

# KHMER NASAL AFFIXES - OLD MON BORROWING OR PROTO - MON - KHMER RETENTIONS?

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## PRELIMINARY REMARK

I originally intended to submit this paper to the 21st Sino - Tibetan Conference to be held at the University of Lund but decided to present it to the Thammasat conference as my second contribution. However, at the time of writing it is uncertain whether the paper will be presented at all due to the limit on the number of contributions imposed by, the organizing committee. I therefore decided to submit it for publication in the conference proceedings. Salaya, 27 July 1988.

It is twenty - five years ago that the first typological comparison between Mon and Khmer morphology was made. J.M. Jacob ( 1963 ), while synchronically interpreting modern Khmer /bVN-/ ( where V stands for an environmentally conditioned vowel, N for an environmentally conditioned nasal consonant ) as a single affix, concedes that a diachronic analysis may lead to an interpretation as a compound affix. Possible reconstructions were not provided nor was mention made of Schmidt's earlier analysis ( 1916 ) that segmented modern Khmer /-mn-/ into \*-m- and \*-n-.

In this contribution I wish to argue that the earlier reflex of modern Khmer /bVN-/ is a compound prefix, consisting of proto - Khmer \*p- for the 'causa-

tive' ( a reflex of proto - Mon - Khmer \*p-, as shown by Schmidt 1906 ) and a nasal infix \*-N- for the 'frequentative'; there are grounds to argue that \*-N- for the 'frequentative' in Khmer and Mon may be a borrowing in one language and not a PMK retention.

In 1986 I suggested the existence of Khmer elements in early epigraphic Mon ( 9th to 10th c. AD ), mainly particles/ clitics and titles. Earlier, in 1984, I provided evidence that there is no discernible difference between Old Khmer *tel* and *man* when subordinating/relativizing clauses ( only the reflex of OKhm. *tel* is used in modern Khmer ). At the Khon Kaen archaeology conference in 1986 I pointed out that OKhm. *man* may indeed be a borrowing from Old Mon given OM phonological variation to encode strong and weak forms ( *man min mun* ), absent in Khmer, and given the fact that OM has no other means of relativizing clauses except for a strong form of an extracted attributive infix /-m-/ ( *ma* ); OKhm. may also combine both *tel* and *man*.<sup>1</sup>

This contribution is meant to be a sequel to my Khon Kaen paper. On this occasion I wish to go a step further and suggest that \*-N- in Khmer may be a borrowing from OM.

## 1. PARTICLES/CLITICS COMMON TO BOTH KHMER AND MON

mod. Khmer	Old Khmer	Old Mon	mod. spoken Mon	position	function
---	<u>ra</u>	---	/raʔ/	<sup>2</sup> S-final	assertive
Laf---	<u>man</u>	<u>man</u> &c.	---	CL-initial	subordination
	<u>lah</u>	<u>lah</u>	---	N-final	distributive
/daoy/	<u>toy</u>	<u>toy</u> <u>tuy</u>	/tœ/	<sup>3</sup> S-final	marking
Li, Fang Ku				S-initial	sequence
N <sup>neh</sup> /Prongthun	<u>neh</u>	<u>neai</u> '	/noʔ/	<sup>4</sup> N-final	'this'
Penth, Hans. 19				S-initial	
/ʔa:c/ 1985a	<u>'āc</u>	<u>'āc</u>	/ʔat/	<sup>5</sup> V, AUX	
/dɔ:/ History	<u>ta</u>	<u>ta</u>	---	pre-N 1985	* benefactive

2. NASAL AFFIXES COMMON TO BOTH KHMER AND MON

mod. Khmer	Old Khmer	Old Mon	mod. spoken Mon	function	class
-m-	-m-	-m-	-m-	'agentive'	v -- n
---	---	-m-	---	<sup>6</sup> 'attributive'	v -- v
-n-	-n-	-n-	-n-	'instrumental'	v -- n
-n-	-n-	-n-	-n-	'quantifier'	n -- n
	*-N-	-N-	---	'frequentative'	v -- v
-N-	-N-				
allomorph for 'causative'					
/p-/ in CC-bases					
(cf. Shorto 1969, passim)					
		-ə-	-ə-		
allomorph for 'causative'					
/p-/ in CC-bases					

3. NON - NASAL AFFIXES COMMON TO BOTH KHMER AND MON

p-	p-	p-	p-	PMK *p-	'causative'	v -- v
-b-	-p-	-w-	-w-	PMK *-p-	'nominalizer'	v -- n

(cf. Shorto 1969)

4. AFFIXES EXCLUSIVE TO MON

Old Mon	mod. spoken Mon	function	class
s-	---	'hypothetical'	v -- v
-ə-	-ə-	multiple	v -- v
			v -- n
-r-	-r-	?	v -- n

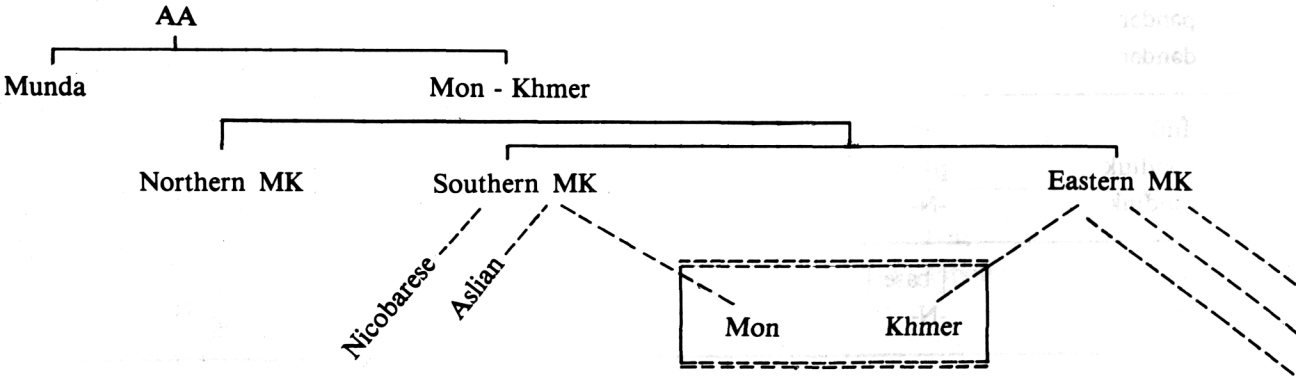
5. AFFIXES EXCLUSIVE TO KHMER

mod. Khmer	Old Khmer	function	class
-mn-	-mn-	nominalizer	v -- n

(In addition rhotacized affixes and reduplicated initials; the latter may be reconstructed as \*C<sub>1</sub>-X-C<sub>1</sub>V(C) where \*-X- is a former infix lost through mediocluster reduction ; see Bauer 1982. For additional comparisons see Jacob 1963. )

6. THE POSITION OF MON AND KHMER WITHIN MK

It has been pointed out repeatedly, most notably by Shorto in 1973 (published in 1979)<sup>7</sup> and Headley in 1973 (published in 1976)<sup>8</sup>, that Mon and Khmer occupy an isolated position within Mon-Khmer. A commonly accepted subgrouping is the following :



However, it should be borne in mind that Khmer and Mon were languages in contact ; linguistic contact is attested for the second half of the first millenium AD. Archaeological and ecological data permit us to envisage a north - western expansion of Khmer speakers into Mon speaking territories, with a period of absorption up to AD 1300 ; the northern Mon inscriptions of Lamphun and Chiangmai show, at a late stage, influence from Khmer orthographic conventions ( replacement of virāma by reduplicating the final consonant ; this procedure is lacking in an unpublished inscription on a votive - tablet from Chiangmai, now in the Lopburi museum ).

The grouping of Mon together with Aslian and Nicobarese is based on inflectional morphology, word - structure and phonologies.

Except for the particles/clitics mentioned above, by the time the first epigraphs in Mon and Khmer are attested ( Khmer 612 AD, Mon undated but possibly a century earlier ) their syntax is radically different. Their phonologies and word-structure also differ

markedly ( PA Khmer having /β/ and lacking a contrast with imploded / ʙ / d/ as well as a series of pre - nasalized stops ).

Huffman presented a differing grouping with Bahnaric - Katuic at the centre<sup>9</sup>. However, Ferlus, in conversation ( July 1988 ), argues, rightly in my view, that the apparent equi - distance of various subgroups to Bahnaric - Katuic is due to internal borrowing.<sup>10</sup>

## 7. OLD MON MORPHOLOGY.

A selection of paradigms is presented in Bauer 1988 ; additional examples are to be found in the introduction to Shorto 1971. OM has two inflectional affixes, /s-/ for the ' hypothetical ' ( future - irrealis, modality ) and /-m-/ for the ' attributive ' ( subordination ). The status of /-N-/ is unclear although I interpret it as an inflectional infix for the ' frequentative ' ( aspect ). Forms incorporating the causative ( /p-/ ), hypothetical ( /s-/ ) and frequentative ( /-N-/ ) are attested.

### Examples :

( 1 )	yuk pənyuk spənyuk	[ base ] p- / -N- s- / p- / -N-	caus., frequ. hypo., caus., frequ.	to raise to cause to raise shall cause to raise
( 2 )	kəpər kəmpər	[ base ] -N-	frequ.	to put round to encircle
( 3 )	leh rənh	[ base ] -N-	frequ.	to dance to dance, dancing <sup>11</sup>
( 4 )	jeh jərh	[ base ] -N-	frequ.	to sing to sing, singing
( 5 )	pər pəndər dəndər	p- p- / -N- -N-	caus. caus., frequ. frequ.	to shade BASE * dər to keep shaded to be shaded with
( 6 )	duk pənduk rənduk	[ base ] p- / -N- -N-	caus., frequ. frequ.	to be complete fulfilling to complete <sup>11</sup>
( 7 )	zar rənzar	[ base ] -N-		to go to take away <sup>11</sup>

Morpho - syntactic constraints exist in Mon and have been discussed elsewhere.<sup>12</sup>

Examining the first example (1) one could, as in the case of Khmer (listed below), interpret the initial sequence as a single affix; such an analysis could be supported by instances such as (5)b and (6)b. However, evidence from single - infix forms, such as (2), (3), (4) and (5)c, indicates that in Old Mon the frequentative infix /-N-/ occurred by itself as well and was not bound by a concurrent causative prefix /p-/. Hence /pəN-/ initials in morphologically complex forms have to be segmented into /p-/ and /-N-/ affixes. As examples (5) and (6) show /p-/ and /-N-/ cannot be treated as a fused affix since the two (or three) morphologically complex forms differ semantically; each affix has a unique function. The last example though is problematic: (7) is attested only once in OM (Ananda plaques, 250) and contaminated in Middle Mon by the verbal clitic *nā*<sup>13</sup> (its regular MM reflex being /ʔna/), meaning 'away'. Although Shorto's gloss reproduced here, "to take away, carry off" (1971 : 318), suggests a causative, a /p-/ prefixed causative is attested, /pʔar/ (together with its hypothetical form /spʔar/ 'to practise'). A further problem is the existence of a multiple - affixed form /pənʔar/,

glossed as 'conduct', and interpreted by Shorto as a noun, probably as a nominalized causative. In this case the /-N-/ infix would not mark the verbal category 'frequentative' but an abstract noun, similar to OM /gruŋ/ /gənruŋ/ ( /-N-/ , 'to laugh', 'laughter' (n.)). Syntactically there is no doubt that we deal here with nouns. Yet, /-N-/ may be derived from the 'frequentative' and [-n-] may have been confused with /-n-/ [-n-] forming instrumental nouns from verbs.

## 8. OLD KHMER MORPHOLOGY

What can be said with some degree of certainty about the morphology of proto - Khmer is that the reflexes of PMK \*n- (instrumental, quantifier, depending on the word-class of the base), \*m- (agentive) and \*p- already existed in proto - Khmer, as did \*p-. Problematic in OKhm. are the complex prefixes CN- and some additional nasal infixes. In spite of the very restricted character of OKhm. epigraphs we can be sure that Old Khmer did not possess a system of inflectional morphology, and affix - combinations are unknown, except for the already then fused /-mn-/ infix and the complex CN- prefix under discussion.

(8)	pāt pampāt	[ base ] pN-	to disappear to eliminate
(9)	cām pañcām	[ base ]	to watch for, watch over " to consign, entrust " ( Jenner Pou )
(10)	kap pañkap	[ base ] pN-	to hide ( You Sey : caus., not in Jenner - Pou )
(11)	ket pañket	[ base ] pN-	to give birth to id., " to be related by blood " ( Jenner - Pou )
(12)	pān 'ampān	[ base ] -N-	to hold, keep to arrest ( Jacob 1963 )
(13)	sam sañsam psam, phsam	[ base ] -N- p-	to associate ( with ), unite, combine to gather, accumulate, OKhm. toponym only ( Jenner-Pou ) to combine, unite



In spite of the paucity of attested /p-/ and non-nominal /-N-/ ( /-m-/ ) affixed forms, the Old Khmer data suggest, as in ( 12 ) and ( 13 ) that a nasal infix existed in verbal derivatives ; what the function was we cannot say, ( 12 ) suggests indeed a 'frequentative' whereas (13) implies a causative/transitive meaning in the modern reflex. Yet, OKhm. verbal -N- in ( 13 ) cannot be interpreted as a 'causative' in complementary distribution because the base can take the causative /p-/ prefix.

## 9. MIDDLE KHMER MORPHOLOGY

More extensive and varied data are available for the Middle Khmer period together with a complete analysis ( Jacob 1976 ). Her analysis is based on the epigraphic texts only ( AD 1566 - 1747 ). As far as nasal affixes are concerned no changes occur except for an additional fused /-rn-/ infix. No frequentatives are recognized by Mrs. Jacob ( except /cac-/ derived from a /c-/ base ) ; /-m-/ infixes in verbal derivatives are interpreted as causative formation in complementary distribution ( which, however, is not mentioned ). Middle Khmer data are drawn exclusively from her list ( 1976 ).

( 14 )	gat phgat	[ base ] p-	to be exact ( time ) to ensure, attend carefully
( 15 )	jum phjum	[ base ] p-	around to place together
( 16 )	dan pandan	[ base ] pN-	to be soft to soften
( 17 )	pansam	[ no Mid.Khm. base attested, see ( 13 ) OKhm. base ] pN-	to put together, unite with
( 18 )	hey panhey	[ base ] pN-	( particle ? ) already to finish ( transitive )
( 19 )	srecc samrec	[ base ] -m-	to be finished to finish
( 20 )	jah jumrah	[ base ] -m-	to be uncluttered, free to clean

No verbal nasal infix is attested with simple initial bases /C-/ ; it is thus apparent that /-m-/ is a 'causative' in complementary distribution with /p-/, the former occurring with /CC-/ bases, the latter with bases with simple initials. What is remarkable in the

corpus of Middle Khmer epigraphs is the proliferation of /pəN-/ prefixed forms. It is difficult to interpret the paucity of these prefixial forms in OKhm, whether this is due to the textual characteristics of the epigraphs or the low productivity of these prefixes.

## 10. MODERN KHMER MORPHOLOGY

Modern Khmer sees a proliferation of forms with reduplicated initials and the addition of yet another fused nasal infix /-rm-/. In all other respects the morphological system appears to be identical. Two varieties of Khmer have been analyzed in sufficient detail, the central standard (Huffman, Jacob (1968) and Jenner (1969)) and the northern (Thomas (1984)). The only difference with respect to the nasalized prefix pN- between these two varieties is

that Northern Khmer retains in the disyllabic, morphologically complex forms the voiceless bilabial plosive of Old Khmer whereas the remaining varieties of Khmer shifted it to the voiced implosive /ɓ- / (in all other contexts, simple initial and medial \*p- and \*p- have shifted to /ɓ- / and /-ɓ- /, as well as \*t- and \*t- to /ɗ- / and /-ɗ- / : this shift is partial and complex and cannot be discussed here). Examples from Surin varieties (Thomas 1984) :

(21)	dʏt pɗʏt pandʏt	[ base ] p- pN-	to be spotted, stained to paint, smear
(22)	cuel pcuel pancuel	[ base ] p- pN-	to crash into
(23)	sʏm psʏm pansʏm	[ base ] p- pN-	to be wet to wet
Mrs. Thomas mentions that variation is encountered with base - initials /ɗ- /, /c- / and /s- /; other base - initials in her data do not exhibit variation of simple and complex prefixes. It may be argued that this is a case of medio - cluster reduction in colloquial Khmer, also attested for central varieties in Cambodia (Jacob 1968 : 24 - 25) ; this, however, cannot be			
(24)	baek bɔmbaek	[ base ] *pN-	to break to cause to break
(25)	riən bɔɣriən	[ base ] *pN-	to learn to teach
(26)	peɹ bɔmpɛɹ	[ base ] *pN-	to be full to fill
(27)	kʏn bɔɣkʏn sɔɣkʏn	[ base ] *pN- -N- (?)	to grind, crush id. id., 'frequentative' (Jenner - Pou)
(28)	dam ɗɔndam	[ base ] -N-	to cook id.

maintained because an anaptyctic vowel and secondary stress would have been maintained or the initial would have been lost /pa- / and the nasal medial acquired fully syllabic status /N- /. Thus the variation exhibited in these cases is one between forms containing a simple prefix 'causative' /p- / and a complex prefix 'causative' /pN- /.

( 29 )	təh cəmtəh	[ base ] -N- ( ? )	to be opposed to obstruct
( 30 )	tuən ptuən	[ base ] p-	to repeat "to repeat several times" ( Jenner - Pou )
( 31 )	cit pcit	[ base ] p-	to be near, close to bring near, close

What emerges from the modern Khmer data is that the causative may be marked by three affixes, /p-/, /CvN-/ and /-m-/, the latter in complementary distribution as already mentioned. It is also clear that in some cases the \*causative has a 'frequentative' meaning as well, such as ( 27 ) and ( 30 ). What remains to be explained though are prefixial forms where the first element is not /p-/ but another stop /kN-/, /cN-/, /tN-/, /dN-/, liquid or fricative.

I take them to be cases of analogy, or back - formations, of morphophonemic processes attested in Old Mon, traces of which can be reconstructed for some Bahnaric and Katuic languages although this has not been hitherto recognized ; some Katuic languages are typologically close to Mon, both have retained a vocalic infix. In Mrs. Watson's analysis of Pakoh <sup>14</sup> we find forms like

( 32 )	sua tərsua	[ base ] /tər-/	to look for to look for each other	*-r-	'reciprocal'
( 33 )	hom pəhom təhom	[ base ] /pər-/ /tə-/	to have a bath to bathe each other to bathe	*p- / *-r- *?	'caus.'. 'recipr.'

which are interpreted as reciprocal ( 32 ) marked by prefixial /tər-/ and ( 33 ) causative - reciprocal marked by prefixial /pər-/. However, what has not been realized is that in ( 32 ) an earlier form is \* /sərsua/ and the reciprocal marked by the infix \*-r-, following the Mon - type rule of extracted infixation. Subsequently /səCs-/ and /səs-/ initials shifted to /təCs-/ and /təs-/ , as attested in other MK languages ( Old Mon/Middle Mon/Spoken Mon, Khmer dialects ). Since /p-/ and /tə-/ mark the causative in Pakoh and causative /p-/ may be combined with the reciprocal \*-r- to /pər-/ , initials shifted to /tər-/ in certain environments were re - analyzed as simple reciprocals, as they have been in Watson's synchronic analysis. Other cases in her data include 'to feed each other' /tərcə/, base /ca/ 'to eat', my reconstructed form \*cərca, reciprocal infix \*-r-.

It is my thesis that a similar process has taken place in Khmer ; cases like ( 29 ) and ( 27 )c,

/cəmt-/ and /sərk-/ were formed in analogy to \* /caNC-/ and \* /saNC-/ ( attested in ( 13 )) and /CvN-/ initials re - analyzed. This would also explain cases of /CvN-/ nominalizations which must have been calqued on the re - analysis of extracted infixes the existence of which is attested in Old Khmer ( 12 ).

## 11. CONCLUSION

One conclusion can be drawn from the above with certainty : Old Khmer /pN-/, modern Khmer /paN-/ /bɔvN-/ have to be re - interpreted as a fused, combined affix, consisting of the prefix /p-/ and the infix /-N-/. The function of the former is the causative which has been reconstructed for PMK \*p- as \*causative by Schmidt, the latter is a nasal infix marking the 'frequentative' which is attested in Old Mon. The fact that since Old Khmer the function of /pN-/ and /p-/ is identical is no proof to the contrary. In Old Mon where both af-

fixes \*p- and \*-N- function independently lexical glosses also blur the difference between simple causatives and causative - frequentatives outside their syntactic context.

The second hypothesis of this contribution, that we may deal with an early Mon borrowing of -N- 'frequentative' into Khmer, is more difficult to validate - I doubt we will be able to prove it directly. Part of the problem is, as mentioned at the beginning, that both Mon and Khmer are language isolates in their respective subgroups. Although Mon shows some typological similarities with Bahnaric and Katuic, no traces of a verbal \*-N- have been found there; in languages relatively close, both geographically and historically, to Khmer, say Stieng and Kuy no verbal nasal infix exists. However, some Aslian languages mark aspect, and together with Nicobarese show inflectional morphology.

Logically, we can establish a number of possibilities of how to explain a common -N- infix in Khmer and Mon: (1) \*-N- for the 'frequentative' is a PMK affix, and hence a retention in both Khmer and Mon, (2) it is an OM borrowing in Khmer, (3) it is a Khmer borrowing in Old Mon, (4) an extinct areal feature, (5) a borrowing from a non - Mon - Khmer language.<sup>15</sup>

Option (5) can be discarded; preliminary reports<sup>16</sup> suggest that Chamic languages lack a verbal nasal infix; option (4) cannot be validated though it is unlikely since there are no traces left in other MK languages. As far as option (1) is concerned the same argument applies: there is a paucity of data on morphological systems in MK; the little there is does not permit a possible PMK reconstruction for a verbal affix 'frequentative'. Other affixes, such as the ones mentioned at the beginning, \*-n- 'instrumental', \*-m- 'agentive', \*-p- 'nominalizer', can be reconstructed with confidence (as indeed the causative \*p-). More difficult to trace are the Eastern Area 'reciprocal' \*-r-, and Mon and Katuic /-ə-/.<sup>17</sup>

The argument thus focuses on a Khmer - Mon contact affix; there are a number of indicators that do suggest a borrowing from Mon to Khmer.

(i) productivity: -N- is fully productive in Old Mon; affix productivity does not cease with Mon medio-cluster reduction.

(ii) segmentation: -N- can be segmented in Mon; it occurs as single affix, or in combination with 'causative' /p-/, or /p-/ and 'hypothetical'

/s-/. Although in certain phonological environments an -N- can be isolated in Khmer it is productive only when occurring with causative /p-/, in other words it must be regarded as a fused affix /pN-/. What is striking about Khmer morphology generally is the number of fused affixes, gradually increasing over time, OKhm. /-mn-/, Mid.Khm. /-rn-/, mod.Khm. /-rm-/, /pN-/ throughout.

(iii) opacity<sup>18</sup>: With the exception of \*-n- and \*-m- nasal affixes are categorially opaque in Khmer.

(iv) re-analysis: Extracted -N- infixes and combined forms pN- have been re-analyzed in Khmer; extracted affixation and combined affixation in Mon has not led to re-analysis.

(v) systems: Shorto has repeatedly pointed to the dangers of comparing, and reconstructing, single affixes instead of systems. If \*-N- is interpreted as an aspectual affix Mon -N- shows similarities with Aslian in that aspect is encoded there also by the use of inflectional affixes. This is not attested for Khmer.

These indicators correlate well with historical events in that Khmer language areas have been gradually expanding during the first millennium AD and shortly after, whereas Mon language areas have shifted and contracted ever since. Even today this pattern can be observed where Khmer absorbs Kuy, and Mon is absorbed by Thai and Burmese. Moreover, Khmer expanded into areas where Mon was spoken, creating conditions favorable to borrowing and structural re-alignment. The situation appears to me similar to the one described by Southward (1971) for Marathi exposed to Dravidian influence. The proliferation of fused and re-analyzed forms in Khmer suggests a recurrent creolization.

## ACKNOWLEDGMENTS :

David Thomas and members of the former SIL Vietnam branch for checking Chamic nasal infixes, Michel Ferlus, Michael Vickery for interpreting *s - kum* in M.G.2, a votive tablet from Mahasarakham, as a Khmer - Mon blend - form which led me to reassess common Khmer - Mon forms not as cognates but as borrowings, and Claude Jacques for discussing the use of Sanskrit in Cham and Khmer epigraphy.

## NOTES

1. Leaving aside, as Claude Jacques suggested to me in conversation ( July 1988 ), sentence - initial ( anaphoric ) *man*. This is no counterevidence for it being an OM loan.

2. An orthographic form /ra :/ exists in classical ( pre-modern ) Khmer poetry. Notice the lengthened vowel and the lack of final glottal stop. Syntactically I take it to be identical with OKhm. *ra*. Its function is far from clear ; see references in Bauer 1986.

3. Etymologically, \**toy* may mean 'to follow' in OKhm., yet in OM it functions only as a particle. My reading in 1986 of 143/23, a *Simā* stone from Udorn, is to be amended, according to Uraisi, to *tmot*. I take *toy* to be a cognate. Shorto, in conversation ( May 1987 ), interprets spellings OM *o u* as diphthong /uə/.

4. I interpret OM *neai'* to be a Khmer loan ; Uraisi ( 1988 ) is incorrect in stating that the vowel graph *eai* ( her *ay* ) is found only in Isan OM epigraphs ; it is attested in the Alopyi and Nagayon frescoes at Pagan, as *treai treaiy* ( for the regular *trey* 'noble, exalted' ). The Nakhorn Sawan replica of a stupa ( N.W.7 ) may also have this vowel.

5. Contra Uraisi ( 1988 ) \**a:c* is a cognate in Khmer and Mon, not a loan. The syntactic construction leaves no room for a different interpretation.

6. In modern spoken Mon attributives are retained but take a different affix.

7. H.L. Shorto, The linguistic proto - history of mainland South East Asia. in : R.B. Smith & W. Watson, eds., *Early South East Asia*, London, Oxford U.P., 1979, 273 - 278.

8. R. Headley, Some considerations on the classification of Khmer. in : P.N. Jenner, et al., eds., *Austroasiatic Studies*, Honolulu, University of Hawaii Press, 1976, 431 - 451.

9. F.E. Huffman, On the centrality of Katuic - Bahnaric to Austroasiatic. Second International Conference on Austroasiatic Linguistics, Mysore, 19. - 21.12.1978.

10. Shorto, in conversation ( May 1987 ), points out that there are Khmer loan words in Khmu?, implying early language contact.

11. The /r-/ initial in the derivative follows a morphophonemic rule in OM whereby bases with /ʔ-/ and /l-/ initials taking extracted infixes do not reduplicate their initial but show /r-/ in its position. Implosives are assumed to follow the same rule although two cases behaving otherwise are attested /dɔy/ /tərdɔy/ /ɓar/ /bərɓar/. Their formation may be explained by way of analogy to morphologically simple forms /təb-/ and complex forms /təmb-/ ( from /təb-/ and /bəb-/ ( from /b-/.

12. See my 'Morphosyntactic changes in Mon', STC 18, 1985, Bangkok.

13. A basic rule, of which the one given in note 11 is complementary, applicable to certain phonological environments, is reduplicating the word - initial, in the case of extracted infixes ( simple - initial bases CVC ).

14. S.K. Watson, Verbal affixation in Pakoh, MKS, 1966, 2.15 - 30.

15. This is a methodological problem similar to the one discussed by Siklos concerning the origin of tense - affixes in Tibetan.

16. I am grateful to David Thomas, of Mahidol, for having sent questionnaires to his SIL colleagues enquiring verbal nasal infixes in Chamic.

17. It appears to me that the process of extraction is attested in various Mon - Khmer languages and may be reconstructed for PMK. The origin of extraction is unknown ; it might have been a procedure to keep verbal and nominal affixes distinct. An argument to that effect was put forward, in a different form, by Diffloth in a draft of his Nyah Kur monograph which he sent me in early 1983 for comment ; I replied that in Old Mon there is no categorial ( semantic, word - class ) distinction between extracted and non - extracted infixes. The verbal -N- frequentative and the nominal -r- are attested as extracted affixes only. For proto - Mon or PMK this may have been different though.

18. The term, and part of the methodology, is due to Jeffrey Heath, *Linguistic diffusion in Arnhem land*, Canberra, AIAS, 1978.

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