Sino-Tibetan *Vulva[1]

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Abstract

This paper attempts the megalocomparison of the lexeme vulva *across a number of languages distributed throughout East and Southeast Asia. The canonical syllable of Sino-Tibetan includes a possible prefix plus root; modern* vulva *forms from Sinitic and Tibeto-Burman languages suggest their historical source was a bi-syllabic morpheme which later split into two independent roots in some languages. The author tracks the surface similarities of forms in Sinitic and Tibeto-Burman languages which lead him to propose Sino-Tibetan* *dzu(k) mat *and Proto-Chinese* *tsʅ mat *(and several variant proto-roots). These roots are based on modern forms from two major southern Sinitic languages,* Min tsi[1] mai[1] *and Kejia* tsʅ[1] piet[7], *and such Tibeto-Burman languages as* Written Burmese tʃok pat *and Northern Hpun (Megyaw)* tsʊ̀ má?, zʊ̀? mà. *The author suggests that Mandarin* tɕi[1] pa[9] *"penis" also shares the same historical source but has undergone a process of phonetic attrition and semantic flip-flop. Many* vulva *forms distributed across genetically related and unrelated languages of Southeast Asia and Japan appear to be related either as cognates or contact loans. The Appendix listing forms from many languages and dialects of this broad geographical area concludes the paper.*

1. Introduction

This paper has three purposes: the main one is to propose a "reconstruction" for the Sino-Tibetan lexeme *vulva* based on the megalocomparison of *vulva* forms from many Sinitic and Tibeto-Burman languages. To do this I have combined Greenberg's multilateral comparison "... a method that looks at everything at once ... at many languages across a few words" (Greenberg 1987:23), with Buck's technique of sorting modern

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forms by their Indo-European etyma (Buck 1949).[2] My second purpose is much more modest: to revise Stimson's (1966) Middle Chinese reconstruction by drawing upon forms from a number of southern Chinese dialects which have since become available. And third, taking a cue from Matisoff's stimulating discussion of megalocomparison (1990), I have decided that while I was in the "hothouse homogenizing atmosphere of Southeast Asia" (Matisoff 1983:63) I might as well extend my net of megalocomparison and pull in phonosemantically similar forms from Benedict's Japanese/Austro-Tai family.

For Proto-Sino-Tibetan *vulva* I propose the reconstruction *dzuk mat; in addition, I propose several variant roots (for the proto-period and later), namely, *dzu mat, *dzuk, *dzu, *dzuk b(j)et, *dzu b(j)et, *bat, *b(je)t. I do not claim that I have "reconstructed" these roots because my demonstration of correspondences between initials and vowels of the proto-roots and their modern forms is both limited and tentative. In speculating on what the phonetic shapes of these roots looked like, I have been mainly guided by the modern Sinitic material; however, in examining roots reconstructed by Tibeto-Burmanists who have worked out the sound correspondences, I have happily found a high degree of phonetic congruence between their roots and mine. What is unique about my "reconstruction" is that I have gone back one step before Tibeto-Burman *bat in proposing a bilabial nasal stop initial for the root, i.e. *mat, from which the Tibeto-Burman and Sinitic reflexes of m-, b-, p-, ph-, h- are derived. The evidence for *m- comes mainly from modern Min on the Sinitic side and Northern Hpun (Megyaw) on the Tibeto-Burman side. The *Appendix: Proto-Sino-Tibetan *Vulva* at the end of this paper classifies the modern forms for *vulva* in a number of Sino-Tibetan languages (as well as some Austro-Tai languages which appear to have Sino-Tibetan loans) under their reconstructed roots.

At the outset, I would like to set forth clearly three points that have guided my thinking in this study of the historical development of *vulva* in Sino-Tibetan languages. First, in devising one Sino-Tibetan root from which all the forms in the modern Chinese dialects and many forms in the Tibeto-Burman languages may be derived, I have in effect based the root on a unification theory which in itself may make it suspect. However, I have done this only in order to have a point from which to begin. The results of this study are very tentative, and where revisions are called for, I will gladly make them.

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[2] Bauer 1988, now a companion piece to the present paper, first applied this combined procedure to the lexemes *tongue* and *lick*. Let me assure anyone who may think the contrary that for now I see no special ties between this pair of lexemes and *vulva*. To pinch an old pun from Matisoff (Benedict 1979:31), I'm no cunning linguist; the juxtaposition has been purely coincidental.

Second, I believe every word has a history of its own. This is not meant to imply that a particular word in the course of its historical development has defied regular sound laws. But I do not think it is surprising if a particular word has been affected by some sound changes but not others. Furthermore, we cannot rule out the possibility that a particular historical development is unique (cf. Matisoff 1972b:276). What I am saying is that we have no way of knowing all the facts about the historical development of a word so that the relationship between the modern reflex and its etymon may not be readily apparent. I have in mind the southern Sinitic forms of *Min-Hongkong* t s i¹ m a i¹, *Min-Xiamen* t s i¹ b a i¹, *Kejia-Sixian* t s ʅ¹ p i e t⁷, and *Yue-Hongkong* h a i¹; phonetically divergent as these forms are on the surface, I believe that all of them ultimately descend from the same historical source.

And third, I believe there is no area of the lexicon that is immune to lexical replacement — bodypart terms are no exception.[3] The notion of basic vocabulary which of course includes terms for the bodyparts is a convenient heuristic device of the linguist. It helpfully distinguishes between relatively stable areas of vocabulary, such as bodypart terms and pronouns, and other areas where lexical expansion is commonly observed, such as the names of culturally-transmitted items which are simply added to the vocabulary and do not necessarily replace already existing terms. I think we need to distinguish between lexical replacement and lexical expansion, two processes which are both termed "borrowing."

A variety of situations bring speakers of different languages into contact, and as a result speakers of Language A may learn an equivalent bodypart term from Language B. Speakers of Language A may know two words for the same thing and may use both terms in variation; eventually, however, the form from B may displace the term in A if the speakers feel no need for having two ways to refer to the same thing.[4] Further, it should go without saying that lexical replacement can take place both among genetically related and genetically unrelated languages. That two languages

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[3] Japanese speakers have borrowed English *penis* as *penisu* which is used by men as often as the native word *chinko* (Soli 1982:78). Several languages of the Middle East have borrowed Arabic *kus* 'vulva': Israeli Hebrew *kus* is the vulgar slang word (Petruck 1986:104); cf. Afghan Persian *kos*, Baluchi *kus* (Nawata 1981:34), Mazandarani *kes*, Persian *kos* (Nawata 1984:29). Megalocomparativists, note Benedict's S-T root *bat and Hebrew p o t 'vulva' (Petruck 1986:69).

[4] E.g. in bilingual families in which children grow up hearing the mother and father speak different languages; or in societies which deliberately use a foreign language in some domain, e.g. English as the vogue language of Japanese advertising. There are also language contact situations in which one ethnolinguistic group dominates another but language influence can move in either direction: English as the pre-eminent language of international business in the British colony of Hong Kong has strongly influenced both Cantonese phonology and vocabulary; on the other hand, the close but hostile contact between Jews and Arabs in Israel finds Hebrew absorbing vocabulary from Arabic.

are genetically unrelated does not mean there can be no relationship between their vocabularies — even if the forms are not genetic cognates, they may still be linked as loanwords. In some of the non-Tibeto-Burman languages of East and Southeast Asia terms for 'vulva' appear to be contact loans from Sino-Tibetan languages.

2.1 Previously-reconstructed Sino-Tibetan and Tibeto-Burman roots

Benedict (n.d.a:3) has reconstructed Sino-Tibetan $*(s-)ba(-t)$ *vulva* derived from $*(s-)bet$ 'hide/hidden' which is based on *Written Tibetan* sbéd-pa, sba 'hide, conceal' (Jäschke 1985:404) and sbá-ba 'privy parts, pudenda' (403). He has connected this root to Proto-Chinese via $*p\texttt{ʋ}o/puo$ 'hide oneself: escape' (GS #102d', Karlgren 1966:153) which he believes is derived from $*s-ba^{A}$. Benedict's source of modern Chinese dialect forms (he cites *Hakka* piet[8] and *Min-Kienyang* pie[7]) is Proto-Chinese $*(s-)biet$ *vulva* from an earlier Sino-Tibetan $*(s-)bat$ (n.d.a:4). [Cf. Benedict 1988:39 which listed a more phonetically detailed root $*b'i\breve{e}t$ for Chinese and associated it with 屄 : however, this Chinese character seems to have a relatively recent history: according to Stimson 1966:292, the graph first appeared in a dictionary of the late 17th century].

If we hypothesize a connection between Benedict's ST root $*s-bat$ and *Min-Xiamen* tsi[1] bai[1], this comparison raises several questions: (1) Can we link ST $*s-$ with the initial syllable tsi[1]? (2) Can we derive Modern Min b- from ST $*b-$? (3) Can we derive modern Min -ai from ST $*-at$? My answers to these questions are as follows: (1) At the proto-ST level I prefer a full prefixal syllable $*dzu$ from which can be derived proto-Chinese $*ts\texttt{ŋ}$ and Min tsi[1]. (2) In the history of the Min dialects modern b- initial has derived from Middle Chinese (and presumably earlier) $*m-$, that is, $*m-$ underwent a process of denasalization. To accommodate Min I have proposed that proto-Chinese $*mat$ > proto-Min $*mai$ > modern Min bai. (3) At the moment I cannot point to any other lexical items in Min to demonstrate that one of the sources of proto-Min -ai has been proto-Chinese $*-at$; and the lack of such evidence may mean that this correspondence is unique. However, as we shall see below in section 3.1, comparable forms in Kejia dialects clearly indicate that the etymon's rhyme had a -t ending.

On the Tibeto-Burman side, previous reconstructions include: Burmese-Lolo $*d\acute{z}uk$ (Benedict 1972:53), Lolo-Burmese $*b(j)et$ (Matisoff 1972a:83) and $*b(j)it$ (Thurgood 1974:105).[5] Tibeto-Burman $*h\texttt{ə}i$,

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[5] Originally reconstructed as $b(y)et$ and $b(y)it$, these roots are rewritten with *j* as the palatal glide.

*kəi (Matisoff's roots cited in Benedict 1979:30), and Loloish *dza² batᴸ (Bradley 1985:44). It will be noticed that among all of these Sino-Tibetan and Lolo-Burmese roots there is only one, Bradley's Loloish, that is bi-morphosyllabic. It is my view that we need to reconstruct a two-syllable root for this lexeme.

2.2 Sino-Tibetan *dzu(k) mat

I have reconstructed Sino-Tibetan *dzu(k) mat primarily on the basis of *Northern Hpun (Megyaw)* zù? mà - tsù má? and *Written Burmese* t∫ok pat. The discussion below on the Min and Kejia forms in the Chinese dialects will show how the Hpun forms with their bilabial nasal initial in the second morphosyllable are the key to the Sino-Tibetan reconstruction. *Written Burmese* t∫ok pat reflects the devoicing of the affricate initial of the first syllable; the Burmese form by itself gives no reason for reconstructing *m- but it is needed in order to accommodate m- of Northern Hpun, and m- and b- of modern Min, the source of which is *m-. The Hpun forms were recorded by Luce (Henderson 1986) in a fine phonetic transcription and for several Hpun speakers, so it is not entirely clear what the glottal stops may represent; nor is it clear whether the initial of the first morphosyllable was a voiced fricative or a voiceless affricate. The Written Burmese forms, however, indicate that both morphosyllables of the etymon had stop endings and that the first morphosyllable had a voiced affricate initial.

2.3 Sino-Tibetan *dzu(k) b(j)et

ST *dzu(k) b(j)et, another bi-morphosyllabic variant root, is based on *Modern Burmese* sau? pe?, *Burmese-Yaw* sau? phe?, *Akha* dɔ̀ bɛ̀q, *Mpi* to³¹ phe³¹, *Lisu* tu¹ bi⁶, *Central Yi* tu⁵⁵ bi²¹, *Bisu-Huai Chomphu* tɔ̀ pɛ̀, *Bisu-Takɔ* tà pɛ̀. Alongside these forms we can compare forms from Austro-Tai and Japanese: *Saisiyat-Tungho* to pi?, *Japanese-Tokyo* tu: bi, and *Japanese-Kanagawa* tu bi (phonetically, the first syllable of the Japanese forms is [t sɯ], [t-] before [ɯ] becomes an affricate). The striking phonosemantic similarity of these forms with those in Tibeto-Burman indicates some kind of relationship. I suggest these items may be instances of contact loans through lexical replacement across genetic lines.

2.4 Split etyma: Sino-Tibetan $\begin{Bmatrix} \bullet & \text{dzu(k)} & \text{mat} \\ \bullet & \text{dzu(k)} & \text{bjet} \end{Bmatrix} > \begin{Bmatrix} \bullet & \text{dzuk} \\ \bullet & \text{dzu} \\ \bullet & \text{bat} \\ \bullet & \text{bjet} \end{Bmatrix}$

Forms in some modern Tibeto-Burman and Sinitic languages indicate to me that the original bi-morphosyllabic roots split into mono-morphosyllabic roots. i.e. both the first and second morphosyllables of the roots developed into independent, monosyllabic morphemes. To identify an etymon that undergoes this kind of split we may use the term *split etymon*.[6]

The Tibeto-Burman foundation of these reconstructed monosyllabic roots is based on the following forms:

1. *dzuk > *rGyarong-bTsan Lha* ʔo Ndzyuk, *rGyarong-lCog rtse* ʔu sytuk. *Written Burmese* t ʃok, *Maru* t ʃok, *Atsi* t ʃuʔ, *Chang Naga* ʃûk. *Northern Hpun (Megyaw)* soʔ.

2. *dzu > *Chin (Zo)-Haka (Lai)* t ʃhu¹, *Written Tibetan* stu, *Tibetan-Gio* tu, *Thakali* tu, *Manang-Prakaa* tu, *Chin (Zo)-Ahraing K'umi* thu¹, *Chin (Zo)-Wo Ma Tu* ʃu¹; *Karen-Palaychi* zù [a contact loan; cf. other Karen languages: *Bassein Pho* 1én?, *Moulmein Pho* 1én, *Taungthu* 1în, *Moulmein Sgaw* 1ì, *Bassein Sgaw* 1î]. Benedict (letter dated May 5, 1988) suggests the source of the Tibetan forms is Tibeto-Burman *(s-)tu 'join'.

3. *bat > *Sak-Bawtala* ²ăpaʔ², *Ganan* paʔ⁴, *Kadu (Kantu)* paʔ³.

4. *b(j)et > *Sak-Dodem* ăpɛt, *Kanauri* phɛːts, *Akha* à bèq, *Lahu* t ʃha pèʔ, *Sani* pæ⁵⁵, *Haoni* tsò pɹ, *Southern Yi* pi⁵⁵, *Moso-Weihsi* pi³¹.

We also find listed under this root one form from Austro-Tai: *White Miao (=Petchabun)* piʔ (low tone). Benedict (1975:417) derives piʔ from Proto-Miao-Yao *biʔ; however, the similarity of piʔ (and even *biʔ itself) to forms in Tibeto-Burman languages as well as to the Wu and Min forms of Sinitic (to be discussed below) suggests that the Miao form may very likely be a loan from some Sino-Tibetan language.

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6 Split etymon is at the opposite end of split cognate, a term that has been defined by Matisoff as "cognates that have reflexes of at most one given proto-phoneme in common, since they descend from different syllables of a polysyllabic etymon" (Matisoff 1990:117). In view of the material presented here. I would like to propose another way of analyzing a polysyllabic root and modify his definition by replacing "of at most one" with "of one or more". This is to say that at a later stage a bi-syllabic proto-root can split up into two independent mono-syllabic roots, each of which is derived from one of the original syllables: i.e., Time 1. AB → Time 2. A and B; the modern lexical reflexes of A (or B) can share one or more segmental reflexes of the proto-phonemes making up the phonetic shape of A (or B).

3.1 ST *dzu mat > Proto-Chin. *tsʅ mat > S. Sinit. $\begin{Bmatrix} \text{*tsʅ mai} \\ \text{*tsʅ bjet} \end{Bmatrix}$

In reconstructing the Chinese root, we cannot look to the Chinese characters for help because there are no graphs which have been associated with this morpheme in older stages of the Chinese dialects (cf. Stimson 1966:292 concerning 屄 ascribed to the late 17th century). Forms from the modern Min and Kejia dialects provide the basis for the reconstructed root.

ST *dzu mat, a variant root in which the velar stop-ending of the first morphosyllable has been lost, is proposed as the source of Proto-Chinese *tsʅ mat. The major sound change occurred in the first morphosyllable: devoicing of the initial and centralization of the vowel. My bi-syllabic reconstruction is more complex than Middle Chinese *pei proposed by Stimson (1966:293) who claimed on the basis of forms from Mandarin, Taiwan Kejia, and Taiwan Min that the Middle Chinese etymon for *vulva* did not have a -p, -t, -k ending characteristic of the Rusheng tone category. Further, his monomorphosyllabic root took no account of the bimorphosyllabic shape of the Kejia and Min forms.

However, the following forms from several Kejia dialects found in Guangdong clearly indicate that the etymon was bimorphosyllabic and that the second syllable did indeed belong to the Rusheng tone category: *Kejia-Danshui* tsi¹ pet⁷; *Kejia-Sixian* tsʅ¹ piet⁷; *Kejia-Wuhua* tsʅ¹ piet⁷; *Kejia* (Maciver 1982/1926) tʃi¹ piet⁷.

Most Min dialects show forms which are very similar to *Min-Taibei* tɕi¹ mai¹. As mentioned above, modern Min b- has developed from *m-, and *Min-Hong Kong* tɕi¹ mai¹ still reflects the older initial. There is also the problem of how to account for the loss of the -t ending in Min, since some of the Min dialects such as Xiamen preserve fairly faithfully the series of final stops -p, -t, -k. At the moment, although I cannot point to any parallel examples of an actual correspondence, I am proposing that Min -ai is one of the modern reflexes of proto-Chinese -at. Further, in ancestral Min when the -t ending was reduced to the i-offglide, the morphosyllable changed its tone category, i.e. *mai became reassigned to Yin Ping (perhaps it was influenced by the tone of the preceding syllable tsʅ¹).

I believe the bisyllabic Kejia and Min forms are ultimately related to the same etymon, but in the course of their development these reflexes have preserved different phonetic features of the etymon: for the second morphosyllable, the Kejia forms have kept the original Rusheng ending; while the Min forms, on the other hand, have lost the -t ending but have preserved the voiced initial and low vowel. At an early stage of the Old Chinese period the source language of modern Kejia, Yue, and Min or southern Sinitic (comparable to Norman's (1988:210) Old Southern Chinese) divided into at least two groups of speakers from whose languages

the Min and Kejia dialects have developed. For each proto-dialect family th
final of the second morphosyllable developed in different ways, which i
reflected in the reconstruction of two variant proto-roots: Proto-Min *ts
mai and Proto-Kejia *tsɿ bjet.

3.2 Split etymon 1: *tsɿ mat > $\left\{ {*\text{tsɿ} \atop *\text{bjet}} \right\}$

The concept of split etymon can help us explain the existence of tw
phonetically distinctive mono-morphosyllabic forms in some of the moder
Chinese dialects. I suggest that these forms are monosyllabic reflexes of th
historical bimorphosyllabic etymon *tsɿ mat which split into tw
independent monosyllabic roots *tsɿ and *bjet:

1. *tsɿ > Min-Chaoyang t s i [1], Min-Yongan t sɿ[1], Pinghua-Lingu
t s e i[1], Kejia t ʃ i[1] (Maciver 1982/1926), Kejia-Hailu t ʃ i[1].

2. *bjet > Gan-Nanchang p i e t[7], Gan-Gaoan p i e t[7], Kejia-Xinzh
p i t[7] p i t[7], Xiang-Changsha p i e[7], Min-Chaozhou p h i ʔ[8], Wu-Pujian
p h i ə ʔ[42], Wu-Wenling p h i ɛ ʔ[44], Wu-Songyang p h ɿ ʔ[44], Min-Shaowu p i e
p i e, Wu-Qingtian b i̱[22], Wu-Yongjia ɓ i[33], Wu-Wenzhou p e i[1], Mandarin
Beijing p i[1], Mandarin-Guilin p æ[1], Kejia-Huizhou p e[1], Mandarin-Xian p h i[1].

The *bjet rime developed from *mat through the raising an
fronting of *-a-, which led to the acquisition of an j-onglide in some Kejia
Gan, and Wu dialects.

3.3 Split etymon 2: *tsɿ mai → *mai → *bai → *phai → Yu ha i[1]

From the point of view of their retention of the Rusheng endings, th
Yue dialects are considered ·to be among the most conservative of th
southern dialects. So, in relation to Kejia and Min, the Yue dialect form
such as Yue-Hong Kong ha i[1] seem somewhat deviant with the h- initia
instead of a bilabial stop, the absence of a Rusheng ending, and the mono
morphosyllable. Stimson (1966:292) implied that the Yue dialects did no
share the same etymon as his other modern Min and Kejia dialect forms
Nevertheless, in comparison to Mandarin and Min, the tone and rhyme c
Yue-Hong Kong ha i[1] are right; further, the existence of p h- for some Wu
and Min (as well as Mandarin-Xian) dialects (forms listed under *bjet i
the Appendix) indicates that p h- as well as p- have developed from *b-
Such a development raises the possiblity for the further development of p h-
namely that the stop initial may have lost its labial plosive quality leaving onl
the aspiration behind as the initial.

There is evidence in Sinitic to support a scenario in which a glottal fricative initial is derived from an aspirated stop initial: e.g.. modern Yue-Taishan h- corresponds to Yue-Guangzhou th- and kh- (as well as several other) initials (Huang 1990:232-244) — these stop initials more faithfully reflect their historical sources. For Cantonese I propose that the proto-root *tsı mai split into two roots. *tsı and *mai; the initial of *mai underwent several developments: *mai > *bai > *phai (and *pai) > *hai[1]. Hence. I include Yue in this etymology. Also. cf. Kejia-Zhongshan hai[5] pai[3] which seems to have joined the two syllables together.

On the Tibeto-Burman side. cf. Matisoff's roots *həi and *kəi (Benedict 1979:30) based on Tankhur Naga həi 'sexual organ of women'. Limbu hi (ra) 'vulva'. Mru kai 'vulva'.

Stimson (1966:293) rejected any link between Yue-Guangzhou hai[1] and Siamese hi:[1]; however, Benedict (n.d.b:3) has claimed a very early donor connection beween Tai *hi:^A and Yue hai^A in which Cantonese borrowed the lexeme from Tai. Still within Kadai. cf. Zhuang ma:i[6] with the bilabial nasal stop initial.

3.4   Lexical replacement in Kejia

A number of Kejia dialects have been in close contact with Min dialects and have borrowed from Min their forms for *vulva*: Kejia-Meixian tsı[1] pai[2]; Kejia-Sixian tsı[1] pai[2] (apparently in variation with tsı[1] piet[7]); Kejia-Yongding tsɨ[1] pai[2]; Kejia-Pinghe tɕi[1] pai[2]; Kejia-Taidong tsı[1] pai[2] ~ tɕi[1] pai[2]. In the Min dialects the two morphosyllables belong to the same tone category but the first morphosyllable undergoes tone sandhi. For the Kejia forms the different tone categories may correspond to differences in phonetic contours of the sandhied and original tones of the Min morphosyllables at the time they were borrowed into Kejia.

3.5 Semantic flipflop

In the northern and central Mandarin dialects and in at least one southern Wu dialect the phonetic shape of the common term for penis is very similar to the phonetic shape of the term for vulva in the southern dialects of Min and Kejia:

Wu-Longyu:	tɕi[42] paʔ[54]
Mandarin-Beijing:	tɕi[1] pa[9]
Mandarin-Changzhi:	tɕi[1] pa[1]
Mandarin-Xiaogan:	tʃi[1] pa[9]
Mandarin-Wuhan:	tʃi[1] pa[9]

Chinese dictionaries and novels typically transcribe this word as 雞巴
the first character means 'chicken' and the second is a nominal suffix. (On
might even see some accidental semantic similarity between the Chines
form and English "cock" = penis). The choice of this graph may have bee
in recognition of the similar shapes of the (uncircumcised) penis and
chicken's head and neck; this would then be a case of folk etymologizin
which found a fortuitous match between sound and meaning. I suggest a
such forms ultimately descend from *tsʔ mat 'vulva'.

It is interesting to note that the same bipolar transposition in meanin
of historically related lexical items so that in one language the word mean
vulva but in another *penis* has been described by linguists working wit
other languages of the Southeast Asian area: Matisoff (1978:271), citin
examples (from Benedict 1975) in Formosan languages, has termed thi
development "interlingual antonymic association." Benedict (1979:21) ha
described the phenomenon in Karen as "genital flipflop."

.   Chinese semantic flipflop may have been just one consequence of th
differentiation of the dialects brought about by their increasing geographic
separation on the one hand and contact-borrowing among the dialects o
the other. The forms for *vulva* in the northern, central, and eastern dialect
are typically the monosyllabic form p i [< *b(j)et] or something simila
rather than the bisyllabic words found in Kejia and Min.

Right now in Taiwan we can observe the effects of near homophony c
terms meaning *penis* and *vulva* created by contact between mutuall
unintelligible Mandarin and Taiwanese.   When mainlanders who wer
predominantly Mandarin-speaking evacuated to Taiwan in large numbers i
the late 1940's, they brought with them *Mandarin* tɕi¹ pa⁹ 'penis
However, because of its near homophony with *Taiwanese* tɕi¹ pai¹ 'vulvi
and the confusion and consternation this has caused, younger people wh
are typically bilingual in Taiwan Mandarin and Taiwanese have shied awa
from using *Mandarin* tɕi¹ pa⁹ and appear to be replacing it with 老二
lao⁴ ɚ⁶ (literally, 'old two').

3.6 Semantic shift

When the bi-morphosyllabic root *dzuk mat split into independer
morphemes, in some languages or even within the same language, *ma
retained its original meaning for the bodypart, while *dzuk shifted i
meaning to the related activity *copulate*. Two Tibeto-Burman languages ma
reflect this kind of development: *Atsi-Sadon* tsho? 'copulate' (but also c
tɕu? 'vulva') and *Kanauri* tsuk (ʃimig) 'copulate' (ʃimig = verb suffix
A comparable semantic shift in ST *dzuk may have occurred amor
Chinese dialects: cf. *Gan-Gaoan* tshok⁷, *Gan-Nanchang* tshɔk⁷, *W*
Shanghai tsho?⁷, *Mandarin-Beijing* tshau⁵, *Wu-Wenzhou* tɕuo

'copulate'. Finally, *dzuk may have been borrowed into at least one Austronesian language: cf. *Malay* ancuk 'copulate, unite with' (Abas 1983:14).

4. Austro-Tai *tupi < *ts] mat

In the course of working with materials on Austro-Tai languages, I have been struck by the phonetic similarity of some of their *vulva* forms with those in Tibeto-Burman languages. Have there been historical contact relationships among languages of these two groups resulting in lexical borrowing? Of course, this means that many modern Austro-Tai forms ultimately derive from roots reconstructed for Sino-Tibetan. Intimate and prolonged contact among the various languages of Southeast Asia has resulted in the mutual exchange of vocabulary items (cf. Matisoff 1983:62-64), and I believe this includes the lexeme *vulva*. So-called core vocabulary is not impervious to lexical replacement or addition. The distribution of related forms extends throughout East and Southeast Asia and includes Taiwan, Japan and the Ryukyuan Islands, and islands in the South Pacific. As the source of Proto-Austro-Tai *tupi I propose *ts] mat, the same proto-variant root proposed for southern Chinese which I believe was the donor source of the Autro-Tai root. Before I explain my reasoning behind this claim, let us first reconsider reconstructions for Proto-Tai and Proto-Austro-Tai.

At the Proto-Tai level Li F. K. (1977:250) has reconstructed glottal fricative *h- initial based on the modern Southwest and Central Tai dialects which have similar forms, hi or hi: and tone [1]. The close similarity between Tai and Yue leads me to agree with Benedict (n.d.b:3) that some kind of contact donor relationship links their forms: we note the correspondence between the historical tone categories and initial consonants of *Siamese* hi:[1] and *Yue-Guangzhou* hai[1]. As mentioned above in Section 3.3, Benedict (n.d.b:3) has claimed that the Yue form is an early loan from Tai, but I reserve judgment on this matter.

Benedict (1975:417) has reconstructed Proto-Tai *hi (but more recently *hii[λ] in n.d.b:3) which he derived from *hNi (this root in turn is derived from an earlier *hNGi). He has also reconstructed Proto-Miao-Yao *bi? which he claimed is derived from an earlier possible disyllabic root *biq[i] (< *buq[i]). However, I believe that *White Miao* pḻ? (with low tone and cited in Benedict 1975:417) is fairly similar to Chinese dialect forms and is more likely a loan from some Chinese dialect; cf. *Min-Chaozhou* phi?[8] (Choy 1976:312). *Wu-Songyang* phi?[44] (Ballard 1988).

Recently, Benedict has attempted to join Japanese to his Austro-Tai group. With respect to the lexeme in question, he (1990:258) has

reconstructed Proto-Austro-Kadai *tupi based on *Saisiyat* *topi? (bu cited incorrectly in text as topi without final -?); *tupi is the source o Proto-Austronesian *tupi and *pipi. Proto-Kadai *[SYL]piC (< [tu]pi) Proto-Polynesian *fifi. Proto-Atayalic *pipi? (from *Atayal* pipi? (Egerod 1980:470), Old Japanese *Fiwi. Benedict also cited forms from two Ryukyuan dialects. *Yonaguni* hi: and *Shodon* hwi(i), whose development he believes has followed in tandem with Japanese. With respect to Benedict's root *tupi, we can compare additional Japanese dialect forms by prefecture: *Japanese-Tokyo* and *Kanagawa* tu:bi *Japanese-Ibaraki, Toyama, Aomori, Tokushima, Tokyo, Shizuoka, Nagano Yamanashi* bebe; *Japanese-Kagoshima* and *Okinawa* hi::; *Japanese-Okinawa* pi: (Narusawa 1986:128); *Japanese-Okinagarabejima* bi:bi:, bi:bi, bibi (Nakamoto 1981:77). Similar forms occur in neighboring languages cf.Batanic languages of the Philippines, *Ivasay* bi:bi and *Isamorong* bib: (Tsuchida et al 1987:); *Mokilese* pi (Harrison & Albert 1977:67).

With Benedict's root *tupi we can compare very similar bi-syllabi forms from several Tibeto-Burman languages: *Lisu* tu[1]bi[6]; *Central Yi* tu[5] pi[31]; *Akha* dɔ̀ bèq; *Mpi* to[31] phe[31]; *Bisu-Huai Chomphu* tɔ̀ pè. Mono syllabic forms from Tibeto-Burman and Sinitic languages also show similarities with the Austro-Tai forms cited above: *Sani* pɛ[55], *Southern Y* pi[55], *Moso-Weihsi* pi[51]; *Hunan-Loudi* bi[2], *Mandarin-Beijing* pi[1], *Kejia Huizhou* pe[3], *Mandarin-Guilin* pæ[1]. One is certainly struck by the close phonetic similarity of the Lisu and Central Yi forms to the Austro-Tai root. do not believe that this similarity is fortuitous, and claim that it has resulted from the diffusion of these forms into neighboring languages.

5. Conclusion

The fulcrum on which Sino-Tibetan *dzuk mat pivots is my two-par speculation: (1) that *Northern Hpun (Megyaw)* zù? mà ~ tsù má? an *Burmese-Written* tʃok pɑt derive from the same etymon, and (2) tha these Tibeto-Burman forms are historically related to two important form from Sinitic, *Kejia-Sixian* *tsʅ[1] piet[7] and *Min-Hongkong* *tɕi[1] mai[1] But it is primarily from the Tibeto-Burman forms that *dzuk mat takes it phonetic shape.

Sino-Tibetanists may envy the highly polished shine on sound "laws established for Proto-Indo-European, but such a feeling is tempered wit the knowledge that the polishing process spans over 200 years of cumulativ efforts. In contrast, the sound correspondences between Proto-Sinc Tibetan and modern Sinitic and Tibeto-Burman languages worked out over few decades still stand at an early stage of development (cf. Norma 1988:12-16; Chang 1973:337). Bridging the gap between the Sinitic an Tibeto-Burman branches constitutes the main challenge of Sino-Tibeta studies. Thus the Sino-Tibetan world eagerly awaits the appearance of th

first fascicle on bodypart terms to be published soon by Jim Matisoff's *Sino-Tibetan Etymological Dictionary and Thesaurus* project at the University of California-Berkeley. Till then, I hope my own speculative and tentative attempt to develop the Sino-Tibetan etymology of one word can take us a small step in the right direction. The larger task of tracing the historical developments of the root's initials and finals in individual Tibeto-Burman and Sinitic languages still remains.

REFERENCES

Abas, Madya Lutfi. 1983. *Kamus Bahasa, Malaysia-Tionghoa-Inggeris*. Kuala Lumpur: The Shanghai Book Co.

Bailey, T. Grahame. 1910. "Kanauri vocabulary in two parts: English-Kanauri and Kanauri-English." *The Journal of the Royal Asiatic Society of Great Britain and Ireland*, 659-705.

Ballard, W. L. 1988. "Fieldnotes on Wu Dialects." Unpublished ms.

Bandyopadhyay, Swapon Kumar. 1989. "A Tangsa wordlist." *Linguistics of the Tibeto-Burman Area* 12.2:79-91.

Bao Houxing. 1989. "Hunan Shaoyang fangyan yinxi." *Fangyan* 3:196-207.

Bauer, Robert S. 1990. Fieldnotes on Kejia-Xinzhu, Taipei, September 1990.

Bauer, Robert S. 1988. "Sino-Tibetan *tongue and *lick." *Linguistics of the Tibeto-Burman area* 11.2:144-165.

Bauer, Robert S. 1987. "In Search of Austro-Tai strata in southern Chinese dialects." *Computational analysis of Asian & African languages* 28:53-65.

Bauer, Robert S. 1986. Fieldnotes on Min-Hongkong and Kejia-Danshui, Hong Kong, December 1985 and Kejia-Taidong, Taipei, January 1986.

Bauer, Robert S. 1985. "Cognation of bodypart terms across Chinese dialects." Paper presented at 18th International Conference on Sino-Tibetan Languages and Linguistics, Bangkok.

Benedict, Paul K. 1990. *Japanese/Austro-Tai*. Ann Arbor: Karoma.

Benedict, Paul K. 1988. Untitled ms. circulated as handout. 21st International Conference on Sino-Tibetan Languages and Linguistics. Lund, Sweden.

Benedict, Paul K. 1979. "Four forays into Karen linguistic history." *Linguistics of the Tibeto-Burman area* 5.1:1-35. Edited and expurgated by James A. Matisoff.

Benedict, Paul K. 1975. *Austro-Thai: language and culture with a glossary of roots*. HRAF Press.

Benedict, Paul K. 1973. "Tibeto-Burman tones with a note on teleo-reconstruction." *Acta Orientalia* 35:127-138.

Benedict, Paul K. 1972. *Sino-Tibetan: a Conspectus*. Contributing editor, James A. Matisoff. Cambridge: Cambridge Univ. Press.

Benedict, Paul K. no date-a. (postmarked August 16, 1989). "PBY nominalizing *-t suffix." Unpublished ms.

Benedict, Paul K. no date-b. "No. 6 Kadai and DTKN." Unpublished ms.

Bhat, D.N. Shankara. 1969. *Tankhur Naga Vocabulary.* Poona: Deccan College Postgraduate and Research Institute.

Bradley, David. 1988. "Bisu dialects." Paper presented to Burmese-Yipho Workshop, Lund 5/10/88.

Bradley, David. 1986. Letter dated January 3, 1986.

Bradley, David. 1985. "The Haoni dialect of Hani." Paper presented at 18th International Conference on Sino-Tibetan Languages and Linguistics, Bangkok.

Bradley, David. 1975. "Nahsi and Proto-Burmese-Lolo." *Linguistics of the Tibeto-Burman Area* 2.1:93-150.

Brun, Viggo. 1973. "An English-Akha vocabulary." *Acta Orientalia* 35:138-159.

Buck, Carl Darling. 1949. *A Dictionary of Selected Synonyms in the Principal Indo-European Languages.* Chicago: Univ. of Chicago Press.

Burling, Robbins. 1969. "Proto-Karen: A reanalysis." In A. L. Becker (ed.) *Occasional Papers of the Wolfenden Society on Tibeto-Burman Linguistics.* Ann Arbor: Univ. of Michigan.

Chang Kun. 1973. "Review of Benedict, *Sino-Tibetan: a Conspectus.*" *Journal of Asian Studies* 32.2:335-337.

Choy Chunming. 1976. *A Dictionary of the Chao-chou Dialect.* Taipei: Dongya Zhibensuo.

Dyen, Isidore. 1970. "Background 'noise' or evidence in comparative linguistics: the case of the Austronesian-Indo-European hypothesis." In George Cardona, Henry M. Hoenigswald, and Alfred Senn, eds., *Indo-European and Indo-Europeans.* Philadelphia: University of Pennsylvania Press.

Egerod, Søren. 1980. *Atayal-English Dictionary.* London: Curzon Press.

Feng Aizhen. 1988. "Fujiansheng Fuqing fangyande yuyin xitong." *Fangyan* 4:287-300.

Gao Fusheng. 1988. "Anyi Fangyan tongyin zihui." *Fangyan* 2:123-135.

Goldstein, Melvyn C. 1984. *English-Tibetan Dictionary of Modern Tibetan.* Berkeley: Univ. of California Press.

Greenberg, Joseph. 1987. *Language in the Americas.* Stanford: Stanford Univ. Press.

Harris, Jimmy G. 1976. "Notes on Khamti Shan." In Thomas W. Gething, et al. (eds) *Tai Linguistics in Honor of Fang-Kuei Li.* Bangkok: Chulalongkorn Univ. Press.

Harrison, Sheldon P. and Salich Albert. 1977. *Mokilese-English Dictionary.* Honolulu: Univ. Press of Hawaii.

Hashimoto Mantaro. 1980. *The Be Language: a classified lexicon of its Limkow dialect.* Tokyo: ILCAA.

Hashimoto Mantaro. 1973. *The Hakka Dialect: a linguistic study of its phonology, syntax, and lexicon.* Cambridge Univ. Press.

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Hashimoto Mantaro. 1972. *Kyakukago Kiso Goishuu.* Tokyo: ILCAA.

Henderson, Eugénie J. A. 1986. "Some hitherto unpublished material on Northern (Megyaw) Hpun." In John McCoy & Timothy Light (eds) *Contributions to Sino-Tibetan studies.* Leiden: E. J. Brill.

Hoshi Michiyo & Tondup Tsering. 1978. "Zangskar vocabulary, a Tibetan dialect spoken in Kashmir." *Monumenta Serindica,* No. 5.

Hoshi Michiyo. 1984. "A Prakaa Vocabulary — a Dialect of the Manang Language." *Monumenta Serindica,* No. 12:133-202.

Hou Jingyi. 1985. *Changzhi Fangyanzhi.* Beijing: Yuwen Chubanshe.

Hu Shiyun. 1989. "Lianshui fangyan tongyin zihui." *Fangyan* 2:131-143.

Huang Jianyun. 1990. *Taishan Fangyan.* Guangzhou: Zhongshan Daxue Chubanshe.

Huang Xuezhen. 1983. "Yongding (Xiayang) fangyan cihui (2)." *Fangyan* 3:220-240.

Hutton, J. H. 1987. *Chang Language: grammar and vocabulary of the language of the Chang Nagas.* Delhi: Gian Publishing House.

Jäschke, H. A. 1985. *A Tibetan-English Dictionary.* London: Antony Rowe Ltd. (Reprint of original 1881 edition).

Kamus Bahasa Indonesia-Tiong Hoa Dengan Ejaan Baru. 1976. Dongnanya Yuwen Yanjiusuo (ed.) Hong Kong: Nan Kwok Pub. Co.

Karlgren, Bernhard. 1966. *Grammata Serica.* Taipei: Ch'eng Wen Publishing Company. (Reprint of 1940 edition).

Lan Ching-han. 1980. "The Yilan dialect of Chinese, its classified lexicon with grammatical notes." *Computational Analyses of Asian & African Languages,* No. 14.

Li Fangkuei. 1977. *A Handbook of Comparative Tai.* Honolulu: The Univ. of Hawaii Press.

Li, Paul Ren-kuei. 1978. "A comparative vocabulary of Saisiyat dialects." *Zhongyang Yanjiuyuan Lishi Yuyan Yanjiusuo Jikan* 49:134-197.

Li Shen. 1985. *Xuzhou Fangyanzhi.* Beijing: Yuwen Chubanshe.

Li Xingjian and Liu Sixun. 1986. "Tianjin Fangyan Cihui (1)." *Fangyan* 1:71-78.

Lin Liantong. 1987. "Fujian Yongchun fangyan cihui (1)." *Fangyan* 4:310-316.

Liu Ling. 1988. *Dunhuang Fangyanzhi.* Lanzhou: Lanzhou Daxue Chubanshe.

Lu Jinyuan. 1986. "Lüsi fangyan jilüe." *Fangyan* 1:52-70.

Luce, G. H. 1985. *Phases of Pre-Pagán Burma.* Volume II. Oxford: Oxford Univ. Press.

Luo Zhaojin. 1989. *Ruijin Fangyan.* Taipei: Taiwan Student Book Co.

MacIver, D. 1982. *A Chinese-English Dictionary, Hakka Dialect as Spoken in Kwang-tung Province.* Taipei: Southern Materials Center, Inc. (Reprint of 1926 edition).

Matisoff, James A. 1990. "Discussion note: On megalocomparison." *Language* 66.1:106-120.

Matisoff, James A. 1985. "God and the Sino-Tibetan Copula, with some good news concerning selected Tibeto-Burman Rhymes." *Journal of Asian and African Studies* 29:1-81.

Matisoff, James A. 1983. "Linguistic diversity and language contact." In John McKinnon & Wanat Bhruksasri (eds.) *Highlanders of Thailand.* Kuala Lumpur: Oxford Univ. Press.

Matisoff, James A. 1978. *Variational Semantics in Tibeto-Burman.* Philadelphia: Institute for the Study of Human Issues.

Matisoff, James A. 1972a. *The Loloish Tonal Split Revisited.* Research Monograph No. 7. Berkeley: Center for South and Southeast Asian Studies, Univ. of California.

Matisoff, James A. 1972b. "Tangkhul Naga and comparative Tibeto-Burman." *Tonan Ajia Kenkyu* 10.2:271-283.

Matisoff, James A. 1969. "Lahu and proto-Lolo-Burmese." In A. L. Becker (ed.) *Occasional papers of the Wolfenden Society on Tibeto-Burman linguistics.* Ann Arbor: Univ. of Michigan.

Maung Wun. 1975. "Development of the Burmese language in the medieval period." *Journal of Osaka University of Foreign Studies* 36:63-119.

Nagano Yasuhiko. 1984. "A Manang glossary." *Monumenta Serindica* 12:203-234.

Nagano Yasuhiko. 1982a. "A historical study of gLo Tibetan." *Bulletin of the National Museum of Ethnology* 7.3:472-513.

Nagano Yasuhiko. 1982b. "A preliminary report of the three Tibetan dialects in the northern Gandaki Valley." *Monumenta Serindica* 10:81-157.

Nagano Yasuhiko. 1979. "A historical study of rGyarong rhymes." *Linguistics of the Tibeto-Burman Area* 5.1:37-47.

Nagano Yasuhiko. 1978. "A note to rGyarong Tsangla body part terms." Unpublished Univ. of California-Berkeley term paper.

Nakajima Motoki. 1983. *The Southern Chekiang dialect: a linguistic study of its phonology and lexicon.* Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

Nakajima Motoki. 1979. *A Comparative Lexicon of Fukien Dialects.* Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

Nakamoto Masachie. 1981. *Ryukyugo Jiten.* Tokyo: Kinkeisha.

Narusawa Tazuko (ed. dir.) 1986. *Rataino Kotoba.* Tokyo: Asphalt Books.

Nawata Tetsuo. 1981. *Baluchi.* Tokyo: Institute for Study of Languages and Cultures of Asia and Africa.

Norman, Jerry. 1988. *Chinese.* Cambridge: Cambridge Univ. Press.

Norman, Jerry. 1987. "The classification of the Shaowu dialect." *Fangyan* 2:97-112.

Petruck, Miriam R. L. 1986. *Body Part Terminology in Hebrew: a study of lexical semantics.* PhD dissertation, Univ. of Calif.

Qu Aitang and Tan Kerang. 1983. *Ali Zangyu.* Beijing: Zhongguo Shehui Kexue Chubanshe.

Sakamoto Yasuyuki. 1976. "A note on Thai tones." In Mantaro Hashimoto (ed.) *Genetic Relationship, Diffusion and Typological Similarities of East & Southeast Asian Languages: papers for the 1st Japan-US joint seminar on East and Southeast Asian linguistics.* Tokyo: The Japan Society for the Promotion of Science.

Shafer, Robert. 1952. "Athapaskan and Sino-Tibetan." *International Journal of American Linguistics* 18:12-19.

Sherard, Michael. 1982. "A lexical survey of the Shanghai dialect." *Computational Analyses of Asian & African languages,* No. 20.

Solt, John. 1982. "Japanese maledicta." *Maledicta* VI.1 + 2:75-81.

Stimson, Hugh. 1966. "A tabu word in the Peking dialect." *Language* 42.2:285-294.

Thurgood, Graham. 1974. "Lolo-Burmese rhymes." *Linguistics of the Tibeto-Burman Area* 1.1:98-107.

Thurgood, Graham. 1985. "Benedict's work: past and present." In Graham Thurgood, et al (eds) *Linguistics of the Sino-Tibetan Area: the state of the art.* Canberra: Pacific Linguistics C-87.

Tsuchida Shigeru, Yamada Yukihiro, and Moriguchi Tsunekazu. 1987. *Lists of Selected Words of Batanic Languages.* Tokyo: Univ. of Tokyo.

Wang Ping. 1981. "Guiyang fangyande yuyin xitong." *Fangyan* 2:122-130.

Wen Duanzheng. 1985. *Xinzhou Fangyanzhi.* Beijing: Yuwen Chubanshe.

Wen Duanzheng. 1981. "Taiyuan Fangyan Cihui." *Fangyan* 4:295-316.

Wu Zili, Ang Zhiling, Huang Jianmin. 1984. *Yi Han Jianming Cidian.* Kunming: Minzu Chubanshe.

Xiong Zhenghui. 1983. "Nanchang fangyan cihui (2)." *Fangyan* 1:59-80.

Yabu Shiro. 1982. *A Classified Dictionary of the Atsi or Zaiwa Language (Sadon Dialect) with Atsi, Japanese and English Indexes.* Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

Yabu Shiro. 1980. "Linguistic data of the Yaw dialect of the Burmese language." *Journal of Asian and African Studies* 19:164-182.

Yan Qinghui and Liu Lihua. 1990. "A glossary of the Loudi dialect of Hunan province (2)." *Fangyan* 2:152-160.

Yan Sen. 1981. "Gaoan (Laowu Zhoujia) fangyande yuyin xitong." *Fangyan* 2:104-121.

Yan Sen. 1982a. "Gaoan (Laowu Zhoujia) fangyan cihui (1)." *Fangyan* 1:66-80.

Yan Sen. 1982b. "Gaoan (Laowu Zhoujia) fangyan cihui (3)." *Fangyan* 3:234-240.

Yang Huandian. 1982. "Guilin fangyan cihui." *Fangyan* 2:146-155.

Zhan Bohui, Cheung Yatshing (eds). 1988. *A Survey of Dialects in the Pearl River Delta. Volume II: Comparative Lexicon.* Hong Kong: New Century Publishing House.

Zhang Shengyu, Wang Ping, Shen Tong. 1988. "Hunan Taojiang (Gaoqiao) fangyan tongyin zihui." *Fangyan* 4:270-286.

Zhang Chengcai, Zhu Shikui. 1987. *Xining Fangyanzhi.* Xining: Qinghai Renmin Chubanshe.

Zhao Rixin. 1989. "Anhui Jixi fangyan yinxi tedian." *Fangyan* 2:125-130.

Zhuang Han Cihui, Sawloih Cuengh Gun. 1984. Guangxi Zhuangzu Zizhiqu Shaoshu Minzu Yuyan Wenzi Gongzuo Weiyuanhui Yanjiushi. Guangxi Minzu Chubanshe.

APPENDIX

Proto-Sino-Tibetan *Vulva
Reconstructed Roots and Their Reflexes

Sino-Tibetan: *dzuk mat, *dzu mat
   ST *Variants:* *dzu mat, *dzuk, *dzu, *dzuk b(j)et ~ *dzu
       b(j)et, *mat, *b(j)et

Proto-Chinese: *tsʅ mat < ST *dzu(k) mat
   Sinitic *Variants:* *tsʅ mai, *tsʅ bjet, *tsʅ, *bjet, *phjet,
       *mai, *dzuk

1.   *tsʅ mai < *dzu ma

Min-Hongkong	tɕi¹ mai¹	(Bauer 1986)
Min-Yilan (Taiwan)	tʃi¹ bai¹	(Lan 1980:233)
Min-Yongchun (Fujian)	tsi¹ bai¹	(Lin 1987:315)
Min-Dongshandao (Fujian)	tsi¹ bai¹	(Nakajima 1979:138)
Min-Dongshandao (Fujian)	tsi¹ bai¹ a²	(Nakajima 1979:138)
Min-Taibei (Taiwan)	tɕi¹ bai¹	(Bauer 1986)
Min-Fuqing (Fujian)	tsi¹ pe¹	(Feng 1988:296)
Min-Fuzhou (Fujian)	tsi¹ βe³	(Nakajima 1979:138)
Min-Zhongshan (Guangdong)	tsi² bai³	(Zhan, Cheung 1988:204)
Kejia-Meixian (Guangdong)	tsʅ¹ pai²	(Hashimoto 1972:5)
Kejia-Sixian (Guangdong)	tsʅ¹ pai²	(Hashimoto 1972:5)
Kejia-Yongding (Fujian)	tsɨ¹ pai²	(Huang 1983:231)
Kejia-Pinghe (Fujian)	tɕi¹ pai²	(Bauer 1985)
Kejia-Taidong (Taiwan)	tɕi¹ pai²	(Bauer 1986)
Kejia-Taidong (Taiwan)	tsʅ¹ pai²	(Bauer 1986)
Kejia (Guangdong)	tʃi¹ pai²	(Maciver 1982:606)
Mandarin-Changzhi (Shanxi)	tɕi¹ pa¹ = penis	(Hou 1985:85)
Mandarin-Beijing	tɕi¹ pa⁹ = penis	(Bauer 1985)

2.   *tsʅ bjet < *dzu mat

Kejia-Danshui (Guangdong)	tsi¹ pet⁷	(Bauer 1986)
Kejia-Dongguan (Guangdong)	tsi¹ pet⁷	(Zhan, Cheung 1988:204)
Kejia-Shenzhen (Guangdong)	tsi¹ pet⁷	(Zhan, Cheung 1988:204)
Kejia-Conghua (Guangdong)	tsi¹ pət⁷	(Zhan, Cheung 1988:204)
Kejia-Sixian (Guangdong)	tsʅ¹ piet⁷	(Hashimoto 1972:5)
Kejia-Wuhua (Guangdong)	tsʅ¹ piet⁷ [tsʅ¹ biet⁷]	(Bauer 1985)
Kejia (Guangdong)	tʃi¹ piet⁷	(Maciver 1982:606)

3. $^*ts\gamma < {}^*dzu$

Min-Yongan (Fujian)	tsɿ^3	(Nakajima 1979:138)
Kejia-Hailu (Guangdong)	tʃi^1	(Norman 1988:241)
Kejia (Guangdong)	tʃi^1	(Maciver 1982:21)
Min-Chaozhou (Guangdong)	tsi^1	(Choy 1976:431)
Min-Chaoyang (Fujian)	tsi^1	(Nakajima 1979:138)
Wu-Wenzhou (Zhejiang)	tɕi^1 tɕi^1	(Nakajima 1983:621)
	'baby term for vulva/penis'	
Mandarin-Taiyuan (Shanxi)	pæ̃^{3} tɕi^1	(Wen 1981:305)
Lingui (Guangxi)	tsei^1	(Bauer 1985)

4. $^*bjet < {}^*mat$

Gan-Nanchang (Jiangxi)	piet^7	(Xiong 1983:68)
Gan-Ruijin (Jiangxi)	piet^7	(Luo 1989:160)
Gan-Gaoan (Jiangxi)	piɛt^7	(Yan 1982a:80)
Gan-Anyi (Jiangxi)	piɛt^7	(Gao 1988:133)
Yue-Jiangmen (Guangdong)	pit^7	(Zhan, Cheung 1988:204)
Kejia-Xinzhu (Taiwan)	pit^7 pit^7	(Bauer 1990)
Wu-Quzhou (Zhejiang)	ɕia^{32} pie?^{23}	(Ballard 1988)
Xiang-Changsha (Hunan)	pie^7	(Bauer 1985)
Min-Shaowu (Fujian)	pie^5-pie	(Norman 1987:100)
Wu-Wenzhou (Zhejiang)	pei^7	(Nakajima 1983:621)
Wu-Shanghai	ɦbi^2 ka? tsɿ	(Sherard 1982:157)
Wu-Qingtian (Zhejiang)	bi̠^{22}	(Ballard 1988)
Wu-Yongjia (Zhejiang)	ɓi^{33}	(Ballard 1988)
Loudi (Hunan)	bi^2	*(Yan, Liu 1990:158)*
Mandarin-Beijing	pi^1	(Bauer 1985)
Mandarin-Changzhi (Shanxi)	pi^1	(Hou 1985:85)
Mandarin-Xinzhou (Shanxi)	pi^1	(Wen 1985:34)
Mandarin-Dunhuang (Gansu)	pi^1	(Liu Ling 1988:153)
Mandarin-Wuhan (Hubei)	pi^1	(Bauer 1985)
Shaoyang (Hunan)	pi^1	(Bao 1989:200)
Gaoqiao (Hunan)	pi^1	(Zhang, Wang, Shen 1988:281)
Mandarin-Guiyang (Guizhou)	pi^1	(Wang 1981:125)
Mandarin-Liuzhou (Guangxi)	pi^1	(Bauer 1985)
Kejia (Guangdong)	pi^1	(Maciver 1982:606)
Mandarin-Lisi (Jiangsu)	pi^1	(Lu 1986:65)
Lianshui (Jiangsu)	pi^1	(Hu 1989:133)
Mandarin-Yuexi (Anhui)	pi^1	(Chu 1987:285)
Mandarin-Taiyuan (Shanxi)	pæ̃^{3} pi^1	(Wen 1981:305)
Mandarin-Xuzhou (Jiangsu)	pi^1 ɕiə̃^{1} tsɿ^9	(Li 1985:124)
Wu-Shanghai	piɿ^1	(Sherard 1982:158)
Jixi (Anhui)	pɿ^1	(Zhao 1989:128)

Mandarin-Guilin (Guangxi)	pæ^1	(Yang 1982:146)
Mandarin-Tianjin (Hebei)	pa^1 ts̩^{9}	(Li, Liu 1986:72)
Kejia-Huizhou (Guangdong)	pe^1	(Zhan, Cheung 1988:204)
Min-Yilan (Taiwan)	gio^2 pe^1	(Lan 1980:234)
Wu-Wenzhou (Zhejiang)	pø^3	(Nakajima 1983:621)

5.   *phjet < *bjet

Wu-Wenling (Zhejiang)	phiε?^{44}	(Ballard 1988)
Wu-Pujiang (Zhejiang)	phiə?^{42}	(Ballard 1988)
Wu-Jinhua (Zhejiang)	lɔ^{44} phiε?^{22}	(Ballard 1988)
Min-Chaozhou (Guangdong)	phi?^{8}	(Choy 1976:312)
Wu-Songyang (Zhejiang)	phɪ?^{44}	(Ballard 1988)
Mandarin-Xining (Qinghai)	phj^1	(Zhang, Zhu 1987:151)
Mandarin-Xian (Shaanxi)	phi^1	(Bauer 1985)

6.   *phai < *bai < *mai < *ts̩ mai

Min-Yilan (Taiwan)	bai^1 a^3 'baby term'	(Lan 1980:234)
Kejia-Zhongshan (Guangdong)	hai^5 pai^3	(Zhan, Cheung 1988:204)
Yue-Taishan (Guangdong)	hai^1	(Zhan, Cheung 1988:204)
Yue-Hongkong	hai^1	(Zhan, Cheung 1988:204)
Yue-Jiangmen (Guangdong)	hei^2	(Zhan, Cheung 1988:204)
Yue-Xinhui (Guangdong)	hæi^1	(Zhan, Cheung 1988:204)
Yue-Jintian (Hongkong)	həi^1	(Zhan, Cheung 1988:204)
Kejia-Dongguan (Guangdong)	hɔi^1	(Zhan, Cheung 1988:204)

7.   *dzuk 'to copulate'

Gan-Nanchang (Jiangxi)	tshɔk^7	(Xiong 1983:68)
Gan-Gaoan (Jiangxi)	tshok^7	(Yan 1982b:235)
Wu-Shanghai	tsho?^{7}	(Sherard 1982:158)
Mandarin-Beijing	tshau^5	(Bauer 1985)
Wu-Wenzhou (Zhejiang)	tɕuɔ^1	(Nakajima 1983:621)
Mandarin-Lüsi (Jiangsu)	ʐiə? pi^1 'copulate'	(Lu 1986:65)

Proto-Tibeto-Burman Variants:
    *dzuk mat ~ *dzu mat, *dzuk b(j)et, *dzuk ~ *dzu, *mat,
             *b(j)et, *həi, *kəi
Previous Reconstructions:

Burmese-Lolo:	*dźuk	(Benedict 1972:53)
Kukish:	*tʃhu	(Shafer 1952:15)
Lolo-Burmese:	*b(j)et	(Matisoff 1972:30)
Loloish:	*dza^2 bat^L	(Bradley 1985:44)
Tibeto-Burman:	*həi, *kəi (Matisoff's roots cited Benedict 1979:30)	

1.		*dzuk ma	
Hpun-Northern	(Megyaw)	zù? mà	(Henderson 1986:128)
		'pudenda (female)'	
Burmese-Written		tʃok pat	(Bradley 1986)
Burmese-Modern		sɑu? pa?	(Yabu 1980:169)

2.		*dzu ma	
Hpun-Northern	(Megyaw)	tsù má? 'vulva'	(Henderson 1986:133)
Bodo		tʃi pha	(Benedict 1979:23)
Dimasa		si pau	(Benedict 1979:23)
Rawang		mə zɔ	(Benedict 1979:23)
Chin (Zo)-Lai Len Pi		mɛ̆ tʃhu'¹	(Luce 1985:86)

3.	*dzuk b(j)et ~ *dzu b(j)et	
Burmese-Modern	sɑu? pɛ?	(Yabu 1980:169)
Burmese-Yaw	sau? phe?	(Yabu 1980:169)
Akha	dɔ̀ bɛ̀? 'cunt'	(Brun 1973:157)
Mpi	to³¹ phe³¹	(Bradley 1986)
Bisu-Huai Chomphu	tɔ̀ pɛ̀	(Bradley 1988:4)
Bisu-Taki	tǎ pɛ̀	(Bradley 1988:4)
Mru	tǎ pə¹ 'to copulate'	(Luce 1985:91)
Lisu	tu¹ bi⁶	(Bradley 1986)
Central Yi	tu⁵⁵ bi³¹	(Bradley 1986)

4.		*dzuk	
Maru		dʒok	(Benedict 1972:53)
rGyarong-bTsan Lha		?o Ndzjuk	(Nagano 1979:39)
rGyarong-lCog rtse		?u sjtuk	(Nagano 1979:39)
Kanauri		tsʊk (jimiɡ)	(Bailey 1910:695)
		'copulate (vb suffix)'	
Burmese-Written		tʃok	(Benedict 1979:23)
Tangsa		tsut 'vagina'	(Bandyopadhyay 1989:87)[7]
Atsi		dʒu?	(Benedict 1979:23)
Atsi-Sadon		tɕu?	(Yabu 1982:21)
Atsi-Sadon		tsho? 'to copulate'	(Yabu 1982:21)
Chang Naga		ʃūk	(Hutton 1987:115)
Hpun-Northern	(Megyaw)	só?'vagina'	(Henderson 1986:133)

5.	*dzu	
Vayu	dʒu-dʒu	(Shafer 1952:15)

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7 Other apparently related forms are Tangsa *tʒit* 'penis' and *tʒát* 'intercourse' (op. cit. p. 86). [Ed.]

Lushei	t ʃhu	(Shafer 1952:15)
Chin (Zo)-Haka (Lai)	t ʃhu¹	(Luce 1985:86)
Chin (Zo)-Lushei	t ʃh'u²	(Luce 1985:86)
Chin (Zo)-Me Ra (Darling)	t ʃhu'¹	(Luce 1985:86)
Chin (Zo)-Loto (Hriangpi)	t ʃhə³	(Luce 1985:86)
Tibetan-Written	stu	(Qu, Tan 1983:21)
Gyarung	te stu	(Benedict 1979:23)
rGyarong-Tzu Ta	te ʂtu	(Nagano 1979:39)
rGyarong-Suo Mo	te ʃtu	(Nagano 1979:39)
Tibetan-Written	rtu	(Nagano 1978:9)
Tibetan-Glo	tu	(Nagano 1982a:487)
Tibetan-Lhasa	tu	(Nagano 1982b:91)
Tibetan-Kag	tu	(Nagano 1982b:91)
Tibetan-Zhar	tu	(Nagano 1982b:91)
Tibetan-Dangar	tu	(Nagano 1982b:91)
Thakali	tu	(Benedict 1979:23)
Manang-Prakaa	tu³	(Hoshi 1984:160)
Manang-Gyaru	tu¹	(Nagano 1984:208)
Chin (Zo)-Ahraing K'umi	thu¹	(Luce 1985:86)
Chin (Zo)-Ma Tu Pi	thu⁴	(Luce 1985:86)
Chin (Zo)-Zo Tung	thu⁵	(Luce 1985:86)
Chin (Zo)-Tan P'um	thu⁵	(Luce 1985:86)
Chin (Zo)-Awa K'umi	ăthu	(Luce 1985:86)
Lepcha	a tŭ	(Benedict 1979:23)
Karen-Palaychi	zù	(Burling 1969:60)
Chin (Zo)-Kualsim	shu¹	(Luce 1985:86)
Chin (Zo)-Hualngeu	shu²	(Luce 1985:86)
Chin (Zo)-Tedim	shu²	(Luce 1985:86)
Chin (Zo)-Asho (Sandoway)	ă`ʃü²	(Luce 1985:87)
Chin (Zo)-Wo Ma Tu	ʃu³	(Luce 1985:87)
Chin (Zo)-Xongsai	ʃu², su²	(Luce 1985:86)

6. *bat < *mat

Sak-Bawtala	²ăpɑʔ⁴	(Luce 1985:62)
Ganan	pɑʔ⁴	(Luce 1985:62)
Kadu (Kantu)	pɑʔ³	(Luce 1985:62)
Sak-Bawtala	ăpaʊ	(Luce 1985:62)

7. *b(j)et < *mat

Sak-Dodem	ăpɛt	(Luce 1985:62)
Akha	à bè?	(Benedict 1979:31)
Lahu	t ʃa pè?	(Benedict 1979:31)
Kanauri	phe:ts	(Bailey 1910:702)

Tangsa	pè 'vagina'	(Bandyopadhyay 1989:80)
Phunoi	pè tò	(Benedict 1979:31)
Sani	pæ⁵⁵	(Bradley 1986)
Sani	pɛ⁵⁵	(Wu et al 1984:4)
Haoni	tsò pḷ	(Bradley 1985:44)
Southern Yi	pi⁵⁵	(Bradley 1986)
Moso-Weihsi	pi⁵¹	
Tamang	pi tʃi	(Benedict 1979:31)
Bahing	pi si	(Benedict 1979:31)

8.	*həi, *kəi	
Limbu	hi rā	(Benedict 1979:30)
Tangkhur Naga	hai [həi]	(Bhat 1969:68)
Mru	hai²	(Luce 1985:88)

Austro-Tai Variants:
> *bat, *mat, *dzu b(j)et, *dzuk, *dzu, *b(j)et

1.	*bat	
Sui	pat⁷	(Benedict n.d.a:3)

2.	*dzu b(j)et	
Saisiyat-Tungho	topiʔ	(Li J.K. 1978:163)
Saisiyat-Taai	topiʔ	(Li J.K. 1978:163)
Japanese-Kanagawa	tubi	(Narusawa 1986:128)
Japanese-Tokyo	tu:bi	(Narusawa 1986:128)

3.	*dzuk	
Isamorong	tʃoktʃok	(Tsuchida et al 1987:43)
	'sexual intercourse (to have)'	
Malay	ancuk	(Abas 1983:14)
	'to copulate, unite with'	
Indonesian	ancuk	(KBITH 1976:20)
	'to copulate'	
Japanese-Shizuoka	otʃoko	(Narusawa 1986:128)
Be	ɑuʔ5	(Hashimoto 1980:158)

4.	*dzu	
Japanese-Osaka	otʃotʃo	(Narusawa 1986:128)
Japanese-Tokushima	ososo	(Narusawa 1986:128)

5.	*mat	
Japanese-Yamagata	maɛʃo	(Narusawa 1986:128)

Zhuang-Wuming	ma:i[6]	(ZHCH 1984:501
6.	*b(j)et	
Japanese-Akita	beEa	(Narusawa 1986:128
Babuyan	obet	(Tsuchida et al 1987:42
Ivasay	ovet	(Tsuchida et al 1987:42
Isamorong	ovet	(Tsuchida et al 1987:42
Isamorong	isbit	(Tsuchida et al 1987:42
Japanese-Miyagi	beEʃo	(Narusawa 1986:128
Japanese-Ishikawa	tʃa be	(Narusawa 1986:128
Japanese-Saga	tʃan be	(Narusawa 1986:128
Fiji	mbe mbe	(Dyen 1970:437)
Japanese-Ibaraki	bebe	(Narusawa 1986:128)
Japanese-Tokyo	bebe	(Narusawa 1986:128)
Mulam (Mulao)	pE[6]	(Benedict n.d.a:3)
Japanese-Okinagarabejima	bi:bi:	(Nakamoto 1981:77)
Japanese-Okinagarabejima	bi:bi	(Nakamoto 1981:77)
Ivasay	bi:bi	(Tsuchida et al 1987:42)
Japanese-Okinagarabejima	bibi	(Nakamoto 1981:77)
Isamorong	bibi	(Tsuchida et al 1987:42)
Atayal	pipi?	(Egerod 1980:470)
Miao-White	pì? (low checked tone)	(Benedict 1975:417)
Japanese-Okinawa	pi:	(Nakamoto 1981:77)
Japanese-Amami Oshima	pi	(Nakamoto 1981:77)
Mokilese	pi	(Harrison, Albert 1977:162)
Japanese-Kikaijima	φi	(Nakamoto 1981:77)
Japanese	hehe	(Narusawa 1986:128)
Zhuang-Wuming	hi[1]	(ZHCH 1984:425)
Tai Khamti	hi[4]	(Harris 1976:138)
Lao	hi	(Li F.K. 1977:253)
Ahom	hi	(Li F.K. 1977:253)
Shan	hi	(Li F.K. 1977:253)
White Tai	hi	(Li F.K. 1977:253)
Nung	hi	(Li F.K. 1977:253)
Thai	hi:[5]	(Sakamoto 1976:44)
Japanese-Okinawa	hi:	(Narusawa 1986:128)
Japanese-Kagoshima	hi:	(Nakamoto 1981:77)
Japanese-Amami Oshima	çi:	(Nakamoto 1981:77)
Japanese-Amami Oshima	çi	(Nakamoto 1981:77)

Bibliographic Note:
This appendix cites two sources in an abbreviated form; both are listed in the bibliography.
KBITH refers to Kamus Bahasa Indonesia-Tiong Hoa Dengan Ejaan Baru.
ZHCH refers to Zhuang-Han Cihui.