

SOME SOURCES OF CHAMIC VOCABULARY

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This paper is a preliminary attempt to identify the sources of certain Chamic¹ and proto-Chamic² words and to discuss some implications of these identifications.

From Lee's (1966) list of approximately 700 proto-Chamic reconstructions and from the author's Jarai dictionary (Headley, 1965) 97 suspicious forms were noted. These were separated into four groups: (1) words of probable Mon-Khmer or Austroasiatic origin, (2) words of probable Indo-European origin, (3) words of probable Austronesian origin which were borrowed extensively by Mon-Khmer languages, and (4) a residue of suspicious words of uncertain origin.³

Generally, the following criteria were used to assign a set of cognates to one of the four groups. If at least one of the cognates was found in a Mon-Khmer language not occupying territory adjacent to an Austronesian language, the set was placed in group 1. If a clear Sanskrit or Pāli cognate was found, the set was placed in group 2. It is very likely that some of these sets actually represent early borrowings from Austroasiatic sources by Sanskrit-Pāli. Generally, if the Mon-Khmer cognates were found only in languages contiguous to Austronesian languages, the set was placed in group 3. The remaining words were placed in group 4.

The 97 cognate sets are listed below.⁴

Words of Probable Mon-Khmer or Austroasiatic Origin.

'around': PC *jūm. II. čum. III. PJH *yum; BAH jūm; PSB *jūm. IV. PAC jōm 'to wrap'. VIII. V chūm 'to assemble, to join'. Cf. PC *pajum 'to meet together' and Khmer pračum.

'axe': PC *jōŋ. III. PCNB *čhuŋ; PJH *čuàŋ; PSB *suŋ.

'back': PC *rōŋ. II. kna:ŋ. III. PCNB *rōŋ; PJH *rōŋ. IV. PEK *k_ŋ; PAC krōŋ. VII. PAL krōŋ. VIII. PVM *ləŋ (?). A reconstructed form such as *kerōŋ, with the *-r- undergoing normal Mon-Khmer shifts to -n- as in Khmer or -l- as in Vietnamese, is possible. The PVM form may be related to Ancient Thai *hlaŋ^o 'back'.

'to bark': PC *groh. II. pruh (?). III. SED kōu; PM *groh; ST bluh. IV. PEK *krōh. VII. PAL brō; Kumkaw brōh. It appears that two roots are involved: *groh and *bruh, both of which refer to barking or spitting (as a cat). Cf. CHR vrūh 'to spit', Koho bruh 'to spit,' Khmer prueh 'to spit', and PAL Kār-prūh 'to spit (of a cat)', Mon pruh 'to squirt from mouth or trunk', PMK (Shorto, 1973) *[p]-ruəs, Cham pruh 'to spit'.

'basket': PC *la?i. II. l?ey. III. Koho lə?i. CHR la-i.

'bear': PC *čageu. III. SED rokōu; BAH Šogāu; PSB *čigāw. IV. BR sakāu. VIII. PVM *kéw. Misc. Achinese čagēë.

- 1.7 'bind, tie, catch': PC *čap. I. čap. II. čap. III. MN čap; CHR čap; SR čap. IV. BR koup (?). VI. čop 'touch'. VII. PAL čap 'attach'. VIII. V chap 'to join/assemble'. Misc. various Malacca languages: če:p, ča:p, čiap; PMK (Shorto, 1973) *[b]cap 'to adhere'.
- 1.8 'bird': PC *č̥im I. čhi:m, čhem. III. PCNB *čhem; PJH *č̥im; PM *s̥im; ST čum; CHR sum. IV PEK *č̥_m; BR čém; KU če:m. V. sim. VI. həčem. VII. PAL šim; LA saim. VIII. V chim M chim. Misc. HAK k'im; CAN k'am; Khasi sim. This form is clearly Mon-Khmer, possibly derived from a proto-form resembling *čim. The two Chinese apparent cognates are puzzling unless they represent borrowings from an earlier form than *čim, perhaps *k̥im.
- 1.9 'bracelet': PC *kōŋ. I. ko:ŋ. II. ka:ŋ. PCNB *akon; PJH *(a)kon; PSB *kon. IV. PEK *kon. VII. PAL kyaŋ. VIII. V cong 'curved, bent' (?). Misc. PA *gelaN (?).
- 1.10 'bridge': PC *rabāŋ. I. span. II. spien. III. ST səban; MN kban; SR rebəŋ. IV. PEK *pōŋ (?) . VI. həpən (<sabāŋ) 'paved road'. VIII. PVM *bá:n 'board' (?). Misc. Lao sa?phaan; PMK (Shorto, 1973) *pəpaan?; PAN *papan.
- 1.11 'castrate': PC *kriau. II. krlev. III. HA kriao; BAH krēo; ST kriō; SR kr(i)ao. IV. PA kreau 'castrated pig'. VIII. V xeo 'to cut off' (?).
- 1.12 'chin': PC *kaŋ. I. krəmaŋ (?). II. čaŋkaŋ (?). III. PCNB *kaŋ; PJH *kaŋ; PSB *kaŋ. VIII. V căm (?). Misc. Common Thai *gaŋ.

- 3 'choose': PC *ruah. II. re:h. III. HRE raih; SED rah; BAH r̥ih; SR roah. IV. PEK *r_s; BR r̥oh; PAC ros/reh. VI. Mon /rùi/ < Burm. rwe: < a Mon-Khmer source. VII. PAL rāh, ră?.
- 4 'citrus fruit': PC *kruai?. I. kru:č. II. kro:č. III. SED krui; BAH krūi; PSB *kroč. VI. Literary Mon (chu) krot 'orange (tree)'. Misc. NIC karoait; PMK (Shorto, 1973) *kruəc (~*kruuc).
- 5 'coconut': JAR duŋ, RA duŋ. II. do:ŋ. III. BAH doŋ; MN duŋ; ST duŋ. IV. KU toŋ. Misc. SKT tunga. The SKT form may be a borrowing from Mon-Khmer. If the other languages borrowed it from SKT, I would expect to find it more widespread, especially in Cham, where it apparently does not occur. Also the Khmer spelling is not *duňa which would be expected from SKT tuňga, but rather tūňa.
- 16 'coffin': PC *bōŋ. II. po:ŋ 'large stove' (?). III. PCNB *bōŋ; PJH. *bōŋ; MN bōŋ~buoŋ. IV. PAC piŋ (?).
- 17 'crossbow': PC *srāp. I. thna: . II. sna: . III. BAH hra: ; PSB *sena: . VI. na? (<tga). VIII. V ná; M ná. Misc. Lao na: ; NIC dona (-foin).
- 18 'to cut': PC *reh. II. re:h. III. BAH reh ~ rih 'to gnaw'; HAL reh; PM *reh; SR reh. IV. PEK *re:h.
- 19 'to defecate': PC *eh. I. ič. II. ?ač. III. PCNB *īč; PJH *īk; PSB *?e?. VI. oik (< īk). VIII. V īa, M īe. Misc. PA *ta?ih (?);

NIC aič; Khasi eit; Semang i: ; Senoi et;
Proto-Karen *?éq, SKT and PA acama 'scum' (?).
I believe that the Khmer form /?ač/, in spite
of its spelling acam(a), is not derived from the
SKT-PA form acama. The Mon-Khmer forms all
appear to be derived from a proto-form resem-
bling *?ič.

- 1.20 'different': PC *pha. III. PCNB *pha; PJH
*pha. IV. BR mpha.
- 1.21 'to drizzle': PC *halim. II. rōl+m 'shower'
VIII. V ram-ram (?). Misc. Indonesian gerimi
- 1.22 'drum': PC *sagor. II. skɔ: (<sgara). III.
PCNB *hagər; PJH *-gär; PSB *səgər. IV. PEK
*Cakʰōr; KU takūäl. VI. Old Mon siṅgir. PMK
(Shorto, 1973) *sgər.
- 1.23 'to explode': PC *patuh. I. pathuh. II.
ptuh. III. BAH dōh; HAL pətūh; PSB *bərtōh.
IV. PEK *padóh. VI. hətəh 'to suppurate,
burst'. VII. PAL pədōh. VIII. V nō (?).
Misc. PMK (Shorto, 1973) *btuh. If *-d- > n
*-h > ũ or ū then the Vietnamese form may be a
cognate.
- 1.24 'to feed/nourish': PC *čiem. I. čhem. II.
čəñčəm. III. PCNB *čhem; PJH *čiam; PSB *syā
IV. BR asiem; PAC čeam; KT čiam. VI. Old M
'cim ~ 'iñcim. VIII. M chiém. Misc. PMK
(Shorto, 1973) *nciim ~ *nciem ~ *ncuem.
- 1.25 'flat': PC *lat. II. liet. III. PM *lat;
BAH lat.
- 1.26 'fly': PC *ruai. I. roy. II. ruy. III.
PCNB *roy; PM *rəhway; ST ruei; CHR raway. I
PEK *róoy; KU ?aruay. V. KM roi. VI. rùi.

VII. PAL ruwāT. LA ruə. VIII. V ruōi. Misc.
Temiar rewāi; Car NIC inru:y.

'to fly': PC *por. III. PCNB *pär; PSB *pär.
IV. PEK *pâr; KU pa:l. VI. pɔ (<paw>). VII.
PAL pər; DA pan; LA pēu, pōi. VIII. PVM *pal.
Misc. HAK poui (?); Garo bill; Dimasa bur. Final
*-r shows the -r, -l, -n, -ø reflexes; cf. 1.22,
1.43, 1.58, and 4.8. Shafer (1952:155) cites
the Chinese piuən 'to spread the wings, to rise
suddenly (as a bird)' as a possible cognate.
Proto-Lolo-Burmese pyan¹.

'formerly': JAR dum, RA dum, CH dom. I.
the:m. II. daem. III. BAH tə:m; PSB *tə:m.
IV. BR naum; PAC tōm. VI. tōm. All of these
forms, probably from a proto-form resembling
*tə:m, had an original meaning of 'trunk (of a
tree)' in the Mon-Khmer languages.

'garlic/onion': JAR kɔdim, RA kdum 'kind of
yam'. I. ka?thiam. II. ktim. III. PCNB
*ga?d_m; PJH *gadiam; MN diem. Misc. Thai
kathiam. Misc. PMK (Shorto, 1973) *ktəm 'egg'.

'goat': PC *bube. I. phə?. II. pəpə:. III.
PCNB *bube; PJH *ba(?)be; PSB *be. IV. BR
mbei?/kupē; PAC mbé?; V. beh. VI. həbe?
(<bəbə>). VII. PAL bē; DA bo⁴bè¹. Misc. NIC
me; Thai phé?. The Thai form is probably a
borrowing from some Mon-Khmer source.

'gourd': PC *biluai; 'squash' PC *pulɔi. II.
Ipəv. III. SED plui, plɔi; BAH plui, plɔi;
CHR plɔ:y. IV. PEK *?aluy. VIII. Vn bāu.
Misc. NIC (yuan-) labu ~ lapu; MA labu; PA
*baluh ~ labuh, SKT alabu; PALI alabu, alapu.
There may be a single proto-form involved here

with metathesis as shown for the PA form.

- 1.32 'hat': PC *?duan. II. duən. III. PSB *?duān. IV. PEK *dōan. VIII. V nón.
- 1.33 'hatch': JAR čěh, RA kčeh, CH čaih. II. ſnoah 'hatched' (?). III. BAH čěh; ST čāh. IV. PE *ceeh. VIII. čē? 'split'.
- 1.34 'horn, antler': PC *tukrl. III. SED kái; JEH takoi; ST kei; SR nke. IV. PEK *ta_k^h_y.
- 1.35 'hot, peppery': PC *haŋ. II. ha:ŋ 'bitter' (?). III. PCNB *ho:ng; PJH *haŋ; MN hǎŋ. IV. PEK *ha:?. VIII. V hang 'strong flavored (of onion)'.
- 1.36 'intestines': PC *prueč (?). III. MN proč; KH proč; ST pro:č. IV. PEK *rooj; BR rual?/ruaj; KU rūāc. VI. kröt. VIII. V ruôt; M rõch. Misc. Proto-Karen *phrwè? (?).
- 1.37 'jar': JAR čěh, RH čeh, CH čaih. III. BAH čeh; HAL čeh; CHR če?. IV. PEK *čee?. VI. čeh.
- 1.38 'kite, eagle': PC *kalāŋ. I. khlaŋ. II. klaŋ. III. PCNB *klaŋ; PJH *klaŋ; PSB klaŋ. IV. PAC kalaŋ. VI. kənɛaŋ < *laŋ-laŋ. VII. PAL klaŋ. VIII. V lang; M tráng. Misc. PMK (Shorto, 1973) *(k)laŋ ~ *(k)laŋ; MA hělang; Malacca kělak, kělaŋ, kraŋ; Khasi khli:ŋ; NIC kalāŋ 'sea eagle'; Kukish *k-lāŋ; Kachin kă-laŋ; Old Burmese laŋ-tă 'vulture'; Proto-Mia *klaŋ?. The proto-Mon-Khmer form was undoubtedly *kla:ŋ. The unexpected vowel in the Khmer form is not yet explained.
- 1.39 'leaf': PC *sula. I. sla:. II. sla: 'areca'; slék 'leaf'. III. PCNB *hla; PJH *

ST la; CHR la; IV. BR sala; KT hla; KU hla:. V. KM la, hla. VI. hla?. VII. PAL hla: , LA hla?. VIII. V lá; M la. Misc. Temiar sela jehub; Senoi selak; Proto-Karen *laq. I suspect that the proto-Mon-Khmer form was *slak or *sla? (Shorto, 1973), the loss of -k ~ -? accounting for the tone in V and for the lengthening of the vowel. The two forms given for Khmer, sla: and slək may both be derived from *slak. I would have expected Pearic to preserve the -k ~ -?.

- 0 'leech (forest)': PC *plūm. I. phli:m/phle:m. III. PCNB *plə:m; PJH *plèm; PSB *plə:m. IV. PEK *plâam. VI. kłom (?). Misc. Malacca: pělum, pělom, klom, pělop.
- 1 'leg/foot': JAR jong; RA jøng. I. siŋ. II. če:ŋ. III. BAH ſe:ŋ; PSB *jøŋ. PEK *?a_ðuŋ; KT yuŋ. VI. caŋ (< juŋ). VII. PAL jung. VIII. V chān. Misc. SKT and PA jangha (?). Although it occurs in Cham, it appears to be an obvious borrowing from Khmer (see Aymonier and Cabaton page 152). The resemblance of the Mon-Khmer forms and the Indo-European form is puzzling.
- 2 'lift': PC *iǒŋ. II. yo:ŋ 'to pull'. III. PJH *yǒŋ; Koho youn; ST yô:ŋ 'hang up'. IV. BR yǔŋ 'hold in hand'. V. yǒŋ 'high'; VII. PAL kar-yong; Riang yǒŋ. Misc. HAK ki-yong.
- 3 'lime': PC *čur. II. ču:(r) 'sour'. III. CHR čur. VIII. V chua 'acid, sour'. Misc. NIC shun (?). I must regard this set as extremely tentative.
- 4 'nephew': PC *kamuēn. II. kmuey (?). III. PCNB *mon; PJH *muán; PSB *kemon. PEK *moon.

VI. kmin. Misc. Temiar kuman; PMK (Shorto, 1973) *km̥u(u)n ~ *km̥uən.

- 1.45 'open mouth': PC *(a)ha. II. ha: . III. BAH ha; PSB *ha; PJH *ha. IV. PEK *kah_?. V ha. VII. DA ha¹. VIII. V há. Misc. NIC hala (?).
- 1.46 'papaya': PC *hūŋ. I. lohuŋ. II. lhaŋ. III. PCNB *rahūŋ; PJH *hūŋ; CHR lahūŋ; ST lhō IV. PEK *_h_ŋ; BR ahŋ; PAC pahŋ. Misc. Lao hu:ŋ.
- 1.47 'peacock': PC *?amrāk. I. morak. III. PSB *brak; BAH amra; HAL amra; Lave bra:k. VI. pərāk (< mrāk).
- 1.48 'peck': JAR čōh, RA čōh. III. PCNB *joh; PJ *joh; ST čoh; CHR čoh. I suspect that the Khm form cōh 'to pick out a thorn' and Palaung čɔ:h 'to chisel' are cognates too.
- 1.49 'pull': PC *ruč. II. ro:č. III. IV. PEK *r_?; KT ro:?. VII. PAL rut 'draw in'. VIII. V rut.
- 1.50 'python': PC *tlān. II. tlan. III. HAL klān; BAH klān; CHR klān, SR klan; ST klān. IV. BR talān; PAC tulán. VI. klon (< klan). VIII. V trān. Misc. NIC tulan; Malacca tělā
- 1.51 'rhinoceros': PC *lumāh. I. romas. II. rōmīeh. III. SED rōme; HAL remaih; CHR rimīh ST remahi. IV. PEK *rama:s.
- 1.52 'river': PC *kroŋ. I. kro:ŋ. III. BAH kro SED (tea) kroŋ; HAL kroŋ; IV. PEK *kru:ŋ. V rōŋ (nam)/hrōŋ. VI. kr ŋ (< kruň). VII. PA rōŋ 'torrent, canal'. Riang kroŋ; LA kloŋ. VIII. V sông; M khōng. Misc. Thai khlo:ŋ

- 'canal'; Proto-Lolo-Burmese *laŋ¹; Old Burmese k'loŋ; Old Bodish kluŋ.
- 3 'sand': PC *čuah. II. kruəh (< gruas) (?). III. HAL čoah; BAH čoah/čuah; CHR čuəh. IV. PEK *čōah. VI. kreh (?); PMK (Shorto, 1973) *kruəs ~ *kriəs 'gravel'.
- 4 'scissors': PC *katri. II. kantray. III. Koho jetrei. VI. kot krai, krop kre. VII. PAL. gim hray. Misc. Malay < Tamil (?) kĕlĕkati 'areca-nut scissors'. Prob. from a PMK (Shorto, 1973) root *traay 'to cut/lop'.
- 5 'slap': PC *pah. II. pah 'to touch, to collide'. III. PCNB *pah 'to chop, split'; PJH *pah 'to cut, chop, split', CHR păh 'to hit, cut'. IV. PEK *-pah; BR tapah; PAC pah. VII. PAL poh.
- 6 'to smoke': PC *jup. I. čup. II. čup 'to suck'. III. HAL jǔp 'to suck'; BAH jup/yôp; ST jup. IV. PAC jup. Misc. Thai su:b; Kachin tśup.
- 7 'to soak': PC *trām. II. tram. III. PCNB *trām; PJH *trām; CHR tram, KH tram. V. čōm 'to drown oneself' (?). VII. PAL ngam; Riang tam-. VIII. PVM *ngām.
- 8 'soup': PC *būr. II. baba:(r). (<pəpɔ:r). III. PCNB *por 'cooked rice'; PJH *por; CHR por. IV. PAC apúr. VII. PAL bur 'scum, bubbles' (?). Misc. Malay bubor 'broth'.
- 9 '(hand) span': PC *čagam. II. caŋ?a:m. III. SR na:m; CHR təngam.
- 0 'split, fight': PC *blah. II. pœnleah 'to peel; to separate (The dictionary of Tandart

also gives a form pleah 'to divide'. Both Khm forms appear to be derived from leah 'to strip off--as branches':) III. PCNB *tablah; PJH *(t)blah; PSB *blah. IV. *_loah; KT blah; BR ploah. VI. prah 'scattered about'. VII. PA plōh. Misc. PA *belaq; Malay bēlah. I suspect there is a genetic relationship between the Austroasiatic and Austronesian (PC and PA) forms.

- 1.61 'spoon': PC *?auāk. II. vε:k. III. CHR ua ST uēk. Misc. Semang āweg.
- 1.62 'squirrel': PC *prōk. I. phrō:k. II. kamprok. III. BAH prok; HAL proak; PSB *pro? PM *prok. IV. BR prok. VII. PAL a-pro(p). VIII. V soc.
- 1.63 'stamp on': PC *juā?. III. PJH *jua?; PCNB *jwat; CHR jā?. VI. cēak 'to march'. Misc. Malacca jag 'to step'.
- 1.64 'swim': PC *luai. II. loy 'to wade'. III. PCNB *jalei; PJH *_lōy; CHR re; ST rē. IV. B lōi; KU looy. VI. lūi. VII. PAL lōi; LA lu Riang-Lang -ŋøy. VIII. V lōi. Misc. PA *laNuy; PMK (Shorto, 1973) *lənuy.
- 1.65 'thread, silk': PC *mrail. I. phra:y. II. pre:. III. PCNB *bray; PJH *bray; MN brai. IV. BR prâi 'bandage'; PAC parai. VII. PAL pra:y 'twist of thread'. Misc. Serting bri.
- 1.66 'thunder': PC *grōm. II. kroam 'noise of thunder'. III. BAH grēm; JEH grám; HAL gérəm. IV. PEK *kh̥rəm; KT gr̥ m; BR krúm; KU seen kroam. VIII. V sâm; M kham.

'tusk': PC *bala. I. phlok. II. pluk. III. HAL bəla; SED polá; PSB *ŋəla; MN bla; ST blük. IV. PEK *pal_k; BR paluak. VII. LA phluk. Misc. Malacca bala/bala?. It is possible that two different forms are involved here: *bəla: and *bluk, but they are so similar that I have grouped them together.

'uproot': PC *buč. I. boč. II. baoč. III. BAH buč; HRE bùč. VI. bot. VIII. V bút. Misc. PMK (Shorto, 1973) *c?booc.

'warm': PC *pa?dau. II. kdav. III. JEH tū; SED tōu; BAH tō; PSB *dūh. IV. *kitâw. VI. ketao (< ktau). There appears to be some innovating in the Bahnaric languages. Evidently the PC and MK forms are based on *-taw with two different prefixes: *kə- for MK and *pə- for PC.

'wasp': PC *hōŋ. I. aŋ. III. PCNB *oŋ; PJH *oŋ; KH oŋ; CHR oŋ. IV. PEK *hoonj. VI. haŋ (< huin̩). VII. ḥng. VIII. V and M ong 'bee'. Misc. Malacca öng, êng, hong.

'wash': PC *rau. II. riev (< rāv) 'to stir up water looking for fish' (?). III. PCNB *?ñraw; PJH *raw; PSB *raw. IV. PEK *?ara:w; KU riauw. VI. krao (< krau). VIII. V rða (?). Misc. MAL ña:w.

'write': PC *čih. III. JEH čih; HAL člh; SED čēh; BAH čih. VI. keh (?). VIII. V ch? 'lead', M čí (?) .

Words of Probable Indo-European Origin.

'cotton': PC *kapas. II. kapba:h. III. BAH kəpah; CHR pa:yh 'kapok ball'. Misc. PA *kapas; MA pokok kapas; SKT karpāsa; PAL kappāsa.

- 2.2 'horse': *aseh. II. seh. III. PCNB *aseh; PJH *(k)aseh; ST seh; CHR aseh. IV. PEK *?aseh; KU se. VI. čheh (< khyeh, khye'). VII. DA θe⁴. Misc. SKT ashva; PAL assa.
- 2.3 'image': PC *rup. II. ru:p. III. HAL rup 'to take a picture'; ST rup; SR ru:p. IV. BR rup. Misc. SKT/PAL rūpa.
- 2.4 'man': PC *manus (?). II. mənuh. III. HAL mənulh; ST bəneh. VI. nih (< mnih). Misc. SK manushya, manusha, manus; PA manussa.
- 2.5 'military; soldier': JAR to'han, RA kahan, Cham dahan. II. tiehien (< dāhān). IV. BR tahan. Misc. Thai thaha:n; SKT dāhana 'reducing to ashes' (?). I suspect that the second vowel of the Khmer form has been lengthened by analogy.
- 2.6 'net': PC *jāl. II. čiel (< jāla). III. SE čea; BAH jal; JEH jar; HAL jal; ST ja:l; KH ja:l. VI. cèa. VIII. V chài. Misc. Malacca jalā', jāla; MA jala; SKT jāla. It is difficult to determine the direction of borrowing in this set. Kuiper (1948:62-64) suggests that it was borrowed from a Proto-Munda root ḍa-ḍa 'matted, entangled'. Its occurrence in Vietnamese would appear to indicate great antiquity within Mon-Khmer.
- 2.7 'pepper': PC *amreč. II. mrič. BAH amre; ST mrač; CHR mre?. VI. pəròik. Misc. Indonesian meritja; SKT marica; Ancient Thai *brik⁴; PMK *mr[i]c (Shorto, 1973) > SKT.
- 2.8 'vehicle': PC *ra?deh. II. røteh. III. PSE *røndeh. Ménétrier (1933:125 note 1) suggests that the Khmer form was borrowed from some

Indian language during Pre-Khmer times. The SKT form ratha gives modern Khmer roat. It is interesting to speculate whether the -h is a reflex of an original Indo-European laryngeal. Cf. Hoenigswald, H.M., *Language Change and Linguistic Reconstruction*, Chicago, 1960; p. 143.

9 'venom': PC *bih. II. pih (< bisa). IV. PEK *pi:h. V. pih. Misc. proto-Indo-European *visa.

10 'Vietnamese': PC *yuān. II. yuən. III. PCNB *ywan; PJH *yuan; ST yuən; MN yuon; SR yoan. IV. PEK *y_n; BR yuan. Misc. Thai yuan; Lao ບູນ; SKT yavana 'barbarian, Greek'.

11 'voice': PC *sap. II. sap 'word, noise'. Misc. SKT shabda.

Words of Probable Austronesian Origin.

1 'ashes': PC *habu. I. phau, pa?u: . II. pheh. III. PJH *buh; MN buh; KH buh; CHR vuh. IV. PEK *b_h; BR bōh; KU phA?. V. bò^c. Misc. MAL puah; PA *abu ~ *gabu; MA abu; Temiar habug; Pali bhasma (?).

2 'needle': PC *jurūm. III. PCNB *jarum; PJH *jarūm; CHR jrūm; KH jurum. IV. PEK *jar_m; BR sarūm; KT jarum; PAC tarūm. V. skam. VIII. V châm. Misc. PA *ZaRum; MA jarum; NIC čařum.

3 'silver': PC *pirak. II. prak. III. ST pra:k; KH pria?. IV. PEK *proak; BR prá?; KU prak. VIII. V bạc; M pạc. Misc. PA *pirak; MA perak.

4 'spirit; god': PC *iāŋ. III. PSB *yaŋ; PJH *yaŋ; PCNB *yaŋ. IV. BR yian; PAC yaŋ. Misc. MA yang; Javanese yang. PA *(qS)i(qS)aŋ.

4. *Words of Uncertain Origin.*

- 4.1 'about to': PC *je. Thai and Lao ຈ້າ 'will'. The resemblance between the Thai-Lao form and the PC form is striking as well as puzzling.
- 4.2 'box': JAR hip; RA hip; Rog hip, hiop; Chru hop; Cham hup. II. hep. III. PCNB *(ga)hip; PJH *(ga)hip; IV. BR help 'closet'. Misc. Lao hi:p; NIC hotep; Hakka hap-tze; Cant hop.
- 4.3 'buffalo': PC *kubau. I. krəbaw. II. krabəy. III. BAH kəpo; SED kopau; HRE kpo; PS *kərpu. VIII. PVM tlèw(?); V trau; M tru. Misc. PA *kebaw; MA kerbau; NIC kapo; Sakai krebo.
- 4.4 'eye': PC *mata. I. mat. II. moat 'mouth'. III. PCNB *măt; PJH *măt; PSB *măt. IV. PEK *moat; KU mă:t. V. mat. VI. mòt. VIII. PVM *má:t. Misc. PA *maCa; MA mata; Temiar mad; NIC mat; MAL mat. Note the semantic shift that has taken place in the Khmer form. A new form /pnɛ:k/, is used for 'eye' in Khmer.
- 4.5 'gold': PC *amah. I. mas. II. mieh (< māsa). III. PCNB *mah; PJH *mah; PSB *mah. Misc. PA *emas; SKT hema-/heman (?). Shorto in a personal communication, 1973, connects this set with a PMK root *i?aaš which gave rise to such Old Mon forms as yimāš 'shining.'
- 4.6 'gun': PC *phau. II. pha:v. III. CHR phao; SR phao. VIII. V phao. Misc. Hakka p'ao; Cantonese p'au'.
- 4.7 'kiss': PC *čum. III. SED (to)čum; BAH (te)čum; PSB *čum. VII. PAL čūp. Misc. PMK *cum; PIN *klijum. Indonesian tjium, ketjup.

'lip': Cham bibir. II. popl: (< babir). IV.
PEK *tamb_r; PAC tambír. Misc. Sakai babir; MA
and Indonesian bibir, PA *bÍRBÍR 'lower lip'.

'sword': PC *dau. II. da:v. III. ST dao;
SR dao; Alak tao. IV. PEK *da:w. VIII. V
dao, dao. Misc. Hakka to; Cantonese to.

There is not enough material available here to
establish sets of regular phonological correspon-
dences; the following list nonetheless presents what
correspondences have been found in this corpus. The
sals and spirant, especially in final position,
bear to be highly stable.

<i>Ato-Chamic</i>	<i>Mon-Khmer</i>	<i>Examples</i>
b-	b-/p-	1.16, 1.30, 1.58, 2.9
p-	p-	1.27, 1.55
-p	-p	1.7, 1.56, 4.2
d-	d-/t-	1.15, 1.28, 1.29, 4.9
-t	-t	1.25, 4.4
k-	k-	1.9, 1.12
-k	-k	1.47, 1.61, 1.62, 3.3
č-	č-/j-/s-	1.2, 1.7, 1.8, 1.24, 1.33, 1.37, 1.43, 1.48, 1.53, 1.69, 4.7
-č/-h	-č	1.14, 1.19, 1.36, 1.49, 1.65
j-	č-/j-	1.1, 1.41, 1.56, 1.63, 2.6
m-	m-	4.4
-m	-m	1.1, 1.8, 1.24, 1.28, 1.29, 1.40, 1.57, 1.59, 3.2, 4.7
-n	-n	1.10, 2.10
-ŋ	-ŋ	1.2, 1.3, 1.9, 1.15, 1.16, 1.35, 1.38, 1.41, 1.42, 1.46, 1.52, 1.67, 3.4
h-	h-/ɸ-	1.35, 1.45, 1.46, 1.67, 4.2

<i>Proto-Chamic</i>	<i>Mon-Khmer</i>	<i>Examples</i>
-h	-s/-h	1.13, 1.23, 1.33, 1.37, 1.48, 1.51, 1.53, 1.5 1.60, 1.69, 2.9
r-	r-	1.3, 1.13, 1.18, 1.26, 1.49, 1.68
-r	-r/-n/-y/-ɸ/-l	1.22, 1.27, 1.43, 1.58, 4.8
l-	r-	1.51
l-	l-	1.5, 1.25, 1.64
-v	-v	1.11, 1.66, 1.68, 4.3, 4.6, 4.9
y-	y-	1.42, 2.10, 3.4
-y	-y	1.5, 1.26, 1.54, 1.64
pVr-	pr-/r-	1.36, 1.62
pł-	pl-/kl-	1.40
bl-	bl-/pl-/pr-	1.60
kr-	kr-/s-	1.11, 1.14, 1.52
gr-	gr-/s-	1.63
kVI-	kl-	1.38
tr-	tr-/ŋ-	1.57
sVI-	sl-	1.39

It is not my intention to reopen here the question of an Austric superfamily including Austroasiatic and Austronesian as proposed by Schmidt early in this century. There must be a great deal more solid comparative work before this question can be resolved. Studies like the present one do show that there is some considerable agreement between the lexicon of Austronesian (Chamic) and Austroasiatic (Mon-Khmer) languages.⁵ This is the "general Southeast-Asian vocabulary" that has been discussed by Haudricourt and others. A striking feature about these cognates between Chamic and Mon-Khmer is that many of them are from the stable, basic vocabulary. Out of the 69 sets in part 1 above, no less than 14 occur in Swadesh's

-word list and represent vocabulary that is apparently highly resistant to loss and therefore to borrowing. These basic words along with their percentages of retention as calculated by Swadesh (1955) & Thomas--for Mon-Khmer (1960) are listed below.

	<i>Swadesh</i>	<i>Thomas</i>
'back' (1.3)	83%	71%
'bird' (1.8)	40%	100%
'catch, tie' (1.7)	74%	50%
'cut' (1.18)	56%	43%
'to fly' (1.27)	82%	71%
'intestines' (1.36)	55%	86%
'leaf' (1.39)	100%	100%
'leg/foot' (1.41)	90%	100%
'pull' (1.49)	43%	71%
'river' (1.52)	51%	57%
'sand' (1.53)	68%	57%
'swim' (1.64)	59%	100%
'warm' (1.66)	79%	79%
'wash' (1.68)	83%	57%

shes' (3.2) (Swadesh: 66%, Thomas: 64%) and 'eye' (4.) (Swadesh: 74%, Thomas: 100%) also belong to the basic vocabulary. Late borrowing by Chamic languages from Mon-Khmer sources is thus doubtful. It would appear then that, discounting the possibility of incidental independent development of similar forms, we are in most cases dealing with very ancient forms which may represent (1) an early substratum on which both Chamic and Mon-Khmer languages have been imposed, or (2) a genetically related language, ancestral at least to Chamic and Mon-Khmer.⁶ That the relationship might include wider membership than Chamic is suggested by such possible proto-Polynesian⁷ cognates as: au 'leaf' (cf. 1.39), *mata 'eye, face' (cf. 4.4),

*ta?e 'excrement' and *tiko 'defecate' (cf. 1.19), *tumu 'origin, base, summit' (cf. 1.28) and such Meo-Yao cognates as 'neck' (Hsing'an Tao tcaŋ, Taipa Yao kiaŋ^a, Haininh Yao claŋ^d, Pap'ai Yao 'koŋ) (cf. 'chin' 1.12) and proto-Meo *klaŋ 'kite, eagle' (Hmong tlā, Hmu tlā, Yao-Mun kiaŋ) (cf. 1.38). Haudricourt (1966) contention that the Meo-Yao languages form a link between the Austroasiatic and Tibeto-Burman languages seems to merit further study based on these last cognates.

The Indo-European borrowings probably entered Chamic prior to the separation of the various Chamic languages which may have been about 900-1000 years ago. Some of these borrowings may, however, be earlier than this since they are so widespread outside of Chamic. I suspect that the words for 'net' (2.6), 'horse' (2.2), 'venom' (2.9) and 'Vietnamese' (2.10) are earlier borrowings.

¹The Chamic languages are spoken by an estimated 525,000 persons in south Central Vietnam and adjacent portions of Cambodia. The Chamic languages are: Rade, Jarai, Bih, Hroy, Cham, Northern Roglai, Cac Gi Roglai, Southern Roglai, Rai and Chru. Rade, Jarai, Bih and possibly Hroy form a northern subgroup while the rest belong to a southern subgroup. The Chamic languages appear to be related most closely to the same Austronesian stock as Malay and Achinese. The resemblance between Chamic and Achinese is striking. The following list provides some Malay, Achinese, Rade and Jarai cognates.

Malay	Achinese	Rade	Jarai	Gloss
air	ie	ea	ia	'water'
ular	uleue	ala	ala	'snake'
beras	breueh	braih	braih	'rice'
ratus	reutoih	etuh	rotuh	'hundred'
emas	meuih	mah	mah	'gold'
terus	troih	truh	truh	'to arrive'

²The proto-Chamic (hereafter PC) reconstructions all taken from Lee (1966).

³Including some words which may ultimately be in Chinese sources.

⁴The following format and abbreviations are used in this section:

lish gloss: PC (= proto-Chamic).

I. Pearic.

II. Khmer.

III. Bahnaric:

PCNB (= proto-Central North Bahnaric).

PJH (= proto-Jeh-Halang).

BAH (= Bahnar).

SED (= Sedang).

Jeh.

HAL (= Halang).

PSB (= proto-South Bahnaric).

PM (= proto-Mnong).

MN (= Mnong).

ST (= Stieng).

CHR (= Chrau).

KH (= Koho).

IV. PEK (= Katuic-proto-East Katuic).

BR (= Brou).

PAC (= Pacoh).

KT (= Katu).

KU (= Kuy).

V. KM (= Khuic-Khmu).

VI. Mon.

VII. PAL (= Palaungic-Palaung).

Wa.

DA (= Danaw).

LA (= Lawa).

VIII. PVM (= Vietnamuong-proto-Vietnamuong).

V (= Vietnamese).

M (= Muong).

Miscellaneous:

PA (= proto-Austronesian).

MA (= Malay).

SKT (= Sanskrit).

TH (= Thai).

Lao.

NIC (= Nicobarese).

HAK (= Hakka Chinese).

CAN (= Cantonese).

This format generally follows the classification of the Mon-Khmer (MK) languages proposed by Thomas and Headley (1970). A question mark (?) following a form indicates that it is here regarded as a tentative or possible cognate or reconstruction. There has been some normalization of the spelling of entries. PCNB is from Smith (1967); PJH from Thomas and Smith (1967); PSB from Blood (1966); PEK from Dorothy Thomas (1967); PVM from Barker (1962, n.d.) and PA from Lee (1966). I also wish to thank Prof. H.L. Shorto and Mr. Robert Blust for many helpful comments on this paper.

⁵ Of course, many words go far beyond the limits of Chamic and Mon-Khmer. Forms cognate with PC *čim 'bird' (1.8), *kalaŋ 'kite' (1.38), *sula 'leaf' (1.39), *kroŋ 'river' (1.52), and *mata 'eye' (4.4) are found over an extensive area of Southeast Asia.

⁶ Shafer (1952) pp. 133-136 suggests some of these same possibilities. Benedict (1966:258-259) feels that the relationship between Austroasiatic and his Austro-Thai is of the "substratum" type.

⁷ Proto-Polynesian forms are from Walsh and Biggs (1966).

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