`Leg` in Southeastern Chinese Dialects
and Tibeto-Burman Root *pey `leg`[1]

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In his recent monograph *God and the Sino-Tibetan Copula* . . .
Matisoff (1985) presented etymologies for the following
Tibeto-Burman roots: *r-pay `spleen`; *r-may `tail`; *-ley
`tongue`; and *pey `leg`. With the first two of these roots he
was able to associate cognate Chinese graphs along with
Karlgren's Archaic and Ancient Chinese reconstructions for them,
namely, [脾] *b'iěg and *b'jiě `spleen, tripe`, and [尾] *miwər
and *mjwěi `tail`. Although he did not list Chinese graphs and
their Archaic/Ancient Chinese reconstructions cognate with his
roots *pey `leg` and *-ley `tongue`, forms from a number of
southeastern Chinese dialects point to Chinese etyma which appear
to be cognate with these two roots on the basis of their very
close phonetic and semantic similarity. Furthermore, in the case
of the Chinese forms meaning `lower leg` and `thigh`, the
corresponding graph even shares the same phonetic as the graph for
`spleen`. The following discussion draws upon my recent research
on bodypart terms in southeastern Chinese dialects to provide the
evidence for establishing a cognate relationship between the
Chinese graph [髀] and Matisoff's Tibeto-Burman root *pey `leg`
(his root *-ley `tongue` is discussed in Bauer 1986b).

Under a section he entitled "New *-ay or *-ey etymologies
attested only in Kamarupan languages", Matisoff (1985:45) set up
the root *pey for `leg` on the basis of the following forms listed
in Table I below:

Table I. *Etymology for Tibeto-Burman *pey `leg`*

Tiddim	phei	`thigh`
Lushei	phei	`foot, leg`
Lakher	phei	`leg`
Tangkhul	(ā)phei	`foot; leg` (Pettigrew)
Tangkhul	phéy	`foot; leg` (Bhat)

Bearing a close phonetic and semantic similarity to these
Tibeto-Burman forms, the comparable Chinese morphemes appear in

Table II below which lists lexical items meaning `lower leg` and `thigh` which are found in a number of southeastern Chinese dialects belonging to the Yue, Hakka, and Min families. Common to all of these items is a monomorphosyllable shaped variously as /pei.3/, /pɐi.3/, /pi.3/, and /pi.5/ and represented by the graph [骲]. A literary term meaning `thigh` or `thighbone` (Wu 1983:35), this graph and its corresponding morphosyllables do not occur in northern Chinese dialects where morphosyllables associated with [腿] are found instead.

Table II. *`leg` and `thigh` in Southeastern Chinese Dialects.*

Dialect	Transcription	Graph	Gloss
Yue-Hongkong	siu.3 pei.3	小 骲	`lower leg`
Yue-Hongkong	tɑi.6 pei.3	大 骲	`thigh`
Yue-Conghua, Guangdong	tɑi.6 pɐi.3	大 骲	`thigh`
Hakka-Danshui, Guangdong	kœk.7 pi.3	腳 骲	`leg`
Hakka-Danshui	thɑi.5 pi.3	大 骲	`thigh`
Hakka-Wuhua, Guangdong	siau.3 pi.3	小 骲	`lower leg`
Hakka-Wuhua	thai.6 pi.3	大 骲	`thigh`
Hakka-Pinghe, Fujian	kio.8/7 pi.3	腳 骲	`thigh`
Hakka-Meixian, Guangdong	kjiɔk.7 pi.3	腳 骲	`thigh`
Hakka-Sixian, Guangdong	thɑi.5 lɔ.1 pi.3	大 ? 骲	`thigh`
Hakka-Taidong, Taiwan	se.3 kiok.7 pi.3	小 腳 骲	`lower leg`
Hakka-Taidong	kiok.7 pi.3	腳 骲	`thigh`
Min-Hongkong	tua.6 pi.5	大 骲	`thigh`
Min-Chaozhou, Guangdong	kha.1 pi.5	骹 骲	`thigh`

For this graph Karlgren has reconstructed two forms in Archaic Chinese, GS#874f *b'ieg and *pi̯ĕg, and two forms in Ancient Chinese, *b'iei: and *pji̯e:; and he has glossed it as "femur, head of femur, haunch" (Karlgren 1940:356), i.e., `thighbone' or `thigh'. The variation between voiced and voiceless initials in both the Archaic and Ancient Chinese reconstructions for this graph reflects its somewhat anomalous tonal development from Archaic/Ancient Chinese to the modern dialects, a matter to be discussed below. The *Gujin Ziyin Duizhao Shouce*'s specifications based on the *fanqie* of two 11th Century rhyme books, the *Guangyun* and *Jiyun*, indicate that this graph had the Ancient Chinese voiced bilabial stop initial *b- [並母] and that it belonged to the *Shang* tone category and the [薺] rhyme of Division Four (Ding 1981:460. Chang Kun's comparative table of the Ancient Chinese rhyme reconstructions developed by various Chinese historical phonologists for this Division Four [薺] rhyme lists *-iei for Karlgren, but the reconstructions of Pulleyblank and Li Rong omit the i-onglide (Chang 1966-67:22). Chou Fa-Kao has reconstructed Archaic Chinese *bjie̯/*pjie̯ and Ancient Chinese *biɪ/*piɪ (Chou 1982:405). On the basis of this information, we can say that the Ancient Chinese reconstruction is in the neighborhood of *biei.

With regard to the phonological development of morphosyllables associated with this graph from Ancient Chinese to the modern southeastern dialects, it is worth noting that while the initial has followed the majority pattern of devoicing from `*b- to *p-, the historical development of the tone category from Ancient Chinese *Shang* (this would be represented by .4 in Table II if there were any modern forms in this tone category) to the modern dialects' *Yin Shang* (equivalent to .3 in Table II) has not followed the majority pattern for graphs with *b-initial and the *Shang* tone. Taking modern standard *Yue* (or Cantonese) of Hongkong as a representative southeastern Chinese dialect for tracing the historical development of 27 graphs with the *b-initial and *Shang* tone category, we see in Table III below a two-way split in the *b-initial and a five-way split in the *Shang* tone reflected in 28 contemporary *Yue* pronunciations of these 27 graphs as recorded in *Lishi Zhongwen Zidian* (Li 1980).[2]

Table III. *Initial and Tonal Developments in Modern Standard Yue of 28 Pronunciations for 27 Graphs with Ancient Chinese *b-initial and Shang Tone.*

Ancient Chinese	Modern Yue Initial	Modern Yue Tone Category	# of Items	% of Total
*b-/Shang	p'-	.4 *Yang Shang*	11	39%
	p-	.6 *Yang Qu*	10	36%
	p-	.3 *Yin Shang*	3	11%
	p-	.1 *Yin Ping*	2	7%
	p-	.5 *Yin Qu*	2	7%
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			28	100%

From Table III above we can observe two main patterns of tonal development in the majority of the graph pronunciations, i.e., 21 out of 28 or 75%: about half of this majority group (11) has remained in *(Yang) Shang*, while the other half (10) has moved over to the *(Yang) Qu* tone category. The tonal development of [觲] /pei.3/ from the lower register *(Yang) Shang* (to which graphs with Ancient voiced initials belonged) to the upper register *(Yin) Shang* (for graphs with Ancient voiceless initials) which has occurred in Yue as well as in most of the other southeastern dialects listed in Table II is found in the pronunciations of only a few graphs, i.e., 3 out of 28 or 11%. In other words, that it did not follow either one of the two "regular" (majority) patterns may indicate that the devoicing of its initial had already preceded that of the majority of its lexical brothers, so that it behaved as though it historically had a voiceless stop initial when the mass of lexical items with voiced stop initials subsequently underwent devoicing and were redistributed into what were to become their modern *Yue* tone classes (in modern standard *Yue* the number of tone categories doubled and the former voiced/voiceless distinction in stop initials belonging to the same tone category became rephonologized through corresponding differences of lower/higher tone values). This is to say that the devoicing process did not affect all lexical items with *b-initial and *Shang* tone simultaneously, but rather in its initial stage it operated sporadically upon the lexicon, i.e., on 25% of the items which now would be categorized as "exceptional" with respect to their historically-voiced stop

initial and distribution in the modern tone categories, *via* lexical diffusion.

As mentioned earlier, Matisoff has cited Chinese graphs and Karlgren's Archaic and Ancient Chinese reconstructions which are cognate with the two Tibeto-Burman roots *r-pay 'spleen' and *r-may 'tail'. From a comparison of these two roots and the roots for which no cognate Chinese graphs were listed with the corresponding forms in southeastern Chinese dialects, what kind of pattern can we observe? Again taking *Yue* as a generally-representative southeastern Chinese dialect for comparative purposes, we can note a regular correspondence between the rhymes *-ay and *-ey of the four Tibeto-Burman roots and the /-ei/-rhyme of Yue-Hongkong: for the first two Tibeto-Burman roots the corresponding forms from Yue-Hongkong are /phei.2/ 'spleen' and /mei.4/ 'tail'; with Tibeto-Burman roots *pey 'leg' and *ley 'tongue' we can match Yue-Hongkong /pei.3/ 'leg' and /lei.6/ 'tongue'.

Endnotes

[1]This paper is a revision of a section of "Cognation of Bodypart Terms across Chinese Dialects, Part II" which was presented at the 19th International Conference on Sino-Tibetan Languages and Linguistics, Columbus, Ohio, September 12, 1986.

[2]The distribution by tone categories of 28 modern standard *Yue* pronunciations for 27 graphs with Ancient Chinese *b-initial and *Shang* tone is given below (tone values are represented by Chao tone letters):

Yang Shang ⼁12		*Yang Qu* ⌐22		*Yin Shang* ⼁35	
被	p'ei	罷	pa	髀	pei
婢	p'ei	陛	pai	坂	pan
倍	p'ui	部	pou	幕	puŋ
蓓	p'ui	簿	pou		
髀	p'iu	辨	pin	*Yin Ping* ⼐55 ⼁53	
殍	p'iu	辯	pin	鮑	pau
抱	p'ou	笨	pan	辮	pin
誹	p'in	伴	pun		
牝	p'an	拌	pun	*Yin Qu* ⊣33	
蚌	p'ɔŋ	並	piŋ	拌	p'un
桦	p'ɑŋ			膀	pan

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