

Khmer Nominalizing and Causativizing Infixes

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Introduction

In this paper I reexamine the infixes of Old and Middle Khmer and attempt to reclassify them using the analytical framework of Autolexical Syntax.¹ I will demonstrate that the infixes cannot be treated merely as a result of metathesis since there are prefixes with the same phonological shape but different functions. The proposed analysis involves treating the infix as a simple affix at the morphosyntactic level, but with morphophonological requirements that vary depending on the specific affix involved.

Background on Khmer

There have been a number of descriptions of the Khmer language dating back to the earlier part of this century, e.g., Maspero 1915; Pinnow 1957.1958; Jacob 1963; Ehrman et al. 1972; Huffman 1970b. The historical stages of Khmer are usually divided into three. The first is Old Khmer, which is divided into Pre-Angkorian (611-801 CE) and Angkorian (802-1431) periods. The second is Middle Khmer (1432 - mid 18th century). Modern Khmer describes the language from then up to the present.

Khmer has no productive derivational morphology. Old Khmer and Middle Khmer, however, had prolific derivational morphology (Jenner & Pou 1981, Jacob 1963, 1976) in the form of prefixes and infixes. Previous studies have proposed a large number of infix shapes, but the present work will show that many of these are merely a result of phonological processes. The infixes of Khmer have been studied by Judith Jacob (1963, 1976), Philip Jenner (1981), Jenner & Saveros Pou (1981), and Long Seam (1989).

Khmer phonology has undergone a number of significant developments, which are fairly easy to trace thanks to a long written history dating back to the 6th century. Scholars generally agree that Old Khmer had a

series of voiced and voiceless initial consonants; that this voicing distinction was replaced by a phonation type distinction of clear and breathy voice in the vowels and that this contrast eventually was lost, leaving behind a highly complex vowel system which displays an unusual "harmony" system. Modern Khmer initial consonants are still divided into two groups, representing the historically voiceless ones referred to as FIRST SERIES, and the historically voiced ones, referred to as SECOND SERIES.

Examples of the infixes which will be discussed are listed in (1-3).² There are three distinct infixes classified functionally. One is a nominalizer that creates nouns, usually abstract, from verbs. The second forms causative or transitive verbs, and the third creates nominal agents from verbs.

1) -m- nominalizer

a. kcəi	'unripe'
kəmcəi	'something unripe'
b. ?aoy	'give'
?əmnəoy	'gift'
c. khəŋ	'angry'
kəmhəŋ	'anger'
d. c ^h uuu	'ill'
cumnəuu	'illness'

2) -m- causativizer/transitivizer

a. kɔ̄dau	'warm, hot'
kəmdəu	'to warm, reheat'
b. ?ət	'not'
?əmnət	'endure privation'
c. lhae	'to relax'
ləmhae	'to amuse someone'
d. kɔ̄əp	'satisfied'
kəmnɔ̄əp	'to salute; venerate'

- 3) -m- agentives
- | | |
|-----------------------|---------------------------|
| a. [?] chlak | 'cut' |
| OK: cəmlak | 'sculptor' |
| b. kit | 'think' |
| OK: gmit | 'thinker'(?) ³ |
| c. cam | 'wait for' |
| OK: cmam | 'sentinel' |
| d. Skt: sev | 'to serve' |
| OK smeṅ | 'servant of god' |

Previous Accounts

Jacob (1976) provides the following system of infixes for Old Khmer: *-p-*, *-m-*, *-mn-*, *-n-*, *-N-* and for Middle Khmer, she gives *-p-*, *-m-*, *-mn-*, *-n-*, *-rn-*, *-N-*. Of these, only *-rn-* is an innovation. Modern Khmer maintains the full Middle Khmer set and shows evidence of an *-rm-* infix. But it is important to note that there is no productive infixation in Modern Khmer, and that the *-rm-* infix is therefore a short-lived phenomenon or may have been present in Middle Khmer but is simply unattested in the written sources. She considers the lack of examples of *-rm-* and *-rn-* inconsequential. The *-rn-* infix in Middle Khmer had a semantic function of marking utensils, a function not shared by any other infix. The *-p-* infix was used for artifacts. These affixes will not play a major role in this paper.

Jenner (1981) lists */-vmn-/* separately as a syllabic infix. He properly considers the assimilating nasal */-N-/* only as part of complexes involving further prefixation but includes */-h-/* as an allomorph of */-ʔ-/*, for which I consider the evidence to be inadequate, and indeed, doubt that */-ʔ-/* functions as an infix at all. With regard to the liquid infix */-L-/*, it is by no means clear that there is any semantic effect, and the relationships claimed by Jenner seem to be stretching the point, e.g., */sαα/* 'to be white, clear', */slαα/* 'stew' (Jenner has 'to clarify, stew', but there is no evidence of the semantics of clarification. We will see, however, that even within the nasals he proposes far too many infixes, as most are just phonologically conditioned allomorphs.

Syllable Structures of Khmer

In order to understand the morphophonology of Khmer, it is necessary to have a picture of the basic phonology

of Khmer. Most Khmer words are monosyllabic or sesquisyllabic. All disyllabic words are either borrowed or the result of affixation via non-productive morphological processes.

Underlying Syllable Structures are CV:, CV(:)C, CCVC. Surface forms are CV:, CVC, CVCVC and derived CVCCVC. All native Khmer words are stress final. The complex Khmer orthography reflects a surface phonological level. Morphophonological operations include prefixation, infixation, partial and full reduplication.

With these preliminaries out of the way we can begin our examination of the Khmer infixes. Example (4) involves infixation into an unaspirated first series cluster. In this case the affix forces a syllabification which splits the root. The phonotactically acceptable C_1C_2VC combines with the infix m to produce C_1mC_2VC , which is not well formed at the morphophonological level. An epenthetic vowel must be inserted to create the well-formed string C_1VmC_2VC . Because C_1 belongs to the first series, the vowel will be $/\alpha/$.

4) $kc\dot{a}i$ 'unripe' + $-m-$ → $k\alpha mc\dot{a}i$ 'something which is not ripe'

	<kci>	<kmci>
Morphosyntax:	X^0	X^{-1} [Af m + X^0 kci]
Morphophonology:	#kci#	#kmci#
Phonology:	/kci/	/kmci/
Phonetics:	[kcəi]	[kαmcəi]

The next example (5) involves infixation into an unaspirated first series cluster where the second element is a liquid. The same analysis applies.

5) $trap$ 'to imitate' + $-m-$ → $t\alpha mrap$ 'example, model; manner of behaviour'

	<trap>	<tmap>
Morphosyntax:	X^0	X^{-1} [Af m + X^0 trap]
Morphophonology:	#trap#	#tmap#
Phonology:	/trap/	/tmap/
Phonetics:	[trap]	[tαmrap]