NOTES

RECOVERING EXTRACTED INFIXES IN MIDDLE KHMER: THE FREQUENTATIVE [-N-]

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I am going to show that (i) some of the so-called reduplicated
prefixes in Middle Khmer follow a morphophonemic rule attested
in Mon which can help recover lost infixes (in this case [-N-])
and that (ii) there is a case for recognizing the function
'frequentative' in Khmer. This note is a sequel, with additional
examples drawn from Pou's Rāmakerti studies (1977), of my earlier
analysis of proto-Khmer *p- and *-N- (1988)ᴀ

In her typological comparison Jacob (1963) lists a 'frequentative'
function for modern Khmer, showing reduplicated base-initials /k-,
c-, t-, p-, ɗ-, ɓ, ŋ-, ɲ-, m-, s-/ but none for Old Khmer with
Middle Khmer data not being examined. These were analyzed later
in 1973. On that occasion a 'frequentative' function was recognized
but there was only one example in the data to support this analysis
(base-initial /c-/). One should remember though that Jacob's
Middle Khmer analysis was based exclusively on the available
epigraphic data. Comparing this restricted data-base both with
Old Khmer and modern Khmer she comments:

> The reduplicative prefixes (frequentatives and
> intensifiers) seem to have come into use much
> more fully since the Middle Khmer period [1976:608]

Examining additional material drawn from the Khmer version of the
Rāmāyaṇa Saveros Pou (1977) - in this case, drawing on the earlier
redaction, dating from the 16th century AD, designated as
R[āmakerti].I. - recognizes, in the section on morphology (pp.
124-131), (i) reduplication of base-initials as morphemic and
assigns (ii) the function "désidératif" to this process:

> Ce sur quoi je voudrais insister est l'usage du
> redoublement dans R.I. Il est rare en vieux
> khmer, et devient un abus en bas khmer moyen et
> khmer moderne [...]. Or, à côté de la fonction
> trop connue comme d'intensité, le redoublement
> exprime le désir ou l'intention en passant par
> le stade de l'insistance; cet aspect que
> j'appelle désidératif est exploité exceptionnellement
> en khmer moyen [...] [1977:128]

Again, here are a number of misconceptions: Assumptions about
frequency and productivity are being made by comparing data of
a rather diverse nature; medieval Khmer Buddhist epigraphy is
very different in its textual resources from 7th century
monumental inscriptions, and differs also from an early epic
text intended for recitation. Secondly, derivatives with
different phonotactic patterns following different morphophonemic
rules, reflecting different stages of a transition, are lumped
together. [1] A new analysis will be proposed below.

By 'extracted infix' I refer to infixes which occur only in
bases with simple initials. These are not inserted into the
base, that is, following the base-initial, but precede the
base-initial; the derivational process is completed only when
the base-initial is repeated enclosing thus the infix. [2]
according to the following pattern:

<div align="center">

Extracted Infixation   Simple Infixation

base $C_1V(C)$ $C_1V(C)$

derivative C_1-X-$C_1V(C)$ C_1-X-V(C)

</div>

where -X- symbolizes the infix.

These two types of infixation are attested in Old Mon and some
Katuic languages, the former type also in Javanese. [3] The
reasons for calling this process 'extracted infixation' (and
not, for example, complex prefixation or the like) relate to my
analysis of Mon morpho-syntax where extracted infixation is
historically related to affix-extraction and the emergence of
clause-clitics. [4] In Mon this process is complicated by a number
of restrictive phonological rules which need not concern us
here. [5] Elsewhere I have given a number of Old Mon paradigms
illustrating the use of the 'frequentative', an aspect-marking
nasal infix [-N-], extracted from verbal bases with simple
initials or simply infixed in verbal bases with complex initials.
The following paradigm must suffice:

ɗuk	base	'to be complete'
rənɗuk	[-N-]	[frequentative]
pənɗuk	[p-], [-N-]	'completing'
spənɗuk	[s-], [p-], [-N-]	[hypothetical, causative, frequenta
sɗuk	[s-]	'shall be complete'

Multiple affixation, combining [p-] causative forms with [-N-]
nasal infixed forms, occurs, just like in Khmer, with one
difference: The nasal infix [-N-] in Khmer is in complementary
distribution with the prefix [p-] (in the case of causatives)
whenever the base-initial is complex; in other words, polymorphe

/pCC-/ initials are unknown in Khmer and are in complementary
distribution with /CNC-/ initials. In Mon the complementary set
for the causative prefix [p-] in the same environment (CC- base
initials) consists of the vocalic infix [-ə-].

    Extracted infixation is attested in Middle Khmer- and it
would be surprising if it were not, given the Katuic evidence-
as in

le / 'anle   'on, above' / 'place'   (IMA 26.8 / IMA 2.40)
(see Jacob (1976), p. 616).[6]

    Jacob's establishing a function 'frequentative' is based on
the following instance (1976.611, IMA 37.14):

            cāy / cacāy   'to spend' / 'to contribute'

    Before examining further Middle Khmer data, let us look
first at a variety of Northern Khmer, as described by Thomas
(1984 and 1989); we find in her analysis of nasal affixation
variation of the following kind:

    sʌ:m   / psʌ:m ~ pansʌ:m   'to be wet' /'to wet'
    dʌt   / pdʌt ~ pandʌt   'to be stained' /
                                       'to paint, smear'
    krah /   kanrah ~ kamrah 'to be thick' / 'thickness'
    phlɯ: /   panlɯ: 'to be bright' /
                                       'brightness'
    pruah /   panruah   'to scatter' /
                                       'what was scattered'
    cruh /   canruh ~ camruh 'to fall off' /
                                       'what fell off'

Such a paradigm suggests that an autonomous nasal infix has to be
recognized; problematic is the confusion of semantic categories
as well as variation of the nasal itself. On the basis of Mon
I am inclined to recognize a 'frequentative' for /-n-/ and an
'attributive' for /-m-/ with subsequent contamination and overlap.
Important in this Case is that multiple affixation occurs,
consisting of a causative prefix [p-] and a nasal infix the
exact function of which has yet to be determined. Although the
nasal infix has a 'causative' function when occurring with
complex base-initials of the form CC- (in complementary
distribution with [p-] for simple base-initials) that cannot be
its sole function. Neither the data from Surin nor the following
Middle Khmer data lend themselves to such an interpretation:

brāy	/ banrāy	'pretty, shimmering' / 'resplendent'
phtām	/ pantām	'to instruct' / 'instruction'
cboh	/ camboh	'towards' / '[...], directed to' (attributive?)
chut	/ camhut	'effective' / 'having the power to bring things to pass'
snak	/ saṁnakk	'to stay overnight' / 'to stay at, in'
thlā	/ taṁlā	'to be pure' / 'purity' (attributive?)

(Jacob 1976. passim.)

Before recognizing a function for the nasal infix further Middle Khmer data should be examined: Pou's list (1977.128) of so-called reduplicated initials follows as Fig. 2. (Fig. 1 illustrates extracted infixation and simple infixation in Old Mon.) I have rearranged Pou's data in Fig. 2 and separated nasalized and non-nasalized derivatives, including a revealing case of variation:

coeñ   /   cacoeñ ~ cañcoeñ   "se redresser" / "être prétentieux, abusif"

Here we have a case of medio-cluster reduction /-ɲc-/ > /-c-/ in progress. The loss of the medial nasal here, and in the examples in Fig. 2, is morphemic. This process is well attested in Mon and leads there to affix-syncretism[7], that is, the merger of formerly distinct semantic functions through loss, merger, or replacement of affixes. All the cases shown in the right hand column of figure 2 can be interpreted as forms that had earlier medio-clusters consisting of a nasal in its first position.

Forms with $C_1 \partial C_1$- and $C_1 \partial NC_1$- initials, corresponding to bases with simple initials, can be interpreted as 'frequentatives' and 'attributives'; the same applies to forms with $C_1 \partial NC_2$- complex initials corresponding to bases with complex initials $C_1 \partial C_2$- if the former are not derived 'causatives'.

To sum up I think one can argue that Khmer has (i) a morphophonemic process of extracted in fixation, and (ii) a nasal extracted infix [-N-] which can be assigned the function 'frequentative'. Both epigraphic Middle Khmer and Middle Khmer of the Ramakerti I suggest it to be a transitional stage with progressive mediocluster-reduction.

Extracted Infixes			
yɸm / yəmyɸm	'to breathe' / [attributive]	[-m-]
piʔ / pəmpiʔ	'three' / 'triad'	[-m-]
leh / rənleh	'to dance' / [frequentative]	[-N-]
lɸɲ / rənlɸɲ	'destroyed' / 'degeneration'	[-N-]
sul / sərsul	'to write' / 'writing'	[-r-]
/	'two / 'pair'	[-r-]
/	'complete' / 'to complete'	[-N-]

Simple Infixes		
yas / yemas	'to shine' / [attributive]	[-m-]
paʔ / pema ʔ	'to do' / [attributive]	[-m-]
paʔ / pnaʔ	'to do' / 'conduct'	[-n-]
tuy / tmuy	'finished' / [attributive]	[-m-]
tom / tnom	'tree' / [quantifier]	[-n-]
sɔr / smɔr	'low' / [attributive]	[-m-]
sal / snal	'to spreas' / 'mat'	[-n-]

Figure 1: Extracted and Simple Infixes in Old Mon.

Extracted Infixes [-N-]	Masked Extraction (Simplified Medio-clusters)
ṭiñ / tantiñ "savoir" / "s'enquérir" ḍāp / dandāp "bas" / "se montrer modeste" ḍiñ / dandiñ "en travers" / "attendre la venue de" doen / dandoen "désirer vivement" / "se montrer hautain" lañ' / lanlañ' "éloigné" / "s'étirer"	-dūc / dadūc "attirer à soi" / "insister, demander" loe / laloe "dessus" / "se croire supérieur" -lāk' / lalāk' "se mouvoir de haut en bas" / "être léger" coek / cacoek "folâtre" / "impudique" puol / papuol "appeler" / "inviter avec insistance" pūl (id., variant base)

Figure 2: Extracted Infix [-N-] and Masked Extraction (simplification of medio-clusters) in Middle Khmer
(Rāmakerti I., source: Pou (1977), p.128)

OM	MKhm.	function	word-class
[-m-]*	[-m-]	agentive	v → n
[-n-]	[-n-]	instrumental	v → n
[-n-]	[-n-]	quantifier	n → n
[-N-]	[-n-]	frequentative	v → v
[-m-]	[-m-]*	attributive	v → v
[-ə-]	[-N-]	causative	v → v
		(allomorph)	

Figure 3: Nasal infixes in Khmer and Mon and their functions; [ ]* denotes rare occurrence.

Such a scenario, however, raises new questions: Why were
initials of the shape $C_1 \partial NC_1$- subject to medio-cluster reduction
and initials of the shape *pǝNC- subject to fossilization and
re-analysis (incidentally, just like in Katuic)? Was there in
Khmer an 'attributive' function to be assigned to the infix [-m-]?
Would that be a retention from Proto-Mon-Khmer, or how is the
Mon evidence to be evaluated (in Mon this is a highly productive
affix)?

NOTES

1. Cases of nasal accretion (<u>nasaler Zuwachs</u>, à la Dempwolff)
and cases without nasal accretion are not separated.

2. See Bauer 1982.136-297, 509-519; for a review of extracted
infixes pp. 238-239.

3. For Katuic, see Bauer 1982.508-510, and 1988.11. For
Javanese see especially Rukmantoro Hadi Sumukti, <u>Javanese morphology
and morphophonemics</u>. Ithaca, Cornell University, PhD thesis,
1971, x, 164pp. and E.M. Uhlenbeck, <u>De struktur van het Javaansche
morpheem</u>. Bandung, A.D. Nix (= Koninklijk Bataviasch Genootschap
van Kunsten en Wetenschappen, 75), 1949. Khmer and Mon contacts
are attested in Java itself, around the 11th century AD; Tamil
contacts there also occurred.

4. See also some of my other publications, listed in the
Austroasiatic Bibliography in this issue of <u>MKS</u>. Verbal paradigms
are given in my 'Is it tense or modality (or both) that is marked
in Mon? The "hypothetical"' in: J. Davidson, ed., <u>Contributions
to Mon-Khmer Studies - Essays in honour of H.L. Shorto</u>, London,
SOAS (in press).

5. Necessary in this context in order to understand the
examples cited is the rule whereby a /ʔVC/ base undergoing
extracted infixation reduplicates not the glottal stop but
replaces it by an /r-/; /lVC/ bases reduplicate not the /l-/ but
also an /r-/ in the derivative. /r-/ suppletion does not apply
to imploded /ɓ-/ base-initials where its corresponding voiced
plosive is reduplicated. /ɗVC/ bases are ambivalent, possibly
due to contamination: /ɗVC/ bases may reduplicate /r-/ initials,
as in the example given here, or, following the rule for the
imploded /ɓ-/ base-initial, reduplicate its voiced exploded
counterpart /d-/ to yield a form like /dǝXɗVC/ (where X is the

extracted infix). Why this contamination has taken place I do
not know; another variant occurs in cases like /tərɗɔy/ 'inside',
derived from /ɗɔy/ by extracted infixation of [-r-] where the
suppletive reduplicated initial is the voiceless plosive.

6. Middle Khmer data appear here in transliteration, Mon
data and Northern Khmer in IPA. IMA refers to 'Inscriptions
Modernes d'Angkor'. This example is the only one attested in
IMA; it may actually be interpreted as *'le undergoing simple
infixation with [-n-]. There are, however, cases in Old Khmer
reported by Jacob and mentioned in Bauer 1988 to support the
view that extraction does occur.

7. My theory of affix-syncretism in Mon-Khmer was first
developed in Bauer 1982.156-164, and grew out of my reading of
Delbrück's Synkretismus - Ein Beitrag zur germanischen Kasuslehre,
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#

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