

ANOMALOUS EXPANSIONS IN KHMER MORPHOLOGY

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In the course of sifting data for a forthcoming lexicon of Khmer wordbases and derivatives Dr Saveros Pou and I have come upon a small number of derivative-like forms which, to the best of our knowledge and belief, have not been noted previously.¹ For want of a simpler term I have chosen to refer to these pseudo-derivatives as "anomalous expansions"---*anomalous*, because their formation deviates from systematic derivational possibilities as understood so far; *expansions*, because all of the forms in question are attributable to attested wordbases.

In order to describe this morphological class without undue ambiguity it is necessary to explain four terms which the description entails and to say something of normal processes of derivation.

The four terms in question are *primary wordbase*, *secondary wordbase*, *primary derivative*, and *secondary derivative*.

Primary wordbases in Khmer are conterminous with the minimal word and hence have the canonical form CV(F), in which C represents any permitted simple consonant. Examples: *rām̄ña* /reəŋ/² 'to obstruct, strain out'; *loh* /lólh/³ 'to separate';

¹But see Saveros Pou, "Notes de morphologie khmère," in *ASEMI*, VI (1975).4: 63-9, especially section III, "Expansion anormale de la présyllabe," 67-8, which treats four of the anomalous expansions reported here.

²Khmer forms are cited in a strict indianist transliteration of the original orthography followed by a phonemic transcription. Unless otherwise stated or shown, all phonemic forms represent the modern standard. In this case the acute (´) marks the High Register and the grave (`) marks the Low Register of fourteen otherwise ambivalent syllable nuclei.

³[luəh].

kāca /kaac/ 'to be bad, wicked'.

By the incorporation of one affix primary wordbases yield *primary derivatives*. These show three canonical forms, depending upon the shape of the affix:

- CCV(F), in which CC represents any allowable binary consonant cluster. Example: srām̄ña /sraŋ/ 'to sift, select', < rām̄ña /reəŋ/, as above.
- Crv- + CV(F), in which the presyllable is one of the series of so-called rhotacized prefixes to be mentioned shortly. Example: praloḥ /pralaoh/⁴ 'to be separated from one another', < loḥ /lōh/, as above.
- Cvm- + -nV(F), in which the presyllable is generated by the infixation of /-vmn-/ into a primary wordbase. Example: kaṃṇāca /kaṃnaac/ 'to be consistently wicked', < kāca /kaac/, as above.

Primary derivatives of the shape CCV(F) often function as *secondary wordbases*. That is to say, forms of this structure are at once the result of derivation from primary wordbases and are capable of serving as the point of departure for further derivation. Primary derivatives of the two other structures are not subject to affixation.

By the incorporation of one affix these secondary wordbases yield *secondary derivatives*. Depending on the shape of the affix, these show four canonical forms:

- C₁CCV(F), in which C₁ is morphologically /R-/, defined as reduplication of the secondary-wordbase initial. Example: kakhva'ka /kkwak/ 'to be dirty, unkempt', < *khva'ka /kwak/, same meaning, < va'ka /wuk/ 'to be mixed up, in disorder'.
- Crv- + CCV(F), in which the presyllable is again one of the rhotacized prefixes. Example: prajhloḥ /praclōh/ 'to quarrel with one another', < jhloḥ /clōh/ 'to differ, dispute', < loḥ /lōh/, as above.
- Cvn- + CV(F), in which the presyllable is generated by the infixation of /-vn-/⁵ into a CCV(F) syllable. Example: taṃkœña /taṃkaaəŋ/ 'to elevate, exalt', < thkœña /tkaaəŋ/ 'to be lofty', < kœña /kaaəŋ/ 'to be high'.

⁴[prə'lah].

⁵/N/ = assimilating nasal.

- C_vN- + CCV(F), in which the presyllable is one of a secondary set of prefixes added to a CCV(F) syllable. Example: raṃbhāya /rumphíiəj/ '(of wind) to blow gently; to be cool', < bhāya /phíiəj/ 'to spring up, shoot forth; to breathe', < bāya /píiəj/ 'to be scattered, strewn'.

Tertiary derivatives, so infrequent as to be almost rare, also occur. These have the canonical form C_vN- + CCV(F), precisely like the secondary derivatives just mentioned, but are the result of the infixation of /-vN-/ into a C₁CCV(F) syllable.⁶ Example: jañjrāṃña /cuncreəŋ/ 'stubble', < *jajrāṃña /ccreəŋ/ 'to be all bristly', < jrāṃña /creəŋ/ 'to bristle', < -rāṃña /-reəŋ/ 'to rise up, be stiff'.⁷

Normal processes of derivation show four patterns:

wb. + pfx + pfx ⁸	raña /rɔŋ/ 'to clarify (liquid)' traña /traŋ/ 'to filter' kantraña /kantraŋ/ 'bamboo strainer'
wb. + ifx + ifx	ṭuta /dot/ 'to grill' tputa /tbot/ 'to hold in cooking-sticks' ṭamputa /dambot/ 'cooking-sticks'
wb. + pfx + ifx	paña /baŋ/ 'older sibling' cpaña /cbaŋ/ 'to be older, superior' campaña /cambaŋ/ 'to be oldest'
wb. + ifx + pfx	dula /tul/ 'to bulge' dhula /thul/ 'to be chubby' ⁹ kandhula /kanthul/ 'to be tubby' ¹⁰

⁶This interpretation is admittedly subject to debate. Secondary wordbases normally take only the syllabic infix /-vN-/ or one of the secondary set of C_vN- prefixes just mentioned. As far as my experience enables me to say, however, tertiary derivatives always have a word-initial which duplicates that of the secondary wordbase. In order to account for this duplication it seems reasonable to pass through the C₁CCV(F) step, which is operative whether attested in a specific derivational chain or not.

⁷The hyphen indicates that -rāṃña /-reəŋ/ occurs only as a bound form. It is likely in this case, however, that the base is to be identified with rāṃña /reəŋ/ 'to obstruct', cited previously.

⁸Wb. = wordbase; pfx = prefix; ifx = infix.

⁹Not listed in the semi-official *Vacanānukrama khmēra / Dictionnaire cambodgien*. Cinquième édition (Phnom-Penh: Institut Bouddhique, 1967, 1968).

¹⁰The connotation is derogatory.

In considering the foregoing sets, note that the intermediate forms /traaŋ/, /tbot/, /cbaaŋ/ and /thul/ are primary derivatives of the primary wordbases above them and at the same time secondary wordbases of the secondary derivatives below them. It should be clear that these intermediate forms are a necessary step between the primary wordbase and the secondary derivative.

In reality, however, the derivational chain is not seldom broken. Interruptions arise from the absence of an existing or recognizable primary wordbase, from the absence of a secondary wordbase accounting for a secondary derivative, and from skewed semantic development on any of the three levels. In order to work out morphological relationships it is therefore often necessary to set up a hypothetical primary wordbase or primary derivative or to postulate a mediating gloss for one form which is in consonance with a deviant gloss and at the same time is justifiable by the other two forms.

As long as these procedural requirements are understood it will suffice to divide the anomalous expansions in question here into three general groups.

Group I

Group I comprises twenty-six members and is divisible into three subgroups.

Group I.A has only three members. One of these, the source of which is still in doubt, is an expansion of a tertiary derivative; the other two are expansions of secondary derivatives.

The characteristic of this subgroup is the presence of a short, nonneutral vowel in the presyllable, where a short neutral vowel would be expected. Since the word-initial in all three cases is /c-/, it is not surprising that the anomalous vowel is /i > è/.¹¹ The forms in question are:

¹¹None of the expansions reported here can be dated. Since
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- (1) $ciñc\grave{a}ma /cinc\grave{a}em > c\grave{a}nca\grave{a}em/$ 'eyebrows'. Expansion of
 $*cañc\grave{a}ma /c\grave{a}nc\grave{a}em > canca\grave{a}em/$; cf. Old Khmer $cañcem$
 $/c\grave{a}nc\grave{a}em/$;
 < $*cac\grave{a}ma /cc\grave{a}em > cca\grave{a}em/$ 'to surmount';
 < $-c\grave{a}ma /-c\grave{a}em > -ca\grave{a}em/$, allomorph of $c\grave{a}ma /c\grave{y}ym/$
 $[čy:m]$ 'to increase; to be over', attested in
 $chn\grave{a}ma /cna\grave{a}em/$ 'to be superior'.
- (2) $ciñc\grave{e}ña /cinc\grave{e}eŋ > c\grave{a}nca\grave{a}eŋ/$ 'to be bright, luminous'.
 Expansion of $*cañc\grave{e}ña /c\grave{a}nc\grave{e}eŋ > canca\grave{a}eŋ/$;
 < $*cac\grave{e}ña /cc\grave{e}eŋ > cca\grave{a}eŋ/$ 'to be all light';
 < $c\grave{e}ña /c\grave{e}eŋ > ca\grave{a}eŋ/$ 'to be clear, light, bright'.
- (3) $ciñcr\grave{a}m /cincram > c\grave{a}ncram/$ 'to chop, hash, mince'.¹² Ex-
 pansion of $*cañcr\grave{a}m /c\grave{a}ncram > cancram/$;
 < $*cacr\grave{a}m /ccram/$ 'to cut into small bits';
 < $*cr\grave{a}m /cram/$ 'to be in small bits', presumably
 allomorph of $sr\grave{a}m /sram/$ 'to be cracked, crack-
 led'.
 < $r\grave{a}m /ram/$ 'to be constant, repeated'.

Expansions of this particular kind are of scant linguistic interest and need be regarded as no more than phonetic alternants which penetrated the standard language by force of their prevalence.

Group I.B comprises twenty members, all expansions of primary derivatives.

These are characterized by the intrusion between the ini-

the development of the registers was a gradual process which, to all appearances, culminated only within the last century and a half, it is necessary to take into consideration the Middle Khmer value of all vowels deemed anomalous. In transcriptions such as $/cinc\grave{a}em > c\grave{a}nca\grave{a}em/$ the prior form represents Middle Khmer while the latter form represents the modern standard form developing out of it. In this first case, it is only in the Middle Khmer form that expansion is seen at all, inasmuch as the modern form of the presyllable is phonetically identical with the Old Khmer presyllable: $[č\grave{a}ŋ-]$.

¹²S. Pou and I have previously sought to explain this item as a learned alteration of colloquial $ciñj\grave{a}m /c\grave{a}nc\grave{o}em/$ 'to chop, etc.', based on a late Middle Khmer $*j\grave{a}m /cam > coem/$ borrowed from Chinese. See Saveros Pou and Philip N. Jenner, "Some Chinese Loanwords in Khmer," in *JOS*, VI (1973).1: 44, item 145.

tial and postinitial of the latter of a nonneutral vowel, phonemically long or short but short on the phonetic level.

These forms cannot be divided into meaningful sets either on the basis of their intrusive vowel or on the basis of the vowel of the primary derivative from which they develop. Hence I list them all together in Khmer dictionary order.

- (4) *cēcūva* /cɛɛcuuw > caaɛcòow/ 'to serve as go-between, arrange a marriage'. Cf. also Middle Khmer *cicū* /cicuu/, same meaning;
Expansion of **cacūva* /ccuuw > ccòow/, same meaning;
< -*cūva* /-cuuw > -còow/ 'to flatter, cajole', attested also in *chūva* /chòow/ 'to pump, worm information out of'.
- (5) *dīdæra* /tiitæər > tiit'éər/¹³ 'to waver, be indecisive';
Expansion of **dadæra* /ttæər > tt'éər/, same meaning;
< *dæra* /tæər > t'éər/ 'to go or come half-way; to occur at mid-point'. Cf. Old Khmer *der* /dæər/, same meaning.
- (6) *dīdai* /tiitəj > tiit'éj/ 'to be different, distinct, separate'. Cf. Old Khmer *didai* /diidəj/, same meaning;
Expansion of **dadai* /ttəj > tt'éj/, same meaning;
< -*dai* /-təj > -t'éj/ 'to be other, different', attested in Old Khmer *dai* /dəj/, same meaning.
- (7) *dūlāya* /tuulaaj > tuulíiəj/ 'to be open, broad, roomy, spacious';
Expansion of *dhlāya* /tlaaj > tlíiəj/ 'to be open';
< *lāya* /laaj > líiəj/ 'to spread'.
- (8) *pārāsa* /baaraah > baaraah/ 'stray animal; outcast';
Expansion of *prāsa* /praah/ 'to be parted, separated';
Loan < Sanskrit *prāsa*, *prāsta*.
- (9) *päi* ɬām /pəj lam > paj lam/ 'to speak broken Khmer or other language';
Expansion of **phlām* /plam/ [p^hlæm], reduction of *praɬām* /pralam/ [p^ɬə'læm ~ p^əlæm] 'to be muddled, mixed up, confused';¹⁴

¹³[ti'tv:].

¹⁴The simplification of the rhotacized prefixes is discussed below under Group II.

< lām /lam > loəm/ 'to be confused'.

- (10) biṭora /piḍoor > pidaaor/ 'to be scented, fragrant';

Expansion of *btora /pḍoor > pdaaor/, by attraction to Sanskrit and/or Pāli vi- 'out, apart, in different directions',¹⁵ for *ptora /pḍoor > pdaaor/ 'to perfume'

< ṭora /ḍoor > daaor/ 'to spread, swell, overrun'.

- (11) bīroḥ /piiroh > piiróh/ 'to resound; to be full, sonorous, sweet-sounding';

Expansion of *broḥ /proh > próh/, by attraction to Sanskrit and/or Pāli vi-, as in 10 above, for *proḥ /proh > praoh/ 'to resound, reverberate' (cf. proḥ /praoh/ 'to sprinkle (water) with the fingers') or a special development of broḥ /proh > próh/ 'to sow broadcast';

< -roḥ /-roh > -róh/ 'to throw off, emit', probably to be identified with -roḥ /-róh/ 'to drain, flow off', attested in jroḥ /croh/ 'gorge, ravine; mountain torrent'.

- (12) yopa'la /jooβol > jóobal/ 'view, opinion';

Expansion of *yapa'la /jβol > jbal/, same meaning;

< ya'la /jɔl > jul/ 'to see, perceive; to understand'.

- (13) yopaṃ /jooβom > jóobam/ 'weeping, lamentation';

Expansion of *yapaṃ /jβom > jbam/, same meaning;

< yaṃ /jɔm > jum/ 'to weep'.

- (14) līlā'pa /liilap > liiloəp/ 'to retrace one's steps'. Cf. also Middle Khmer lelāpa /leelap/, same meaning;

Expansion of *lalā'pa /llap > lloəp/, same meaning;

< lā'pa /lap > loəp/ 'to go back, repeat'.

- (15) sāya yuta /saaj jut/ 'Desmos chinensis (Annonaceae), a creeper with yellow flowers having long, drooping petals'. Cf. Thai สายหยุด /sǎaj jùt/.¹⁶

¹⁵Cf. Khmer bijāya /picéj/ 'to be triumphant', < Sanskrit vijaya, Khmer bidhī /pithii/ 'ceremony', < Sanskrit vidhi, and numerous other loans of the same formation.

¹⁶An alternant Khmer form for the same plant noted by S. Pou, sāva yuta /saaw jut/, shows a further stage of development away from the primary derivative but a development of a kind with which we are not concerned here.

- Expansion of srayuta /srɔjɔt > srajot/, as Middle Khmer [s^fə'jut], 'to be faint, feeble, limp';
 < -yuta /-jut/ 'to fall in, slump', allomorph of ruta /rut/ 'to lower, drop' and luta /lut/ 'to fall away, dip, drop'.
- (16) sārāya /saaraaj/ 'edible (marine or freshwater) algae';
 Expansion of srāya /sraaj/ 'to loose; to be loose';
 < rāya /raaj > ríiəj/ 'to break up, scatter'.
- (17) sārāya /saaraaj/ 'decorated wooden valance under house eaves';
 Expansion of *srāya /sraaj/, same meaning;
 < sāya /saaj/ 'to extend, run'.
- (18) sāvā /saawaa/ 'to be restless, flighty, fickle';
 Expansion of svā /swaa/ 'monkey, gibbon'; conjecturally 'one who swings by the arms';
 < -vā /-waa > -wíiə/ 'to rotate the arm', attested in cravā /crowaa/ 'paddle, oar' and sravā /sra-waa/ 'to sweep into the arms'.
- (19) sāhāva /saahaaw/ 'to be fierce, savage';
 Expansion of *srahāva /srɔhaaw > srɔhaaw/, as Middle Khmer [s^fə'hæ:ɯ], same meaning;
 < hāva /haaw/ 'to be wild, rabid'.
- (20) suraṅa /surɔɔŋ > soraɔŋ/ '(rājasabda¹⁷) neck';
 Expansion of sraṅa /srɔɔŋ > sraɔŋ/ '(of humans) neck; (of upper garment) collar, ruff; (of cattle) dew-lap';
 < raṅa /rɔɔŋ/ 'to hold up, support from below'.
- (21) sūreca /suurac > sòorac/ 'to be at an end, all done';
 Expansion of sreca /srac/ 'to be ended, done, ready';
 < reca /rac > réec/ 'to be worn down', but conjecturally 'to come to an end or point', allomorph of rwca /rúuəc/ 'to be done, over with'.
- (22) 'āṅapa /qaanɔɔp > qaanaɔp/ 'support; supporter, patron', now replaced by even more anomalous raṅapa /rnaɔp/;
 Expansion of *'aṅapa /qɔɔnɔɔp > qaanaɔp/, for *'napa /qnɔɔp > qnaɔp/, same meaning;

¹⁷Term applicable to royalty; royal dialect.

< 'apa /qɔɔp > qɔɔp/ 'to clasp; to hold up'.

- (23) 'añāra /qaanaar/ '(woodworker's) saw', now replaced by even more anomalous rañāra /rnaar/;

Expansion of *'añāra /qɔɔnaar > qɔanaar/, for *'nāra /qnaar/, same meaning;

< 'āra /qaar/ 'to saw'.

To be grouped with the foregoing are older forms which have since been regularized (e.g., Old Khmer cicāy /cicaaj/ 'to scatter, squander, destroy', < cāy /caaj/ 'to spread, issue', > Middle Khmer and modern cacāya /ccaaj/) and a good number of still conjectural forms such as dīduya /tiituj/ 'owl', probably < -duya /-tuj/ 'to jut, protrude'.

Recognition of this type of expansion may serve to curb the temptation so commonly felt to explain enigmatic Khmer forms on the basis of borrowing, as from Thai for example. There is no denying that a great amount of borrowing and back-borrowing has gone on between Khmer and Thai; in some cases, however, facile "explanations" of this kind merely carry the problem of morphological anomaly out of Khmer where they belong and are no explanations at all. A possible case in point is modern Khmer kāḥai /kaalaj/ 'to disguise; to a-loy (*metals*)', which the *VK*¹⁸ confidently credits to Thai กาหล /kaaləj/ 'to plate (*with metal*); to be plated'.¹⁹

In this case the question of the direction of borrowing is complex. On the one hand Khmer has kralai /kralaj/ as an alternant of kāḥai /kaalaj/. On the other hand both of these Khmer forms as well as Thai /kaaləj/ appear to be referable to Khmer lai /ləj > ləj/ 'to combine, put together', an allomorph of lāya /laaj > líiəj/ 'to mix, scramble, blend'. From the latter base, moreover, Khmer has klāya /klaaj/ 'to be mixed, adulterated, not pure, hybrid, false; to be altered', whence Thai

¹⁸ *Vacanānukrama khmēra*, I (1967): 38a.

¹⁹ Mary R. Haas, *Thai-English Student's Dictionary* (Stanford: Stanford University Press, 1967), 33a.

ក្លាយ /klaaj/ 'to change, be changed'.²⁰ As long as Khmer has even extra-systematic means of forming *kāḥai* /kaalaj/ out of *kralai* /kralaj/²¹ there are no discernible morphological grounds for assuming that it is a back-borrowing, though there may well be convincing historical or technological grounds.

Group I.C comprises three members, all expansions of primary derivatives. These are characterized by an augmented insertion of the shape VC which rhymes with the syllable out of which they are formed.

- (24) *sāva dāva* /saaw taaw > saaw tiiəw/ 'species of large lobster';

Expansion of *sdāva* /staaw > stiiəw/ 'to be half-grown, immature', but conjecturally 'to be gangling';

< *dāva* /taaw > tiiəw/ 'to be spindly, adolescent'.
Cf. allomorph *-tāva* /-taaw/ in *ratāva* /rtaaw/ 'to be elongated; (of limbs, paws, etc.) to be big, outsized'.

- (25) *sāva m̄āva* /saaw maaw/ 'name of several hairy plants such as the rambutan and passionflower';

Expansion of **smāva* /smaaw/, allomorph of *smau* /smaw/ 'grassy plants in general: grass, weed, herb';

< *-sāva* /-saaw/ 'to be hairy', allomorph of *-sūva* /-sòow/ [-sv:u] 'to be grassy, hairy', attested in *spūva* /sbòow/ 'thatch grass', *srūva* /sròow/ 'paddy', and *sramūva* /sramòow/ 'to be hairy, unkempt'.

- (26) *sau ṭau* /səw dəw > saw daw/ 'to be random, haphazard';

Expansion of *stau* /sdəw > sdaw/ 'to stitch (edges of a basket) temporarily', but conjecturally 'to mark off at intervals, make a broken line';

< *ṭau* /dəw > daw/ 'to mark, brand'.

²⁰ Ibid., 18b.

²¹ For all we know at the moment, *kralai* /kralaj/ could be a regularization of *kāḥai* /kaalaj/.

Group II

Group II comprises fourteen members, all expansions of primary derivatives.

The characteristic of this group is the presence, between the initial and postinitial consonants of the primary derivative, of /-rɔ- ~ -ra-/, normally [-rə-].

It is not without significance that expansions incorporating this pseudo-infix thereby assume the same syllable structure as true primary derivatives containing the rhotacized prefixes /prɔ- ~ pra-; trɔ- ~ tra-; crɔ- ~ cra-; krɔ- ~ kra-; sra-/, with which they are liable to be confused. True derivatives of this type are exemplified by *praka'la* /prakal/ 'to stack one on top of the other', < *ka'la* /kal/ 'to raise'; *dra-vēna* /trɔwɛɲ/ 'to be oval, oblong', < *vēna* /wɛɲ/ 'to be long'; *cramūla* /cramool/ 'to be all tangled up', < *mūla* /muul/ 'to be round, compact'; *grajūra* /krɔcuur/ 'to be dour, crabbed', < *jūra* /cuur/ 'to be tart, sour'; and *sradāpa* /sratíiəp/ 'to prostrate oneself', < *dāpa* /tíiəp/ 'to be low'. It is presumably only by chance that presyllable /sra-/ is not found among the anomalous expansions listed hereafter.

(27) *krañām* /krɔɲam/ 'claws, talons';

Expansion of *khñām* /kɲam/ 'to clutch, swipe at';

< *ñām* /ɲam > *ɲoəm* / 'to take up by the handful'.

(28) *krəpwca* /krəb̥uəc/ 'to bring the four corners of (piece of cloth) together and knot them';

Expansion of **kwca* /kb̥uəc/ 'knot';

< *kwca* /k̥uəc/ 'to twist, twirl; to knot'.

(29) *krəpēla* /krəbaaɛl/ 'to cut off at the base or root';

Expansion of **kpēla* /kbaaɛl/, allomorph of *kpila* /kb̥əl/ 'to cut down to the root';

< -*kēla* /-kaaɛl/, allomorph of -*kila* /-k̥əl/ and *kā'la* /kal/ 'to cut close to the root, flush with the ground'.

(30) *kramau* /kramaw/ '(of red and blue/green) to be dark';

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Expansion of khmau /kmaw/ 'to be black';

< -mau /-məw/, < Old Khmer mau /məw/ 'to be black'.

- (31) krayau /krajaw/ 'whorl (in head hair, skin of fingertips)';

Expansion of *khyau /kjaw/, allomorph of khcau /kcaw/ 'snail; spiral, helix';

The CCV(F) form is irreducible.²²

- (32) krasānta /krasaan/ 'to be at peace, prosperous';

Expansion of ksānta /ksaan/ 'to be calm, happy';

Loan < Sanskrit kṣānta.

- (33) krahwca /krahuəc/ 'to be funnel-shaped, funnelform';

Expansion of khwca /khuəc/ '(archaic) small vial for cosmetics (so called because of its shape); dimple';

< kwca /kūəc/ 'to twist, twirl; to knot'.

- (34) grahara /krəhər/ 'rogue, rascal, scamp';

Expansion of -ghara /-khər/ 'to be bold', attested in gaghara /kkhər/ 'to be cheeky, impudent';

The CCV(F) form is irreducible.²²

- (35) grahupa /krəhup/ '(of face, cheeks) to be hollow, sunken';

Expansion of -ghupa /-khup/, allomorph of khupa /khop/ 'to be hollow, concave';

The CCV(F) form is irreducible.²²

- (36) crapā'pa /crabap/ 'to grapple, come to grips, with';

Expansion of cpā'pa /cbap/ 'norm, precept; literary composition', but conjecturally 'hold, restraint';

< cā'pa /cap/ 'to lay hold of, grasp, grip'.

- (37) crapuca /craboc/ 'silk veil-scarf (worn originally by Muslim Cham women, made by gathering up warp and weft threads into small buttons and dyeing them individually)';

Expansion of cpuca /cboc/ 'to gather with the fingertips'.

²²Our working hypothesis has been that all native CCV(F) forms can be broken down into a nonsyllabic affix + a primary wordbase. Thus "irreducible" here means only that we have not yet succeeded in analyzing khcau /kcaw/, -ghara /-khər/, and khupa /khop/.

< *cuca* /*coc*/ 'to press with the finger'.

(38) *trapā'ka* /*trabak*/ '(of animals) to snap at, snap up';

Expansion of **tpā'ka* /*tbak*/ 'to strike at';

< *ṭā'ka* /*dak*/ 'to strike, deal a blow'.

(39) *trapā'ña* /*trabaŋ*/ 'to twist or plait tightly';

Expansion of **tpā'ña* /*tbaŋ*/, allomorph of *tpāña* /*tbaaŋ*/ 'to weave, plait';

< *-tā'ña* /*-taŋ*/, attested in *kaṅtā'ña* /*kandaŋ*/ 'to be all tangled up', allomorph of *-tāña* /*-taaŋ*/ 'to weave, interlace', attested in *paṅtāña* /*bandaaŋ*/ 'woven material, tomentum'.

(40) *prahuka* /*prahok*/ ~ *braha'ka* /*prōhuk*/ 'fermented fish paste';

Expansion of *phuka* /*phok*/ 'viscous mixture' and *bha'ka* /*phuk*/ 'mud, ooze', respectively;

< *-puka* /*-bok*/ ~ *-ba'ka* /*-puk*/, allomorphs of *buka* /*puk*/ 'to decompose, putrefy, be putrid'.

It will not have gone unnoticed that four of the above expansions (items 31, 32, 34, 35) are not reducible to primary wordbases and that only two items, 27 and 30, are reducible to derivatives by prefixation. The remaining eight are reducible to derivatives by infixation. Despite the small number of forms involved, we are struck by the fact that six of these (items 28, 29, 36, 37, 38, 39) contain infix /-b-/ while the other two (items 33, 40) contain infix /-h-/. Until we are able to probe deeper into Khmer morphology, we must be content to recognize an unexplained "attraction" to this type of expansion on the part of forms with postinitial /b/ and /h/.

Expansions of this type may help explain the cryptic relationship between *cnai* /*cnaj*/ 'to cut or polish (*gems*)' and *caraṅai* /*caaraṅaj*/ 'worked gems; crystal, glass'. The first of these is attested in Old Khmer as *cnai* /*cnəj*/, of the same meaning, while the second appears in modern Thai as เล็ยระไน /*ciaranaj*/, with the same meaning as Khmer *cnai* /*cnaj*/.²³

²³George Bradley McFarland, *Thai-English Dictionary* (Stanford: Stanford University Press, 1956), 260a: "to cut; to bur-
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Khmer *cnai* /cnəj > cnaj/, unknown to S. Pou and myself in any stage of Thai, has the CCV(F) structure normal for one type of primary derivative---even if, as seems likely, fuller knowledge shows it to be a loanword.²⁴ Stated as briefly as possible, the problem is how to account for the /-aara-/ insert in Khmer *caranai* /caaranaj/ and the /-iara-/ insert in modern Thai /ciaranaj/.

In the light of the anomalous expansions we have been examining in the present group, it seems reasonable to postulate a Middle Khmer **cranai* /crənəj > cranaj/ as the immediate source of the longer Khmer and Thai forms, that is to say, as an extra-systematic expansion of Old Khmer *cnai* /cnəj/. Moreover, in the light of the anomalous expansions we have already considered under Group I, we have grounds for supposing that this **cranai* /crənəj > cranaj/ subsequently underwent vocalic expansion of two kinds, one of which came to be established in modern Khmer, the other of which came to be established in Thai. Such a supposition is admittedly risky, but we have already seen that there is no discernible correlation between the vowel insert and phonological features of the wordbase; on the contrary, in a number of cases (items 1, 4, 14, 15, 22, 23) we have documentary evidence that the insert has been variable. Nor should it be forgotten that, as long as we do not understand the motives of even single expansions it would be premature to argue that double expansions are out of the question.

However, the chief linguistic interest of these anomalous expansions with /-rə- ~ -ra-/ resides not in the specific derivational problems they may clarify but in the light they may be able to throw on the development of the rhotacized series

nish diamonds or precious stones"; So Sethaputra, *New Model Thai-English Dictionary*. Library Edition (Samrong, Samud Prakan: So Sethaputra's Press, 1965), I: 322a: "to cut (gems)"; Haas, *op.cit.*, 125a: "1. to cut diamonds, jewels, crystal. 2. (diamonds, etc.) to be fashioned, cut."

²⁴Cf. items 8 and 32 above.

of true prefixes²⁵ and hence on the structure of the Khmer word in general.

The distinction between the rhotacized prefixes and the series of corresponding simple consonantal prefixes²⁶ is a subtle one. Semantically as well as stylistically there is no firm footing on which to define the functional differences between them in systematic terms. Morphologically, in an earlier paper S. Pou and I saw the proto-Khmer form of the rhotacized prefixes as having the canonical form CəR-, in which C stands for any stop or /s-/ while R stands for /r ~ l/.²⁷ Certainly derivatives formed with prefixes of this shape are found in Old Khmer, Old Mon, and in later stages of other languages of the Mon-Khmer group. In Old Khmer they begin to give way, from the time of the earliest inscriptions, to prefixes of the shape Crə-, the older /-l/ dropping out entirely. In Old and Middle Mon what appear to be presyllables of this same shape (Crə-) are almost all orthographic alternants of Cə- or Cər- syllables.²⁸

As far as Khmer is concerned, it is worth remembering that Martini observed long ago that the members of initial clusters

²⁵For details regarding these see my *Affixation in Modern Khmer*, unpublished doctoral dissertation (University of Hawaii, 1969), 121-39.

²⁶Ibid., 63-120.

²⁷Saveros Pou and Philip N. Jenner, "Proto-Indonesian and Mon-Khmer," in *Asian Perspectives*, XVII (1974).2: 115.

²⁸H.L. Shorto, *A Dictionary of the Mon Inscriptions from the Sixth to the Sixteenth Centuries* (London: Oxford University Press, 1971) lists only thirty-eight dissyllabic forms with orthographic *kra-*, *gra-*, *cra-*, *jra-*, *tra-*, *dra-*, *pra-*, *bra-*, *mra-* and *sra-*. In twenty-four of these cases (63%) the written post-initial *r* is simply not realized in the phonological form, as *brakuih* /bəkøh/ 'steatite pencil'. In eight cases the phonological form, despite the orthography, has the shape Cər-, as *gralon* /gərluŋ/ 'quantity'. In only two cases, in fact, does the orthography appear to reflect postinitial /r/, namely *jrahān* /jraʔhan/ 'love' and *drahat* /draʔhət/ 'strength', and in both of these cases Shorto is careful to add a query-mark after the phonological form.

are not closely fused.²⁹ Indeed, the transition from the initial to the postinitial consonant is accomplished by a variety of purely phonetic bridge-sounds. These range from zero, through "aspiration," to a neutral vowel, and on to vowels of several colors. Examples: *skuna* /skon/ [skoʎn] 'evil omen'; *phdera* /ptéer/ [p^hte:] 'to empty'; *ktā'pa* /kdap/ [k^ədæp] 'to clench the fist'; *myāna* /mjaan/ [m^əjæ:ŋ] '(in) one way', *crūta* /cròot/ [č^əřo:t] 'to reap'.³⁰

In this same connection, it must be said that the postinitial allomorphs of /r/ are typically very weakly articulated in the rhotacized prefixes. Even in standard speech a clearly flapped or trilled [ř] is heard only in maximal pronunciations in this position, while the following vowel element is more often than not a short neutral vowel carrying no registral distinction. Compare, for example, *prāṃṃa* /praŋ/ [přæŋ] 'to be rainless' with *prakēka* /prakaæk/ [p^fə'kæ:ek ~ pə'kæ:ek]. In the same way, the common pronunciation of our anomalous expansions is [kə'jæm] 'claws' (item 27), [kə'bu·əʎč] 'to knot the corners of' (item 28), [kə'βæ:el] 'to cut off at the base' (item 29), [kə'mæ·u] 'to be dark' (item 30), and so on. In this sense the postinitial /r/ of the prefixes need not be regarded as an essential element.³¹

What does appear to be an essential element of the rhotacized prefixes is their syllabicity, though even this is sometimes in doubt. By considering the question in the light of the loose juncture of consonant clusters and the weak articulation of postinitial /r/, we begin to see that the insertion of /-rə-

²⁹F. Martini, "Aperçu phonologique du cambodgien," in *BSLP*, 42 (1942-45).1: 125.

³⁰The bridge-sounds given here are typical of citation forms and are neither invariable nor obligatory.

³¹Deference to my colleague obliges me to note that S. Pou, far from agreeing with this interpretation, believes that the postinitial /r/ in question here is a literary feature which corresponds to no reality in the historical development of the language.

~ -ra-/ into the fourteen items of this group may have no other effect than that of opening the juncture between the original word-initial and the postinitial. This much comes uncomfortably close to a truism, but the intent of the insertion is far from being self-evident. It is only when we go back and re-examine our fourteen expansions that it dawns upon us that the essential purpose of the insertion is to set up a new contrast by keeping the initial and postinitial of the primary derivative from reuniting. A purely phonetic characteristic is brought up to the phonemic level and, at least in the case of these present forms, a distinction is signaled between /tbaŋ/ 'to weave, plait' and /təbaŋ/ 'to plait tightly' (item 39), /kmaw/ 'to be black' and /kəmaŋ/ 'to be dark' (item 30), /cbap/ 'hold, grip' and /cəbaŋ/ 'to grapple' (item 36), and so forth.

I should mention, finally, that I am not ignoring the possibility that all of the anomalous expansions in this group are formations on the analogy of derivatives with the true rhotacized prefixes. Indeed, it seems most likely that the latter provided both the model and the inspiration for their creation. What is more, these /-rɔ- ~ -ra-/ expansions are only of minor interest for their own sake. The chief benefit to be gained from their examination is the fresh perspective they provide for our understanding of the rhotacized prefixes.

Group III

Group III comprises five members. These are characterized by the obligatory syllable 'ā /qaa/ followed by a primary word-base or a primary derivative.

For the time being at least I term this obligatory syllable a headword rather than a prefix because, in the first place, no Khmer prefix of this shape has been demonstrated thus far and, in the second place, I suspect that the syllable in question is a species of antonym to brah /prah > preəh/, the headword for divine or royal beings and objects (Old Khmer *vrah* /prah/), on

which so many otherwise cautious scholars have stumbled.³²

In the first three items listed below the headword appears to have an intensive function with an unmistakably pejorative connotation.³³ In the last two items an original syllable of roughly similar shape appears to have undergone morphological, and at least partially semantic, assimilation to the same pejorative headword, possibly through the kind of vocalic expansion already described under Group I.

- (41) 'ā kra'ka /qaa krək > qaa krak/ 'to be low or base in quality or character; to be poor, paltry, bad, ugly';
Expansion of *kra'ka /krək > krak/, allomorph of gra'ka /krək > kruk/ 'to be low, base, mean, worthless; to be unclean, offensive';
< -ra'ka /-rək > -ruk/ 'to fall, be low', allomorph of ruka /ruk/ 'to cram into', but conjecturally 'to go down into'.
- (42) 'ā krāta /qaa kraat/ 'to be stripped, bare, unclothed';
Expansion of krāta /kraat/ '(of garment) to slip down or off';
< -rāta /-raat > ríiət/ 'to turn or peel back', attested in srāta /sraat/ 'to undress oneself, be bare', allomorph of lā'ta /lat > loət/ 'to peel, skin'.
- (43) 'ā m̄ā'sa /qaa mah/ 'to be shameful, disgraceful';
Expansion of -m̄ā'sa /-mah/ 'to shame', allomorph of -māsa /-maah > -míiəh/, attested in khmāsa /kmaah/ 'to be ashamed', and of -maḥ /-mah > -meəh/, attested in tmah /tmah/ 'to shame'.

³²The question is complicated by the fact that prefixed syllables of this or similar shape are found in other Mon-Khmer languages and, in fact, seem to have an areal distribution. My colleague has called my attention to an a-type "prefix" to proper names in pre-Angkorian Khmer. I believe this is simply an early form of the modern familiar/pejorative headword 'ā /qaa/ commonly used with the names of boys, brigands, and others of humble station. Indeed, this "personal article," as it has been called, and the headword in question here may be one and the same.

³³Despite the formal and semantic overlap, the syllable we are concerned with here is probably to be kept separate from the one S. Pou and I have ascribed to Chinese. See our "Some Chinese Loanwords," 65, item 220.

(44) 'ā r̄aṅa /qaa raṅ/ 'alembic';

Expansion of -r̄aṅa /-raṅ/, registral allomorph (induced by the headword) of raṅa /r̄oṅ/ 'to be clear, bright; to clarify (*liquid*) by filtration'. The headword may reflect a former affix (e.g., tamraṅa /tamraṅ/ 'filter') or may be a nonce device for nominalizing the wordbase and marking a common article of distiller's apparatus. Any connection with the presyllable of Old Mon 'araṅ /əroṅ/ 'to glitter'³⁴ is doubtful.

(45) 'ā srūva /qaa sruuw > qaa sr̄ow/ 'to be bad, evil; to be unclean, foul';

Expansion of Old Khmer 'asarū /qəsruu/, same meaning; learned formation < Sanskrit a- 'alpha privative' + *sarū /sruu/ 'to be good, right, pure', < rū /ruu/ 'to be good, right', > modern -rūva /-ruuw/, attested in trūva /tr̄ow/ 'to be right, accurate'.³⁵

Residue

There remains a handful of forms which are worth mentioning despite the uncertainties surrounding them.

One of these is cranwca /cran̄uəc/ 'spit, skewer'. At first glance one would suppose it were either a derivative of prefix /cro- ~ cra-/ + a base nwca /núuəc/ or a derivative of infix /-ron- ~ -ran-/ (a common allomorph of instrumental /-n-/) + a base cwca /c̄uəc/. However, neither nwca /núuəc/ nor cwca /c̄uəc/ is known to exist. In casting about for alternative sources, one is tempted to settle upon crwca /cr̄uəc/ '(archaic) to be sharp, pointed',³⁶ a primary derivative of rwca

³⁴Shorto, op.cit., 11.

³⁵Full credit for the working out of this derivation goes to my colleague. See Saveros Pou, "L'inscription de Phimeanakas (K.484) (Etude linguistique)," in *BEFEO*, LVIII (1971): 95-6, and especially "Inscriptions modernes d'Angkor 34 et 38," in *BEFEO*, LXII (1975): 318, note 34. My sole concern here is to have the item on record as belonging to a morphological set.

³⁶In modern usage, 'to be high, keen, shrill'. Cf. from the same wordbase srwca /sr̄uəc/ 'to be sharp-pointed; (military) point, vanguard'.
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/rúuəc/ 'to come to an end or point'. But, being a primary derivative of CCV(F) shape, crwca /crùuəc/ cannot, at least insofar as our experience shows, take the instrumental /-n-/ infix. Since this is nonsyllabic, it would yield a ternary cluster, */crnùuəc/, not tolerated except in the case of reduplications. The /-ran-/ allomorph of /-n-/, moreover, is restricted to primary wordbases. In order to relate cranwca /cranùuəc/ to rwca /rúuəc/ we must posit an anomalous /-vn-/ allomorph of /-n-/, for which there is no evidence known to us, and assume furthermore that the relationship of crwca /crùuəc/ to rwca /rúuəc/ had been forgotten by the time cranwca /cranùuəc/ was formed. The contingencies are so many in this case that it is only prudent to withhold judgment.

The above case, if ever resolved, may show us how to treat a set of four derivatives which have so far defied analysis:

- naniəla /nníiəl/ 'to sprawl (*on the ground, etc.*)';
- praniəla /pranìiəl/ 'to hang onto (*someone*), drape oneself around or "fall all over" (*someone*)';
- pramiəla /pramìiəl/ '(of a cylindrical or globular object) to roll down; to snuggle up to (*someone*)';
- ramiəla /rmíiəl/ '(of a cylindrical or globular object) to roll down'.

The first two forms look as if they should be assigned to a base niəla /níiəl/ while the last two forms look as if they should be assigned to a base miəla /míiəl/; in addition, the second and third forms look as if they might be assigned to a base piəla /bìiəl/. So far as I am aware, none of these bases exists. We are still warranted, nonetheless, in seeing a possible semantic connection between naniəla /nníiəl/ 'to sprawl' and praniəla /pranìiəl/ 'to drape oneself' as well as between pramiəla /pramìiəl/ and ramiəla /rmíiəl/, both 'to roll down'. Whether there is a semantic link between 'to sprawl' and 'to roll down' is a question which can be answered in the affirmative only if a plausible transitional idea can be proposed.

All that I can suggest at the moment is that praniəla /pra-

nìiəl/, which seems to show the most specialized semantic development, could have arisen from the notion of 'to roll or barge into (*someone*)' and later have been limited for a time to the notion of 'to sprawl on (*someone*) in the manner of a child or drunkard'. This would account for its present meaning as well as that of naniəla /nníiəl/ and at the same time would be in consonance with the meaning of pramiəla /prəmíiəl/ and ramiəla /rmíiəl/. This in turn suggests a -riəla /-ríiəl/ allomorph of rāla /ríiəl/ 'to spread, develop, incline toward' as the base of all four derivatives. To accept this, however, would necessitate a number of assumptions difficult of digestion. For one thing, naniəla /nníiəl/ would have to be explained as an assimilated form of *raniəla /rníiəl/. For another, praniəla /proníiəl/ and pramiəla /prəmíiəl/ could only be explained as prefix /p-/ + *raniəla /rníiəl/ and ramiəla /rmíiəl/ respectively, these two consisting of infixes /-n-/ and /-m-/ + the aforesaid -riəla /-ríiəl/. To the best of my knowledge, this type of formation is completely unknown. The liabilities of the assumptions are greater than the solution is worth, and it seems best to leave the whole problem in abeyance in the hope that a simpler solution will present itself eventually.

Some of the expansions in Groups I and III, finally, put us in mind of yet another type of anomalous formation encountered occasionally in the older literature. For example, I well remember my perplexity years ago when I first came upon the form hempūbānta /hɛɛmbuupaən > haaɛmbòopíiən/ 'Himālaya'³⁷ for the modern and more expected himabānta /həmapiíiən/ (< Sanskrit *himavant*). It was not until long afterwards that S. Pou explained to me that the /-ɛuu- > -bòo-/ expansion is distinctive of the stage dialect. This type of formation is clearly one which should be described only by someone intimately acquainted with the theater.

³⁷*Vacanānukrama khmēra*, II (1962): 1528a. The *Lpæka 'aṅgaravatta*, for example, has hemapūbā'nda at 213b, hemapūrabāna at 436e.