977
IE Indo-European
MC Middle Chinese (= Karlgren's "Ancient Chinese")
OC Old Chinese (= Karlgren's "Archaic Chinese")
PTB Proto-Tibeto-Burman
PST Proto-Sino-Tibetan
ST Sino-Tibetan
STC Benedict 1972
TB Tibeto-Burman
WB Written Burmese
WT Written Tibetan

---

25In Lahu the word lē? 'lick' is also used to mean 'eat', especially of things which are eaten 'for fun', or to give gustatory pleasure rather than simply to satisfy hunger, like sweet and salty snacks. The word for 'salt' is ā-lē? "that which is licked", while sugar is often called ā-lē?-cha, lit. "sweet salt". In Lahu, as in many other TB languages, the word for 'delicious' (mē) also means 'sweet'. Another way to say 'sugar' is ā-lē?-mē 'delicious salt'.
References


