PST interrogative *ga(ng).⌣ *ka

Paul K. Benedict

The Chinese and Tibetan evidence for PST[1] interrogative *ga(ng).⌣
*ka was presented at Sino-Tibetan Conference IX (Copenhagen 1976),
accompanied by the comment, 'Cognates elsewhere in TB appear to be scarce',
with mention only of Jg. sentence-final interrogative/emphatic kha. Since
that time, however, many additional cognates have turned up, as shown in
the following table:

Notes on below Table:

> AC reconstructions after the scheme in STAL, modified in
> ACI; glosses and numbering as in GSR (those only in loan use
> marked with *). Interrogatives attested only for the earlier
> (Archaic - to ca. 750 B.C.) period are from the Shi-jing
> (except for one Yi-jing form); the later forms, from the Old
> Chinese (OC) period (of the general 'Classical' texts), are
> so designated. It is probably significant that the
> (secondarily) palatalized forms are, with one exception, from

---

[1] Abbreviations: AC Archaic Chinese; ACI (Benedict forthcoming); BL
Burmese-Lolo; CL Central Loloish; CT Chang-Tangsa (SIC: Konyak group);
GL (Matisoff 1973); GSR (Karlgren 1957); Jg. Jinghpaw; KN Kuki-Naga;
Lu. Lushai; MC Middle Chinese; Mk. Mikir; Mt. Meitei; OC Old
Chinese; P Proto-; PL Proto-Loloish; PL (Bradley 1979); PT
Proto-Tamang; ST Sino-Tibetan; PST Proto-Sino-Tibetan; STAL (Benedict
1976); SIC (Benedict 1972); TT (Benedict 1983); WB Written Burmese; WH
West Himalayish; WT Written Tibetan.

the OC period. There is clear evidence for a tonal 'form class' here: all < *A except g'i̯o:,- < *B (∿ sandhi tone); note that on the TB side the PBL cognates also point to tone *A. The <u>GSR</u> glosses are greatly simplified; see Dobson 1962: 141 ff. for the complex details.

AC 55a　乎　g'o 'final part. of exclam. and interr.'
AC *49a'　胡　g'o 'how, why, what'.
AC 95p　詎　g'i̯o:,- 'how, <u>num</u>' (OC)
AC *1f　·何　g'a 'which, what, how, why'; also (OC) 'where'

<u>TB</u>	<u>PST level</u>	<u>AC/MC</u>	
WT ga-	*ga	乎∿胡	g'o/ɣuo
Jg. gə-∿kə-		詎	g'i̯o/g'i̯wo:,- (palatalized)
Mk. ko- < *ga-			
KN/Mt. *[g]a-			
	∿ *gâ	何	g'â/ ɣâ (Amoy hô)
	∿ *gwa	瑕遐	g'ɔ / ɣa
PL *[s-g]a	*s-ga	歟與	sgi̯o/i̯wo (palatalized)
	∿ *s-gwa	邪	sgi̯ɔ /i̯a (palatalized)
WT gang	*gang		
PL *[s-g]ang	*s-ga(·)ng	庸	sgi̯ung/i̯wong (palatalized)
	*ga-i	柔	g'ieg/ ɣiei < *ga·y
	*ga-t	曷	g'ât/ ɣât < *ga·t
WH *kha	*ka		
PT *kha-			
PL *ʔa- < *s-ka-	*s-ka		
	*s-ka-n	安	s-kân/ ʔân < *s-ka.n
WH *kha-i	*ka-i		
Limbu á-khé(n)	*a-ka-i(n)		
	*s-ka-in	焉	s-ki̯an/ ʔi̯ăn < *s-ken

Notes: (continued)

AC *33h　瑕　g'ɔ　'how, why' (OC)
AC *33j　遐　g'ɔ　'what, how'.

AC *89b	與	sgi̯o	'final interr. part.' (OC)
AC 89e	歟	sgi̯o	'final interr. part." (OC)
AC *47a	邪	sgi̯ɔ	'interr. part.' (Yi-jing)
AC *1185x	庸	sgi̯ung	'how' (OC)
AC *876d	絭	g'ieg	'why, what' (OC)
AC 313d	曷	g'ât	'what, where, when, how, why'
AC *146a	安	s-kân	'how; also (OC) 'where, what'
AC *200a	焉	s-ki̯an	'how' (also 'final part.)

WT gang 'who, which' (dial. also 'what'); gang-na ∽ ga-na 'where'; gang-la ∽ ga-la 'whither'; gang-du ∽ ga-ru 'whither, where'; ga-tsam 'how (many, much, long)'; ga-tshod 'how much'; ga-zug 'how'; ga-re 'where is' (-re < PTB *ray 'to be').

Jg. gə - (often kə - in Hanson) is general interrogative.

Mk. ko- < *ga- (regular shifts: STC: 21, 58) is also a gen. interr.

KN (forms from Marrison 1967): Tangkhul ka-ˀ and Yimchungrü kə- (<*ka-) in 'when', 'where' and 'why'; Khoirao ka- in 'how'; Lotha ko- (<*ka-) in 'how', 'when'; Meitei ka- is gen. interr.; all probably from an earlier *ga- but phonology not yet established.

PL *[sg]a: Atsi (Tsaiwa) khâ (<*A) 'which, what' with final -a (rather than the regular -o) for PBL/PTB *-a (cf. ngô 'I' ∽ ngá 'my'); Lahu (GL: 50-51) qhà (< *A) 'which one', qhà-thâˀ 'when', qhà-qhe 'how, what kind of'; Mpi kho²mong⁴ (kho² < *A) 'when', kho⁶-lo⁴ (kho⁶ < *B) 'how much'; Nyi Lolo kha- is gen. interr.; Jino (CL) khɔ³ so³ (khɔ³ < *A) 'who'. The Lahu form is on the unanticipated tone ˋ, regularly associated with (reconstructed) plain or voiced initial (GL:23), neither yielding an aspirated stop. Mpi has a contrast between aspirated and unaspirated stops which appears to reflect an earlier *ˀg- vs. *s-g- or *sg-, etc. (PL:139), and the aspirated stop in kho²- ∽ kho⁶ - here points to PL *s-gaᴬ or *sgaᴬ (∽ *B in Mpi). This would also serve to explain the Lahu qhà with its 'wrong' tone as well as the Atsi, Nyi Lolo and Jino forms, yet an allofamic PL *kaᴬ can scarcely be excluded.

PL *[sg]ang: Lahu has qhɔ̀ as an allofam of qhà: qhɔ̀ 'which one, where', qhɔ̀-qhe 'where, how, what kind of', on the same 'wrong' tone. Lahu final -ɔ regularly represents PL *-ang or *-aw (GL:14), suggesting PL *[sg]ang here. WB has the nominal affix -kau: (< *B) 'where, what of',

hence an alternative PBL *(s-)gaw^A ∽ B is a possibility here, perhaps from an earlier fused *(s-)ga-u.

WH *kha: Bunan kha 'what', kha-lak 'why'; Thebor kha 'who'; Rangkas kha 'what', kha-lei 'why'; Darmiya kha 'what', kha-mi 'who'; Byangsi kha-mi, id.; Chaudangsi kha-car 'why'.

PT *kha-: Gurung khaba ∽ khab, Thulung khala 'who'.

PL *ʔa < *s-ka: /a/ (variable tone) in all interrogatives in Akha and Lisu and in some Phunoi and Bisu; Lahu has qhȁ ∽ qhɔ̀ '(above) as well as à- in à-tha (cited above) ∽ à-thɔ̂ʔ 'what', a- in a-šu 'who' (see below); WB has ʔa-su 'who', considered an abbreviated form of ʔa-bhai-su (see below for bhai-); the loss of initial */k/ after prefixed (not cluster) *s- is regular: cf. WB *ʔap < *s-kap 'needle'; WT khab; WB ʔim < *s-k[y]im 'house'; WT khyim (Benedict 1981).

WH *kha-i: Byangsi and Chaudangsi khai 'what'.

Limbu á-khé(n) 'how [state, manner, quantity]', from *a-ka-i(-n).

It would seem that at the PST level of reconstruction *ga is to be rated as 'certain' (as things linguistic go), *ka as 'probable' or even 'very probable' and *ga(·)ng as 'possible': ***ga ∽ **ka ∽ *ga(·)ng. A fourth allofam, *gâ, is attested only by Chinese, in contrast to the situation for the deictics (see II), where both TB and Chinese supply evidence for PST *ga ∽ *gâ. The Min form here (hô) indicates that PC had *gâ rather than *gâ·-y < *gâ·-i (with regular loss of *-i in AC/MC after long /â/), thus differing from the pronominal 找 ngâ/ngâ: 'lst p. prn.' < *ngâ.-i (see analysis in II). The palatalized forms of Chinese, a trademark of the language, hardly require the setting up of distinct early allofams but the labialized forms (final -ɔ < *-wa; see STC: fn. 487) are not so readily explained; cf. here PST *k(w)a 'crow/raven': PTB mainly /ka/ forms (STC: fn. 284) but WT kha-ta ∽ khwa-ta; Mt. kwak < *kwa/k[wa]; AC/MC 鳥 (61a) s-ko/ʔuo < *s-ka and 鴉 (37h) s-kɔ / ʔa < *s-kwa, also (palatalized with secondary voicing) 騜 (89k) sgi̯o/i̯wo < *s-ga (from same GSR-89 series as the above-cited interrogative 與 ∼ 欺 (89b,e) sgi̯o/i̯wo).

The *ga(·)ng allofam probably represents an earlier reduplicated *ga/ga with secondary nasalization (the AC/MC form also reflects vocalic length, associated with the reduplication), as indicated by the unique union of two of the Chinese interrogatives in a passage from Zhuang-zi (OC

text): 庸詎 (1185x, 95p) sgi̯ung/g'i̯o: 'how', from *s-ga·(ng)-ga
(non-phonemic vowel-final length), in sentence-initial position with
another interrogative as final: 乎 (55a) g'o < *ga! The status of
*ga(·)ng at the PST level is very much dependent, of course, upon whether
PL or PBL final *-ang rather than the alternative *-aw can be established
for Lahu qhɔ̀, especially in view of the fact that a number of special
Chinese/Tibetan pairings appear to derive from a relatively late (post-PST)
horizon (STAL: 172 ff.).

As might be anticipated, the Chinese cognates exhibit frequent
*s-prefixation along with some dental suffixation: *-i, *-n and *-t (or
*-s, which yielded -t in AC/MC). An early aspirated/tonal (< *B) variant:
*s-khân/xân: is represented by the modern Bai (Minjia) xâ-lè 'what/which',
xâ-nì 'who/which' (cf. Bai xâ 'Chinese'; hàn (pinyin), from 漢 (144c)
xân/xân-. The interrogative s-ki̯an < *s-ken <*s-ka-i-n is paralleled by the
pronominal 言 (251a) ngi̯an/ngi̯ɒn (OC: loan use) '1st p. pron.', from
*nga-i-n (see II). The evidence for prefixed *s- is hard to come by in TB,
with only reconstructed PBL forms available, while dental suffixes are
limited to isolated examples from WH and Limbu (Kiranti group), none of it
justifying the reconstruction of specific affixed forms for PST.

Beyond all this, however, one must wonder whether or not this *-i is
in any sense to be identified with the *i of the basic *i ∼ *u ∼ *a
deictic triangle described for TB in Benedict (II). To carry this further,
could the interrogative *ʔa- of Loloish be referred to the *a of the
triangle (rather than < *s-ka) and compared with Miri o-ko 'what, which'
(cf. śe-ko 'who'), from *a-[g]a? The -ko is a locative element ('place'),
connected with the widespread TB *ka ∼ *ga (∼ -â vocalism) deictic/
locative root (Benedict: ibid). This root has several cognates in Chinese,
some reminiscent of the interrogatives, e.g. 所 (91a) s-gi̯o/si̯wo: 'where,
the place where', from *s-gaᴮ (palatalized), with an early (PC level)
doublet *s-gâᴮ reconstructable on the basis of the deviant Modern Chinese
(pinyin) suǒ; cf. the g'o < *ga ∼ g'â < *gâ interrogative doublet! It
seems possible, perhaps even likely, that these forms are somehow related,
with prefixation and/or tone playing a role. Additional correspondences of
this kind, including two certain cases of 'mixing', are presented below
with a view toward possible expansion of this line of inquiry in the
future:

*su: PBL has *su^A 'remote 3rd', along with *ʔa-su^A > *ʔə-su^A 'who', yet northern TBH languages (WT, Tsona Monpa, Chepang, Thakali, Newari, Sunwari) regularly have /su/ forms for the interrogative 'who', KN has *sV (vowel undetermined), id., Garo has sa, id., Lepcha has sa- with interrogatives and, within BL itself, Nyi Lolo has an interrogative /sa/; cf. also AC/MC 誰 (575u) śg̣i̯wər/źwi 'who', apparently from *s- (palatalized) + *way (copula) = 'who is' (Thurgood 1981, 1982; II). Should the basic PTB/PST interrogative here be set up as *sa, on the basis of the Garo/Nyi Lolo vocalism, with the /su/ forms representing an old fusion with *u 'that' of the basic triangle? That would explain the deictic feature of PBL *su^A 'remote 3rd' but why the disappearance of the interrogative feature, requiring *ʔa- to convert the form into 'who'? Could the *ʔa-have been added redundantly, with   re-analysis of the *su^A (glossed in WB as 'person')? It is possible, in theory, that a basic deictic feature has been retained in BL but shifted to an interrogative feature elsewhere but the widespread distribution of the latter speaks against this view.

*dâ: see the analysis in II; this element appears to be basically (at the PTB/PST levels) an emphatic with variable 'this' and 'that' deixis but both Chinese and Bai have interrogatives derived from the root (one Bai form) or from affixed forms: *dâ-i ∼ *a-dâ-i (*a-d- = ʔa-d- > ʔd- > n-). Only one parallel in TB has been uncovered to date: Chepang doh 'what', from *s-dâ (see Benedict 1983bis for the phonology), perhaps with interrogative *s- (see above).

*tsa: see the analysis in II: PT *tsa^A 'that'; perhaps also WB tsa (< *[ts]a^A) 'thing'; Danu (Yabu 1981) has a directly comparable form: sa (< [ts]a^A) 'what, where; (comp.) how much/many; what kind of'; cf. also the Garo and Nyi Lolo interrogative /sa/ (above).

*ga: for AC/MC note 乎 g'o/ɣuo 'interrog. part.' (above); also a locative ('at, in, at side of'), from *ga; the indicated PST-level *ga is a possible source through early fusion (*ga-u) of WB -kau: 'where, what of' and perhaps also Lahu qhɔ̂ 'which one, where' (see above); Lisu has what appears to be the precise cognate: gɔ⁴ < *gaw^A (tonal agreement with Lahu) but in the meaning 'that', again suggesting an earlier fusion with the basic *u 'that'. The likely extra-BL cognate: KN *[g]a·w: Maring kau ∼ kauwe 'what', kauyayu 'why'; Maram kausanduyu 'how' (cit's from Marrison 1967) points to an earlier interrogative rather than deictic parameter,

strongly indicating that in at least this one instance the latter was a secondary development, if indeed the forms truly are related.

*pa ～ *ba and *ma: interrogatives of this general shape appear in WB as well as the Jg./CT/BG block of languages. Dimasa has ba-ra 'where' (-ra is locative element), ba-khali 'when'. The general interrogative in WB is bhai, apparently a suffixed *-i derivative. WB also has bha 'what (nominal)', which appears to be an abbreviated version of the alternative bhai-ha (-ha 'thing') while Jg. has phā 'what', perhaps a loan from Burmese (cited in Matisoff 1974: No. 80). Apart from Dimasa, BG exhibits a general interrogative *ma(-i): Bodo ma, Garo mai < *ma-i (late development, since Garo has final -e < PTB *-ay). Within CT, a Jg./BG transitional group (STC: 6-7), Phom has a general interrogative me- (～ mə-), from *m[ay]. PTB *ba (-i) ～ *ma (-i) can be set up as a general interrogative on the basis of these forms, with a distribution that is particularly striking, especially in view of the apparent lack of any other possible cognate in BG or CT for the *ma root.

*pi: represented in AC/MC by 被 (25g) pia/pyie̯: < *-pi[B] 'that; 3rd'. Cantonese has the general interrogative 邊 (224c) pín (<*A), regularly from an AC/MC *pien/pien < *-pi·n, apparently a suffixed *-n derivative of the above; note the vocalic length as reflex of the suffixation (*-i-n). The parallel TB derivatives, historically morph-for-morph cognates, show a temporal (future) reference, the WB representative displaying the same vocalic length after suffixation: phin:- < *pi·n- '(comp.) day after the day after tomorrow'.

*mi: apparently not represented as such in Chinese but Cantonese has another general interrogative: 乜 mát, on a 'high' (surd initials) tone, regularly from an AC/MC *[s]mi̯ĕt/mi̯ĕt < *[s-]mit; this appears to parallel pín (above) in a rough way but from *mi instead of *pi, and with suffixed *-t (or possibly *-s) rather than *-n, also without vocalic lengthening. WB has mań 'what', mań-su 'who', identical in shape with -mań 'future tense marker' and apparently from the same earlier *min < *mi-n, hence historically the same dimorph! The latter has been compared (II) with CT *mi(-n), also a future tense marker. If the admittedly provisional analysis here and in II is correct, both the WB interrogative and the WB/CT future tense marker represent divergent semantic developments from a deictic/locative *mi while, within the same group of allofams, the

Cantonese interrogative and the WB future-time designator ('day after the day after tomorrow') havesprung from the parallel *pi. And thus word families beget conglomerates!

<center>Addendum   [10/8/83]</center>

The data gap in this paper for Nungish has recently been filled by an excellent work on Tarung (=Trung), spoken in Yunnan (SW China); see Sun Hong-kai, <u>Outline of the Tarung Language</u>, National Minorities Press, Beijing, 1982 (in Chinese). The Nu (Salween) River dialect of this language shows forms reflecting PTB *ka as well as *ga (!) (tone marks omitted): kha 'which', khadɔ 'where', kame 'who'; also (general) interrogative verbal prefix gə-[gɨ-] < *ga- ('zero stress' form). Isasmuuch as Nungish forms a supergroup with Burmese-Lolo (<u>STAL</u>: fn. 14), this evidence supplies a key link with the PBL *ʔa < *s-ka interrogative.

The 'standard' Tarung River dialect, which appears to lack cognates for the above, has interrogative verbal prefix ma-, corresponding to Nu River gə-. This is distinct from the verb prefix (in both dialects) for negation: mə- [mɨ-], the 'zero stress' form descended from PTB *ma-, yet it is identical (on same high tone) with the negative *ma- derived from mə-+ prefixed a- in verbal forms! The interrogative ma-, however, probably represents the fully stressed PTB *ma-, via the yes/no interrogative marker in disjunctive questions, as analyzed in Thurgood (1983) It is most intriguing, in view of this postulated development, that the Tarung River, but not the Nu River, dialect lacks the simple disjunctive question formed with the regular m - prefix for negation.

<center>Addendum   [1/21/84]</center>

Thurgood documents the appearance of the interrogative marker *ma in several TB groups: Tibeto-Kanauri, Bodo-Garo, Chang-Tangsa and Kuki-Naga, with origin in the elision of the final verb in a yes-no questions: *V(erb)-ma-V(erb) > *V-ma. The writer had wondered about the preverbal position of the element in Trung, as opposed to the general postverbal position, but Thurgood (pc) pointed out to him that this element also occurs preverbally, both in Gyarung and Kham. It would appear, at least to

the writer, that the preverbal position is, if anything, the more 'natural' (because of juncture), arising from elision of the first rather than the second verb: *V-ma-V > *ma-V.[2]

Thurgood's study has illuminated the /ma/ interrogative forms in Tibeto-Burman, which relate to the PTB negative *ma rather than to the homophonous (tonally distinct?) deictic, but the other examples of deictic-/interrogative 'mix' continue to present a challenge. Perhaps one should recognized a 'deictic' as opposed to 'verbal' disjunctive questions: 'that? not-that?' (with speaker pointing first in one direction, than another). The suggested development would parallel that seen the the 'verbal' form, as outlined above, with a similar two-way possibility of elision. If this were in fact to obtain, one could anticipate the involvement of 'that' rather than 'this' deictics in 'mixes' of this kind and, indeed, the forms involved are all of this type: /su/; /dâ/; /tsa/; /ga/; /pa/ ~ /ba/ (but see above for /ma/; /pi/ and /mi/. Even more to the point, one could also anticipate the uncovering of *m(a)- prefixed as well as *-m(a) suffixed forms, as represented by the following pair:

PTB *pa (deictic): see II: 85 and add WT pha 'root for the terms: beyond, onward, farther on; yonder; also (coll.) he'; Jg. interrogative phā (< *paᴬ) but the conservative Khauri dialect has npha < *maphā, with n- the regular (reduced) derivative of PTB negative *ma (SIC: 97). The suggested development has been: *pa? ma-pa? 'yonder? not yonder?' > *ma-pa > nphā > phā.

PTB *ha (deictic): see II: 91, noting especially Mk. ha 'yonder', with final *-a for the 'regular' *-o because of the initial *h- (contra II < *s-ka), and add Tib. (coll.) ha, glossed as 'nearly = pha [see above]: yonder, farther off'; WT interrogative ham, with suffixed -ma for earlier PTB negative *ma (cited by Thurgood ap. Simon). The suggested development has been: *ha? ma-ha? 'yonder? not-yonder?' > *ha-ma > ham.

These are attractive instances of the interplay of deictic and negative elements but one would like to see additional material along these lines before attempting to set forth a general explanation of the under-lying problem of deictic/interrogative 'mix'.

---

[2] Editor's note: From a discourse perspective, it is the second verb which is semantically redundant and thus the most likely to delete.

References

Benedict, P. K. 1972. Sino-Tibetan: a Conspectus. Contributing editor:
      James A. Matisoff. Cambridge University Press.

_____. 1976. Sino-Tibetan: another look. JAOS Society 96.2:167-97.

_____. 1976b. Archaic Chinese affixation patterns. Sino-Tibetan
      Conference IX, Copenhagen.

_____. 1980. The PST tone/accent system: additional TB data. Sino-Tibetan
      Conference XIII, Charlottesville.

_____. 1981. TB/Karen cluster vs. prefix *s-. Sino-Tibetan Conference
      XIV, Gainesville.

_____. 1983. This and that in TB/ST. LTBA 7.2:75-98.

_____. forthcoming. Archaic Chinese initials. To appear in Papers
      presented to Wang Li on his Eightieth Birthday.

Bradley, D. 1979. Proto-Loloish. Scandinavian Institute of Asian Studies
      Monograph Series, No. 39. London and Malmö: Curzon Press.

Dobson, W. 1962. Early Archaic Chinese. U. of Toronto Press: Toronto.

Karlgren, B. 1957. Grammata serica recensa. BMFEA 29.1-332.

Marrison, G.E. 1967. The classification of the Naga languages of
      North-east India. Ph.D. dissertation. University of London. Vol. I,
      292 pp., Vol. II, 460 pp.

Matisoff, J. A. 1973. The grammar of Lahu. UCPL 75.

_____. 1974. The tones of Jinghpaw and Lolo-Burmese: common origin vs.
      independent development. ALH 15.2.153-212.

Sun Hong-kai. 1982. Outline of the Tarung Language. National Minorities
      Press, Beijing. (in Chinese)

Thurgood, G.W. 1981. The Sino-Tibetan copula *wəy. Sino-Tibetan
      Conference XIV. Gainesville.

_____. 1982. The Sino-Tibetan copula *wəy. Cahiers de Linguistique Asie
      Orientale 11.1:65-82.

_____. 1983. Morphological Innovations and Subgrouping: some Tibeto-Burman
      notes. Proceedings of the Ninth Annual Meeting of the Berkeley
      Linguistics Society 9:257-65.

Yabu, S. 1981. Conversational texts of the Danu dialect of Burmese. JAAS
      22:124-38.