Zhangzhung and Qiangic Languages

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## Zhangzhung and Qiangic Languages

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Zhangzhung (ZZ), a dead Sino-Tibetan language only known by fragmentary sources, has no living descendant. The area of the former Tibetan empire is home to many non-Tibetan languages, some of which could be related to ZZ , and therefore be of tremendous importance for interpreting ZZ data. However, the huge diversity of Sino-Tibetan (ST) languages, and the poor accessibility of data on many non-literary languages, makes it difficult for specialists of Old Tibetan philology to evaluate etymological claims regarding the ZZ vocabulary.

The aim of the present paper is to evaluate the degree of relationship between ZZ and Qiangic languages. Several scholars, such as Hummel (1986), have proposed to locate the origin of ZZ in Eastern Tibet rather than in Western Tibet, using some linguistic comparative data. This hypothesis, if true, would be of far-reaching consequences for the study of Tibetan History. However, this paper will show that the evidence is rather limited.

## 1. Methodology

In this paper, we present all ZZ words with possible Qiangic etymologies (drawing data from Tangut and Rgyalrong). ${ }^{1)}$ However, finding cognates is not sufficient in itself to prove that two languages of the same language family belong to the same subbranch: according to August Leskien's principle, only common innovations are valid evidence.

In order to prove that ZZ is closely related to Qiangic, or to LB-Qiangic, ${ }^{2}$ ) we must not only find isoglosses between ZZ and these languages (words unfound in other branches of ST), but also prove that these isoglosses are innovations, not retentions from proto-ST.

Concerning the problem of the internal classification of ST languages, it should be stressed that since no common innovation has been found between all ST languages outside of Chinese, there is not a shred of evidence to talk of a 'Tibeto-Burmese' subgroup. Chinese seems to be just one of the thirty more branches of ST, and deserves no special place in the Stammbaum of the family.

## 2. Morphology

Not much is known about ZZ morphology because of the lack of extensive texts in this language, and this paper is limited to the lexical evidence.

However, an interesting grammatical morpheme is the negative prefix kV -, found in words such as:

Table 1 Examples of the ZZ negative prefix

| ZZ | Tb | Translation | Reference |
| :--- | :--- | :--- | :--- |
| ku-ri | mi-‘dzem | immodest, shameless | Martin 2004: 13 |
| ka-kyu | 'gyur-med, mi-'gyur | unchanged, unchanging | Martin 2004: 11 |

This form is extremely puzzling, as ST languages usually do not have negative prefixes beginning with a velar stop. If one could find a ST language with a velar negative prefix, this would be an interesting clue to classify ZZ within the ST family.

## 3. Vocabulary

Here is a list of possible cognates between ZZ and Qiangic languages. Many of the words presented here are pan-ST, and thus of little help for classifying ZZ within the family. We found only two potential examples of common innovations between ZZ and Qiangic languages (examples 1 and 5) and two possible lexical isoglosses not found outside Qiangic
（examples 8 and 9 ），though all are problematic and might be errors．
Loanwords from Tb and Skt have not been included．Besides，we also discarded roots about which it is unclear whether they are cognates or loanwords，such as dug＇poison＇，mig ＇eye＇etc．，as they are identical with Tb ．

We have tried to avoid presenting spurious comparisons in the present paper．Hummel （1986）found more examples than us between ZZ and Ta ，but some of his proposed cognates are not reliable．For instance，he compares ZZ ＜wer＞（＝rgyal）＇king，victor＇to Ta＇wu－（tsu）＇， in fact not a real Ta form，just the Mandarin reading of the characters 兀卒 that are used in
 syllable of the Ta compound means＇blue，sky＇，while the second one 敩｜dzjwi＇means＇lord＇． This syllable is clearly unrelated to ZZ ＜wer＞．He also compares ZZ ＜tal＞（＝lcags）＇iron＇ with MC铁thet，although this becomes impossible if the OC reconstruction＊hllik is taken into account．

Although we tried not to repeat such mistakes，errors may still have crept into this list of examples and some of the hypotheses proposed here might be eventually proven to be wrong．

The examples are listed following the order of the Tibetan alphabet，with the Tibetan gloss for each ZZ word in parentheses．

## 3.1 ku ra（＝khyi＇dog＇）

Some ZZ scholars have interpreted this word as derived from Skt kukkura－or a Pkt equiva－ lent thereof（Hoffmann 1972：196），others have proposed cognates in various ST languages （Hummel 1986：12，Nishi and Nagano 2001：21）．

The vocalism of the first syllable $<\mathrm{ku}>$ is consistent with the usual reconstruction＊kwi proposed for this root in proto－ Tb （in Tb ，medial $*$－w－changes to -y －before front vowels）． The second syllable，in turn，could be compared with the na element found in many ST lan－ guages，including Tamangic and Rgyalrong．This would suggest that a lenition $* \mathrm{VnV}>\mathrm{VrV}$ would have taken place at some stage in the evolution of proto－ZZ．The existence of this lenition is proven by the word＜gu－ra＞（＝yon－tan）＇virtue＇（Haarh 1968，Martin 2004：30），an obvious loanword from Skt guṇa．

It seems that the structure of the ZZ word is identical to Jpg khu－na．The first syllable is cognate to the pan－ST root in Tb khyi，OC 犬＊kkhwir，Ta效 \＃1200 khjwi 1．30，while the second syllable is cognate to Ta \＃573 㭛 na 1．17．

To have exactly the same compound in both Rgyalrong and ZZ would be a strong evi－ dence of a common innovation between ZZ and Qiangic，although such a compound could also have been formed independently in two branches of ST．Of course，it is also possible that Hoffmann＇s hypothesis is correct and that this word is a corruption of an Indic word，in which case any comparison with ST languages would be irrelevant．

## 3.2 rko／sko（＝lus，gzugs＇body＇）

This word is cognate with Tb sku＇body＇（Haarh 1968，Stein 1971：248）and OC 躯＊qqho＞ khju，Jpg tu－skhru，Ta \＃860既 kwər 1．84．Its pan－ST nature makes it useless for the purpose of language classification．

## 3.3 skod / skos (=so 'tooth')

This etymon is possibly related to Tb so 'tooth (Matisoff 2001: 174, Nishi and Nagano 2001: 19 discuss this etymon). Tb so regularly comes from proto- Tb *swa. Cognates are found everywhere in the ST family, in particular Jpg tu-cya, Ta \#169戙 cjwi 1.10.

The ZZ spelling is puzzling, but it could be an attempt at rendering a sound not found in Tb , such as the velar fricative [ $\mathrm{\gamma}]$. If we assume a ZZ form such as *syo or *sywa, a spelling with a velar stop *<sko> or *<sgo> would have been the only possible way of representing this sound using the Tb alphabet. We have no explanation for the final consonants.

Hummel (1986: 12) believes that $Z Z$ <skod/skos> ought to be compared to Ta \#39赑 kowr 2.82 'tooth'. It is also a possibility, though the Ta word is isolated even within the Qiangic group. This etymology is mutually incompatible with the former one (contra Hummel, who treats all three words Tb so, Ta kowr and $\mathrm{ZZ}<$ skod/skos> as cognates).

## 3.4 khri (=gru 'corner')

The gloss 'corner, tip' is found in Martin (2004: 25). This word could be related to Jpg w-rku 'corner, border', itself a cognate of Tb gru 'corner'. The distribution of this root in ST is too wide to use it for classifying ZZ. The orthographic <i> is probably to be understood as a central vowel (the Tb dialect on the basis of which the orthography was conceived was perhaps like Khams and Amdo dialects).

## 3.5 lgyam (pra lgyam dug = phra rgyas dug)

Martin (2004: 37) translates <lgyam> as 'wide', but he insists that this entry is 'rather dubious'.

The Tb term phra-rgyas corresponds to Skt anuśaya- 'propensity' (classical Skt 'regret', from anu $\sqrt{ } s^{\prime}$ ' 'to lie along, to adhere closely to'). However, the morphological structure of the Tb word is not directly modeled after its Skt equivalent. The concept of anuśaya- is the subject of the whole fifth chapter of Vasubandhu's Abhidharmakośa (La Vallée-Poussin 1925: 1-118). An explanation of the meaning of anuśaya- is given in śloka 39:
(1) Tibetan text:
gang phyir de dag phra ba dang /
rjes vbrel rnam gnyis rgyas vgyur dang /
rjes su vbrang bas de yi phyir /
phra rgyas dag tu bshad pa yin
(2) Sanskrit text: ${ }^{3)}$
aṇavo'nugatāścaite (añavas+anugatās+ca+ete)
dvidhā cāpyanuśerate (dvidhā ca+api+anuśerate)
anubadhnanti yasmācca (anubadhnanti yasmāt+ca)
tasmādanuśayạ̣̄ smṛtāh (tasmāt+anuśayās smṛtās)
De la Vallée Poussin (1925: 78-79) translates this passage in the following way: «Ils sont atomiques (phra ba, anu-); ils adhèrent (rjes vbrel, ${ }^{4}$ ) anu $/$ gam); ils se nourrissent (rgyas
vgyur，anu $\sqrt{\text { śt）}}$ de deux manières（rnam gnyis，dvidhā）；ils lient continuellement（rjes su vbrang，anulbandh），c＇est pourquoi（de yi phyir，tasmät）on les nomme anuśaya－»．The Tb word＇phra ba＇translates Skt anu－＇atom of matter＇（Nominative plural anavas），and rgyas vgyur corresponds to $a n u \sqrt{\prime} \bar{S}^{\prime}$＇to lie along，to adhere closely to，to follow upon＇（Present 3pl Middle anuśerate），here translated by Poussin as＇se nourrir＇（to feed）．

Tb rgyas vgyur is not a literal translation of the Skt form：${ }^{5)}$ rgyas－pa has two distinct meanings：＇to increase＇and＇large，wide＇．Therefore，rgyas vgyur could be translated either as ＇to grow＇or＇to become wide＇．De la Vallée Poussin（1925：78，n．ii．）analyzes Tb phra－rgyas as＇atomique－étendu＇，considering here rgyas to mean＇wide＇，not＇to increase＇．However，one of the Chinese translations of this term，細增＇tiny－increase＇would suggest that rgyas means ＇to increase＇，not＇wide＇．

Therefore，it is not straightforward to decide whether rgyas should be understood as ＇to increase＇or as＇wide＇in this expression，and the ZZ syllable＜lgyam＞can be interpreted either way．If＇wide＇is indeed the intended meaning of＜lgyam＞，it can be compared to two roots found in Qiangic and LB languages meaning＇wide＇or＇broad＇（Jacques 2004：244）：
proto－Jpg＊rtljom，Jpg ryum Si rdzâm wide，broad（of a piece of clothes），
proto－Jpg＊ljam，Jpg jom，Si jâm，Zb lám＇wide（of a place）＇．
These two roots are distinct in proto－Rgyalrong，but from the point of view of historical phonology，both are potentially comparable with Tangut竞 \＃4874 and 覀 \＃34 low 2.47 and Zaiwa lam ${ }^{51}$ ，also meaning＇wide＇．This etymon is not found elsewhere in ST，and it could be an argument for postulating a closer relationship with the Qiangic－LB branch than to the Bodic one．However，it should be stressed that all these hypotheses rest on the assumption that＜lgyam＞translates rgyas in the sense＇wide＇，which is not at all certain．

The ZZ word spelled＜lgyum＞or＜lgyu＞meaning＇road＇（Haarh 1968，Hoffman 1972， Martin 2004：38，Pasar et al．2008：49）is related to the same root，but this word is not dis－ cussed in this paper，as it is absent from Qiangic languages．${ }^{6}$ ）

The ZZ cluster spelled＜lgy＞（see the discussion in Hoffman 1972）does not necessarily represent a triple consonant cluster．It might be an attempt at representing a lateral palatal $* K$ ，or it could be the result of a metathesis from a cluster such as $* \mathrm{k}-\mathrm{lj}$ ．Alternatively，the －g－could be an epenthetic consonant，in the same way as -g －in Tb words such as brgyad $<$ ＊p－rjat（Li 1959）．None of these hypotheses are easy to test given our limited knowledge of the ZZ lexicon，but all have to be taken into consideration．

## 3.6 du（＝sprin＇cloud＇）

This form＇cloud＇is reminiscent of the Qiangic and LB root found in Jpg zdum＇cloud＇，Ta \＃2738氟djij 2.55 ，Bu tim．The loss of final－m is reminiscent of the free alternation between the two forms＜lgyu＞and＜lgyum＞for＇road＇in ZZ ，and it is possible that final $-m$ was lost in some contexts．This etymology is very tentative．

## 3.7 ni（＝mi＇man＇），ne（＝me＇fire＇），ma－ning（＝ming＇name＇）

These three words are synonyms and cognates of Tb mi＇man＇，me＇fire＇and ming＇name＇
respectively．These ubiquitous roots are found everywhere in ST，including Rgyalrong（Jpg turme，smi，trrmi）and Tg（\＃4574馥 mji 1.30 ＇the other one，＇\＃4408蓶 məə 1.31 ＇fire，＇\＃2639该mjiij 2.35 ＇name＇）．

The presence of a dental instead of a labial initial is certainly due to a process of pala－ talisation before a front vowel．The spelling＜ma－ning＞is possibly an attempt at representing ＊mnin by a Tb scribe who spoke a dialect where OT $m n$－clusters where simplified to $n$－．

## 3.8 pe brag／se brag（＝srog gcod＇kill＇）

In this form，the first syllable＜pe／se＞corresponds to Tb srog＇life，＇and the second brag to Tb gcod＇cut＇．This syllable＜brag＞can be compared to Jpg phas＇cut，break＇and Tg \＃4007鞛 pha 1．17，\＃4459授 bja 2．17．ZZ would have added an－r－infix to this verbal root．

## 3.9 ma thun／mang thun（＝sha＇meat＇）

This word＇meat，flesh＇（Haarh 1968，Stein 1971：243，Martin 2004：105）is potentially com－ parable to a root exclusively found in Rgyalrongic languages，Jpg trmthum＇cooked meat．＇ A serious problem with this etymology is the difference in final consonant $-n$ vs．$-m$ ．If this comparison is genuine，it would be a very important isogloss between ZZ and Rgyalrongic， but it is likely to be a coincidence．

### 3.10 mu ／dmu（＝mkha＇，gnam，dbyings，gnas＇sky＇）

The ZZ word for＇sky＇（Hummel 1972：14，Martin 2004：111，Pasar et al．2008：184）is cog－ nate with the Qiangic and LB root found in Jpg tumur＇sky，rain＇，Tg \＃3513轷mə 1.27 ＇sky，＇ Bu mui $^{c}$＇rain＇．

### 3.11 mu zhi（＝lto＇phye che＇snake＇），mur（＝klu＇nâga＇）

＜mu zhi＞translates Skt Mahoraga＇The Great Serpent＇（Hummel 1974－5：515，Martin 2004： 117）．${ }^{\text {7 }}$ ）The second syllable＜zhi＞is comparable to Tb che or chen＇big＇（werzhi＝rgyal chen， tru $z \boldsymbol{h i}=$ rin chen etc），so that the first one $<\mathrm{mu}>$ can be equated with lto＇phye＇serpent．＇ ＜mu＞is to be compared to the ZZ word for Nāga＜mur＞，which comes from the pan－ST root ＇serpent＇（Stein 1971：246）Tb sbrul＜＊s－mrul，${ }^{8}$ OC 迪＊hmmil1，Bu $m r w e^{B}$（unrelated to the root＇bug＇， Tb ＇bu）．

Cognate roots seem to be found in Qiangic languages：Jpg qapri，Ta \＃80朔 phio 2．43， though no nasal initial appears there．

### 3.12 li／le（＝rlung＇wind＇）

This word is clearly related to the pan－ST root found in Bu $l e^{B}$＇wind and Jp būnglì＇breeze＇


### 3.13 sha＇bal（＝sta re＇axe＇）

This ZZ word for＇axe＇（Namgyal 1998：16，Martin 2004：156，Pasar et al．2008：259）could be tentatively compared to the ST etymon found in OC 斧＊pa？，Jpg twrpa，\＃5203瓣wjii 1．67， under the assumption that a phonetic change $-a l \rightarrow-a$ occurred in the Tb dialect of the per－ son who wrote this ZZ word．This etymology is hypothetical．

### 3.14 shin（＝shes pa＇to know＇）

This word is found in many compounds（Martin 2004：158）such as＜kun shin＞＝kun shes， ＜ti shin＞＝rnam shes，＜nges de shin＞＝rang rig．It is related to the ST root＇know＇found in Tb shes， $\mathrm{Bu} s i^{4}$ ，Jpg sus．The final consonant $-n$ could be a nominalizing suffix，as this ZZ form appears mostly in abstract words．＜shin＞would mean＇knowledge＇rather than the verb＇to know＇．

### 3.15 shin／shin ni／shin tun（＝mchin pa＇liver＇）

The ZZ word for＇liver＇（Stein 1971：237）belongs to a well－known ST cognate set，compris－ ing Tb mchin－pa，Bu $a$－sany ${ }^{c}$ ，Jpg tumtshi，Ta \＃5273进sji 2.10 （Matisoff 2001：170）．

### 3.16 sli（＝zla－ba＇moon＇）

This word is only cited in Pasar et al．（2008：277）．It is clearly related to the pan－ST root for ＇moon＇found in Tb zla（ OTb also sla）．

Nevertheless，its unusual front vocalism is interesting，because it suggests that the donor language underwent a＇brightening＇change $*-a \rightarrow-i$（to use Matisoff 2004＇s term）like Qiangic languages Ta \＃2814哏 lhji．＇moon＇or Prinmi 4í．Nevertheless，brightening in this word is also found in the non－Qiangic language Mtshosna monpa $l e^{53}$＇month＇．It is also dif－ ficult to explain why brightening did not occur in the word＇axe＇（13）．

### 3.17 hrang（＝rta＇horse＇）

ZZ scholars have noted that this word is relatable to a root widespread in the ST family（Stein 1971：153）：Bu mrang $^{c}$ ，Jpg mbro，Ta \＃764化 rjijr 1．74，and possibly OC＊mmra？．However， this is not a genuine ST etymon，and must be a（relatively）late Wanderwort，as the horse was unknown in Eastern Asia before the second millennium BC．

## 3．18 Numerals

The ZZ numerals from one to ten are all attested（see Table 2），but it is not always clear whether these are corruptions of Tb forms or genuine ZZ etyma．Three comments can be made on the ZZ numerals．

First，the etyma＇one＇and＇two＇differ from Tb by not having the regular palatalisation ＊ti $>\mathrm{ci}$ and $* \mathrm{ni}>$ nyi．${ }^{9)}$

Second，the numeral＇seven＇is the root found in most ST languages（for instance，Jpg kucnums），unlike Tb ，where an innovative form bdun of unclear etymology replaced the origi－ nal numeral．

Third，the numeral for＇ten＇is＜cu＞and is suspiciously similar to $\mathrm{Tb} b c u$ ：this root is not widespread in the ST family．

Table 2 Numerals 1－10

| ZZ | Tb | Jpg |  |
| :--- | :--- | :--- | :--- |
| tig | gcig | try | 1 |
| ne，nis，ni | gnyis | кnus | 2 |


| sum | gsum | थsum | 3 |
| :--- | :--- | :--- | :--- |
| bing, bing-nga | bzhi | kưßde | 4 |
| nga | lnga | kumpu | 5 |
| drug | drug | kuutsry | 6 |
| snis, sne, sni, snel, snes | bdun | kựnus | 7 |
| gyad | brgyad | kurcat | 8 |
| gu dun | dgu | kuungut | 9 |
| cu | bcu | sqi | 10 |

## 4. Conclusion

In this paper, we have found very little evidence of a special relationship between ZZ and the Qiangic languages. The most interesting examples, such as etyma \#1 <ku ra> 'dog', \#5 <lgyam> 'wide?', \#8 <brag> 'cut' and \#9 <ma thun> 'meat', are all problematic and might be coincidences. Other potential cognates are found throughout the whole ST family and are not usable as an argument that ZZ was related to Qiang and Ta as Hummel (1986) has suggested. The relationship of some ZZ etyma with Almora languages of Western Tibet seems more convincing (Stein 1971). This would be strong evidence against the hypothesis that ZZ originated in Eastern Tibet.

Several possible ZZ sound changes have been identified: the palatalisation of $m$ to $n$ before front vowel (7), the lenition of $n$ to $r$ between two vowels (1), the loss of final $-m$ (the conditioning context is unclear, examples 5 and 6 ) and change $-a \rightarrow-i$ in open syllables (16).

Due to the fragmentary nature of our ZZ data, the hypotheses presented in this paper must all be considered as tentative and subject to revision if new data on the ZZ language are discovered in the future.

## Notes

1) The Rgyalrong data are from Jacques (2004, 2008), and the Tangut reconstruction is based on Gong Hwangcherng (2002). We indicate the number in Li's (1997) dictionary for each Tangut character to facilitate crosschecking. We use the following abbreviations: Bu Burmese, Jpg Japhug, Jg Jingpo, LB Lolo-Burmese, MC Middle Chinese, OC Old Chinese, Si Situ, Skt Sanskit, ST Sino-Tibetan, Tb Tibetan, Ta Tangut, Zb Zbu, ZZ Zhangzhung.
2) It is probable that Qiangic languages, LB and Naxi form a clade in the ST family, though data are still insufficient to prove it.
3) The Skt text comes from the Digital Sanskrit Buddhist Canon database: http://www.uwest.edu/ sanskritcanon/dp/
4) De la Vallée Poussin reconstructs anu/sañj.
5) We would have expected something like *rjes su nyal ba.
6) However, it is found in many ST languages, including Bu lam ${ }^{c}$, Tb lam, Jg lām etc. A special
phonetic change must have occurred in this ZZ word, given the back rounded vocalism.
7) The Tb lto 'phye is a mistranslation from Skt uraga-, which literally means 'the one who moves (-ga) on his chest (uras-)' (= serpent): Tb lto means 'belly' not 'chest'. This error resulted from a confusion of the first part of the compound with Skt udara- 'belly'. A form such as *udara-ga 'the one who moves on his belly' would have been possible and semantically plausible as a metaphor for 'serpent'.
8) Proto- $\mathrm{Tb} * \mathrm{~m}$ becomes denasalized between s- and $-\mathrm{r}-$. The Tb smr-clusters (smra, ngur-smrig etc) are probably derived from proto- Tb *sə-mr-.
9) Syllables such as $n i$ are extremely rare in Tb , and there is little doubt that a palatalization of dentals occurred in proto- Tb . There are many examples of dental stops with $i$, though (mthil, gtib etc), and the exact conditioning factors of palatalization are not entirely clear.

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