A Brief Historical Analysis of Khmer

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Introduction

The language of Khmer is the primary language of the Kingdom of Cambodia, in Southeast Asia. Originally traced to the Austro-Asiatic language family, Khmer has continued to evolve over the last 4000 years.

There are five dialects of Khmer in Cambodia, with Central Khmer as the official dialect. Of the 14.2 million native speakers of Khmer, 12.9 million are in Cambodia.

The Austro-Asiatic language family encompasses 168 languages, which are spread out across Southeast Asia. Of these 168 languages, 147 are in the branch of Mon-Khmer. While the exact origins of this language family are unknown, it is estimated that the original speakers may have migrated from southern China between 4000 and 4500 years ago. Constant invasions by speakers of other languages led to the fracturing and divergence of this family into many much smaller groups. The Mon-Khmer branch has been influenced by the tonal and analytic languages of China, while the much smaller Munda branch exhibits synthetic and non-tonal characteristics of Indo-Aryan languages on India. Only Vietnamese, Khmer, and Mon ever became prominent languages of nation states (Austro-Asiatic).

One major influence on the evolution of the Khmer language was from the introduction of Hinduism by Indians during the pre-Angkorian period. The written script of Khmer descended from the Pallava script of 5th century Southern India and Southeast Asia. Pallava descended from the ancient Indian Brahmi script. The Indic-based orthographic systems of Mon and Khmer both date back to around A.D. 600 (Hartmann 8). Frequent interactions with Indian language groups led to many Sanskrit loan words during the spread of Hinduism during the first millennium A.D., followed by the

introduction of Pali loan words during the spread of Buddhism, through to the 13th century.

One unique characteristic of many of the Khmer-Mon languages is the absence of tones. Many of the neighboring languages incorporate a tonal system, including Thai, Vietnamese, and Chinese languages. Due to proximity, occupation, and trade, these language groups have had significant contact and influence over Khmer speakers. There have been a large number of loan words introduced into Khmer that contained tones in their source language. Much of northern and western Cambodia was under Thai hegemony from 1795 to 1907, yet the Thai tonal system was never incorporated into the local languages (Nghia 1207). The tones in Vietnamese were believed to be from a long occupation by the Chinese. The Vietnamese loan words into Khmer lose their tone, while Khmer words entering Vietnamese are assigned a tone. The Vietnamese word báhn ('cake') became the Khmer *bahn*, and *thày* ('teacher') in Vietnamese became *thây* in Khmer (1207).

Classification of Khmer

Khmer is currently classified as a member of the Mon-Khmer branch of the Austro-Asiatic family of languages. Due to the use of an Indic script and a large number of borrowings from Indo-European languages such as Pali and Sanskrit, Cambodian students were taught that their language was related to Sanskrit and Pali until the middle of the twentieth century. A link to other Mon, Cham, and Vietnamese languages was first proposed in 1852, and Wilhelm Schmidt first proposed the Austro-Asiatic family of Southeast Asian languages in 1907 (Headley 431).

There are around 130 languages in Mon-Khmer. The languages are found between India and Vietnam, stretching from Southern China to Malaysia. The nine branches of the Mon-Khmer languages average cognate percentages of 25%, suggesting that the branches separated from each other around the same period of time (Headley, 441). Among the Mon-Khmer languages, Khmer was shown to have one of the highest numbers of lexical innovations. In a sample of 45 common lexical items from the Swadesh 100-word list, Khmer had 13 unique entries, second only to the Pear language of Cambodia (443). The Mon-Khmer languages share the same basic phonemic inventory and numerous phonological features. The devoicing of original initial voiced stops is common among Khmer, Mon, Sedang, Pearic, and many of the Palaungic languages. The loss of the final *-r is demonstrated by Khmer, Mon, Vietnamese, and Sedang (437). These phonological similarities are illustrated with the following examples, adapted from Headley (436):

Khmer	Mon	<u>Vn</u>	gloss
toat	tàt	tát	'slap'
kuk	k3k	ngục	'prison'
cum		chụm	'around'
buən	pon	bốn	'four'
bañ		bắn	'to shoot'
pi:	ba	hai	'two'
kambao	həpv	vôi	'lime'
	toat kuk cum buən bañ pi:	toat tàt kuk k3k cum buən pon bañ pi: ba	toat tàt tát kuk k3k ngục cum chụm buən pon bốn bañ bắn pi: ba hai

Evolution of Khmer

Khmer is typically divided up into three historical periods. Old Khmer approximately dates from the 7th to the 13th centuries. This period includes both the pre-Angkorian period form the 7th to the 9th century, as well as the Angkorian period between

the 9th and 13th century. Middle Khmer stretches from around the 14th century until the 18th century. Modern Khmer continues from the 19th century through to the present.

Borrowing

Khmer has experienced extensive lexical borrowing from continuous contact with other language groups over the last 2000 years. The earliest written descriptions of Cambodia were written in Chinese, who referred to the kingdom as Funan (derived from Old Khmer: *bnam* 'mountain') (Chandler 14). Close contact, trade, and occupation has led to the introduction of numerous lexical loan words derived from a large number of languages, including Sanskrit, Pali, Thai, French, and English. The earliest dated inscriptions in Khmer were from A.D. 611, while the earliest Sanskrit inscriptions in the area were carved in 613 (21). Sanskrit was the language of religion and the gods, largely limited to the elite and royalty. Khmer was the language that united all of the people in Cambodia. During this period, Sanskrit provided loan words for ideas relating to government, law, literature, religion, and writing ("Traditional Literature" 6). Starting in the 13th century, the rise of Theravada Buddhism as the primary religion in Cambodia led to a new influx of loan words for new ideas and concepts from Pali.

Another important source of loan words is from neighboring Thailand and the Tai language group. During the height of the Angkorian period, the Khmer Empire stretched from the Andaman Sea west of Thailand to the east coast of Vietnam. Following the fall of the Angkorian Empire, Siam (Thailand) invaded and occupied much of present-day Cambodia. These periods of mutual occupation led to a large exchange of ideas and language. One area that makes considerable use of Thai loan words is numerals. While Khmer words are used for 1-29, the numbers for 30-90, 100 (/rɔ̂:y/), 10 000 (/mɔɛːn/), 100

000 (/saen/), and one million (/lien/) are borrowed from Thai (Jacob 28). Other examples of Thai loan words include: /kaoŋ/ 'rude'; /kaeh/ 'to scratch'; /krot/ 'acid'; /kraeŋ/ 'to fear'; /con/ 'small/indigent'; /naam/ 'liquid'; /baab/ 'maid'; and /phay/ 'harbor/dock' ("Sealang"). The pervasive breadth of Thai borrowings covers a wide range of semantic and syntactic roles, demonstrating the large number of advances made in Khmer society during the period of extensive contact with Thai speakers.

A more recent source of borrowing in Khmer has been a result of the French colonial occupation from the latter half of 19th century, until the middle of the 20th century. Words for French influences reflect objects introduced by the French, as well as synonyms of existing words, such as /num/ 'bread'; /maasin/ 'machine'; /haotal/ 'hotel'; /kaafee/ 'coffee'; /viitaamiin/ 'vitamin'; and /ʔaŋkleih/ 'English' ("Sealang"). Most recent borrowings reflect dominant role of English throughout the world in the last 50 years, including America's involvement in Southeast Asia since the 1960's. English borrowings include: /dollaa/ 'dollar'; /piikəɨp/ 'pickup'; /miitiin/ 'meeting'; /mootael/ 'motel'; and /baay –baay/ 'bye-bye' ("Sealang"). The Khmer lexicon has been greatly extended through the process of borrowing, and analysis of these borrowings provides an insight into the history and evolution of the culture as a whole.

Phonological Changes

The phonology of Khmer experienced many significant changes during the period of Middle Khmer. One very important change highlighted by Cambodian and Old Khmer scholar Philip Jenner during this time was the devoicing of voiced stops of Old Khmer, between the 16th and 18th century. Old Khmer *[gi:] became Modern Khmer /kii/, while Old Khmer *[gu:] became Modern Khmer /kuu/. The vowels in Old Khmer

following a voiced consonant stayed the same during the shift; however, they were now considered to be high register. The same vowels following voiceless consonants assumed the role of the newly formed low register, as they were lowered. Old Khmer *[ki:] lowered to the Modern Khmer /kəəj/ and Old Khmer *[ku:] lowered to /kòo/ ("The Relative Dating" 694). The low central *[a:] saw a reversal and compensation since it could not be lowered any further. Old Khmer *[ga:] transformed into the modern /kíiə/. The end result was the creation of two registers or nuclei for each syllable nucleus of Old Khmer (695). This distinction between high and low register is illustrated in the tables on the following page.

The following passage from Jenner's "The Relative Dating of Some Khmer CPĀ'PA" illustrates the kākagati meter, which is kind of poem which contains a sevenline verse with four syllables in a line; with rhyme between the last syllables of a and b; c, e, and f; and the last syllable of g with the following final c. The modern Khmer equivalent is listed beside the passage to illustrate the phonological changes between Middle Khmer and Modern Khmer that have removed the rhyme from the passage. The two most significant phonological changes are the devoicing of voiced stops, as well as the corresponding lowering and fronting of many vowels ("Relative Dating" 697):

Middle Khmer

- a. baak neh jaa cpap
- b. duunman qooj gap
- c. kuun cəw qee krooj
- d. qaa buk qit droop
- e. wii gap (3) duk gooj
- f. tee baak neh dooj
- g. brah paalil thaa
- a. look thaa bləən
- b. meen bit moh ryy
- c. bum sməə surijaa

Modern Khmer

píiak néh cíia cbap

tuunmiiən qaaoj koəp

kòon caw qaae kraaoj

qaa puk qèt troəp

wəəj koəp (3) tuk qaaoj

taae píiak néh daaoj

preəh baaləəj thaa

look thaa plàan ply

mεεn pit móh rýv

pum smaaə sorəjaa

Another significant phonological change is regarding the reflex of Old Khmer /r/. The modern standard dialect and the colloquial dialect of Phnom Penh Khmer have four reflexes of the O.K. /r/, depending on the environment. Robert K. Headley provided the following description in "The Reflexes of Old Khmer R in Modern Khmer" (41):

	<u>Environment</u>	<u>Standard</u>	Colloquial Phnom Penh
I	'R-	/r/	/H/
II	RV-'	/1/	/1/
III	'CR-	/r/	/H/
IV	CR-'	/Ø/	/ Ø /
V	-R	/:/ ~ /1/	/:/ ~ / 1 /

In colloquial Phnom Penh Khmer, the initial /r/ became a weakly voiced pharyngeal fricative /H/ in environments I and III. When an initial R is followed by a vowel, the reflex of /l/ and /r/ have merged. In environment IV, R is reduced to zero. The word-final R is typically replaced with a long vowel and R-deletion in standard and Phnom Penh Khmer, while it may become a retroflex-lateral or lateral glide in western dialects ("Reflexes" 42). Headley suggests that "the relationship between the position of /r/ and the onset of the syllable is apparently a major factor in the stability of the /r/ phoneme. It is most stable when it occurs as the onset or part of the onset" (43).

Khmer Vowels: Middle Khmer ("Development of the Registers" 51)

Front u	nrounded	Cer	tral	Back	rounded
long	short	long	short	long	short
11	ī	уу уу	У	uu .	· u
	î ə		ye	ļ u	ə
99	(e)	әә	ə	00	(o)
33	(8)	aa	a	၁၁	э

Early Modern Khmer ("Development of the Registers" 53)

F	ront u	nroun	ded	j	Cer	tral			Back	round	ed
,Z	ong	sh	ort	lo	ong	sho	rt	. 2	ong	sh	ort
HR	LR	HR	LR	HR	LR	HR	LR	HR	LR	· HR	LR
ii	66	i	e*	уу	уу"	у	y*	uu	00	u*	o *
	íθ	~ iə			уə	~ yə		1	uə	⊸ uə	
ее	ee"	(e)	(e*)	99	a ^{ee}	ə	ə ^v	00	a ^{oo}	(0)	(a)
33	\mathbf{a}^{EE}	(8)	(e*)	e _{aa}	aa	e _a	a	20	aa	э	Q.
				°aa	-	°a	•	i			

Modern Khmer ("Development of the Registers" 55)

F	ront un	round	led	L	Cent	tral			Back 1	rounde	ed
L	ong	sho	rt	10	ng	sho	rt	lo	ng	sho	ort
HR	LR	HR.	LR	HR	LR	HR	LR	HR	LR	HR	LR
11) eé	ī	à	ýу	(ŷy)	-	-	uu	òο	u~ uə	0
fiə	e i f	-	-	ýyə	у̀уа	-	-	úuə	ບໍ່ນອ	-	-
éв	èе	-	-	бə	ааә	-	-	60	aao	-	-
33	аає	-	-	-	-	-	-	-	-	-	-
íie eco	aa	eə 0ə	a] -	-	-		၁၁	aa	u~ uə	a

Khmer Consonant Inventory: Old Khmer ("Chrestomathy II" 5)

	Bilabial	Labio-Dental	Alveolar	Palatal	Velar	Glottal
Stops	p/6 ¹		t/d¹	c,	k,	3
			d	J	g	
Nasals	m		n	ŋ	ŋ	
Flaps			r			
Fricatives	β^2		S			h
Lateral			1			
Approximates						
Approximates		- υ		j		

¹ preconsonantal p and t represent /p/ and /t/; prevocalic p and t represent /p ~ 6/ and /t ~ d/ down to the 10th century, initial & post-initial */b/ and */v/ merge into / β /, which was preserved in final position /-p/ and /-v/

Modern Khmer ("Research Report")

Place	Bilabial	Labio-Dental	Alveolar	Palatal	Velar	Glottal
Manner						
Stops	p, b, p ^h		t, d, t ^h	c, c ^h	k, k ^h	7
Nasals	m		n	ŋ	ŋ	
Flaps			r			
Fricatives			S			h
Lateral Approximants			1			
Approximants		w		j		

Lexical Changes

One area where Old Khmer and Modern Khmer differ is regarding gender distinction. Modern Khmer has two pairs for male and female, which depend on whether it is a person or a plant/animal being described. The words for flora and fauna (/cmool/

'male'; /nii/ 'female) are of Mon-Khmer origin. The source of the human words (/proh/ 'male'; /srey/ 'female') is Sanskrit. Modern Khmer /cmool/ and /nii/ were present in Old Khmer as *jmol* and *ye*. A cognate of *ye*, *ya*- was used as a prefix to the names of numerous slave women in 6th and 7th century texts (Lewitz 762).

For human beings in Modern Khmer, /proh/ and /srey/ are loan words from the Sanskrit *strī* and *puruṣa*. Lewitz also identified another related word, /pdey/ (Skt. *pati*) for 'husband,' found in 10th century inscriptions. In Old Khmer, referring to men and women required compounding where the word for person (anak) is used as a prefix to the gender marker (si, kantai). Man/men was indicated with anak si, and woman/women was indicated with anak kantai (764). These words show cognates in other Southeast Asian languages, especially for *kantai*. These cognates include both human and animal gender. Khmer also has a feminine gender prefix of /ka-/, suggesting that *kantai* had two morphs. Kan- has been identified as a prefix to proper names of women, while tai was used as a title for all women throughout the duration of Old Khmer. Si was not as widely used or productive as *kantai*, and it seems to have disappeared in the 9th century (765). Mon-Khmer made further distinctions in humans, with /klph/ 'virile man' and /kəmlph/ 'young man' (767). Old Khmer also had the word *vrau* 'female/wife,' related to the Mon-Khmer /praw/ 'old maid' (768). This large variety in lexical variation suggests that the iconicity in Old Khmer has given way to economy in Modern Khmer.

A comprehensive analysis of the lexicon of pre-Angkorian Khmer (preceding the foundation of Angkor in A.D. 802) was performed by Philip Jenner's *A Chrestomathy of pre-Angkorian Khmer*. A total of 5,849 lexical items were recorded among the available dated and undated inscriptions of pre-Angkorian Khmer. In an analysis of undated

inscriptions, 53.1% of the 3470 words were slave names, with the vast majority being of vernacular origin (*Chrestomathy IV* v). Among the undated inscription lexicon, 933 of the 3470 words were loan words, primarily from Sanskrit. Monosyllabic bases accounted for 30.8% of the lexicon, with dissyllabic derivatives accounting for 42.3% (*Chrestomathy IV* iii). In the lexicon from the dated inscriptions, 1008 of the 2365 items were slave names and other proper nouns. Monosyllabic word bases accounted for 32.8% of the word count, and 30.3% were loan words (*Chrestomathy II* 1).

From this period, the influence of Sanskrit on the language is very pronounced. While Sanskrit introduced a large number of lexical items into the language, its effect on phonology is less clear. One of Jenner's conclusions was that the germination of post r consonants was initially a characteristic of Sanskrit loans before the year A.D. 802. Following 802, the "application of the Pāṇinian rule which stipulates that 'After r and h when preceded by a vowel there is doubling of any consonant except h'" was extended to the orthography of all Khmer words, despite not applying to Old Khmer phonology (*Chresomathy II* 3). Examples from Jenner's lexicon which illustrate the wide semantic range of Sanskrit loan words from this period include:

'circle; ring; orbit' /bɔɔriməndɔɔl/
'east' /buur/
'tube; channel; drain' /prənaal/
'measuring capacity for grain' /prɔh/
'murder; a heinous crime' /βrahməhatjaa/
'male slave name /buraakryt/
'female slave name /βəjdeeh/

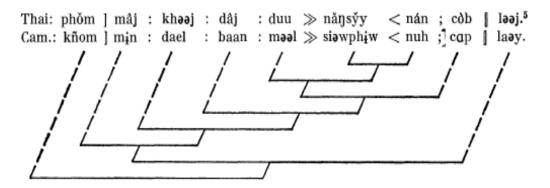
This heavy influx of Sanskrit loan words coincides with the expansion of Indian Hinduism in the region at a time when the organization of the Khmer people was leading up to the creation of the Angkorian Empire.

Syntax

Khmer syntactic structure shares a strong resemblance with the structure of the Thai language. Franklin Huffman noted that "not only is the order and inventory of individual form classes almost identical in the two languages, but also many semantically equivalent forms, or words, seem to share identical ranges of syntactic occurrence" (488). This correlation, along with the close proximity of the two languages, would suggest a familial relationship between the two languages. However, further analysis by Huffman shows that Thai is from the Tai language family, while Khmer is in the unrelated Mon-Khmer family. In spite of the syntactic parallelism, the languages reflect many typological differences. Khmer is a non-tonal language with many disyllabic words and complex morphological affixation. That is a tonal and monosyllabic language, which has a very limited system of affixation borrowed from other languages. The two languages contain many similar lexical items. However, these are a result of constant historical contact, as well as the significant influence of Pali- and Sanskrit-based cultures and religious texts in this region (489). The following basic words were provided by Huffman to support a language distinction:

<u>Khmer</u>	<u>Thai</u>	<u>Gloss</u>
kbaal	hŭa	'head'
traciəq	hǔu	'ear'
day	myy	'hand'
ptěəh	bâan	'house'
krahaam	deeŋ	'red'

The degree of syntactic parallelism between Khmer and Thai is demonstrated with the following comparison (Huffman 490):



I] not : ever : have chance to : read >> book < that ; finish [] at-all 'I've never had the chance to finish reading that book.'

Key:

- 1) (]) subject-predicate construction
- 2) (:) affective construction
- 3) (>>) objective construction
- 4) (<) postposed attributive construction
- 5) (;) completive construction
- 6) ([]) paratactic construction

In addition to demonstrating many shared syntactic properties, this data also refutes the possibility of coincidence in explaining the relationship between Khmer and Thai syntax. The number of potential orders for these six relationships is 720, placing the possibility of a random coincidence at 0.14 percent (490).

Some of the unmarked noun phrase word orders shared between Khmer and Thai include: noun-adjective, noun-genitive, noun-numeral-classifier, and noun-numeral-demonstrative (492).

Khmer:	ptěəh thom	ptĕəh kñom	barəy bpii daəm
Thai:	bâan jàj	bâan phŏm	burìi səəŋ muan
	house big	house me	cigarette two CLF
	'a big house'	'my house'	'two cigarettes'

Another area of syntactic similarity is through the use of verbal subclasses in verb phrases, as defined by the position of the lexical unit. Both languages employ adjectival verbs, transitive verbs, modal verbs, completive, and directive verbs (496).

Khmer: kee sasei lqaa kñom məəl siəwphiw kñom tiw min baan (tē)
Thai: khăw khĭan dii phŏm duu năŋsyy phŏm paj mâj dâj
he write good I read book I go not able
'he writes well' 'I'm reading a book' 'I can't go'

Khmer and Thai also contain a large class of post verbal adverbs and preverbal adverbial phrases (Huffman 499). They also make use of final particles to indicate commands, questions, and emphatic statements (501). The ultimate question to be addressed in this consideration of syntactic borrowing is just exactly who influenced whom? In historical contexts, the Angkorian Empire of Cambodia occupied much of Thailand in the 12th and 14th century. However, this influence was counteracted by the expansion of the Siamese kingdom into Cambodia, starting in the 14th century. Huffman addressed this question with a comparative survey of other Tai and Mon-Khmer languages. One feature, the use of classifiers, was found to exist in all Tai dialects, but only some of the Mon-Khmer dialects (504). The noun-numeral-classifier word order found in both Khmer and Thai has been shown to exist primarily in Tai languages, supporting the notion that Khmer borrowed this feature from Thai. Another feature analyzed by Huffman was the post-verbal relationship-marking particle found in Khmer and Thai. Two Mon-Khmer languages used for comparison, Mnong Rolom and Halang, make use of preverbal relationship particles (504):

MR: bò kan han lai so pl. masc there already saw 'they already saw them' H: Bloy ?lo ? e ?lo? wa? blah yòon Bloy be result be about-to fight we-excl 'Blow is always about to fight us' Based on the data considered, the conclusion of Huffman was that "it is clear that Thai syntactic structure is very close to that of other Tai dialects, while Cambodian syntactic structure is closer to that of Thai than to that of any other Mon-Khmer language investigated" (505). Based on analysis of Pre-Angkorian, Angkorian, and Middle Khmer inscriptions, these syntactic borrowings appear to help explain some of the differences between Old Khmer and Middle Khmer (507). This evidence clearly demonstrates the significant linguistic influence of the Thai-speaking Siamese Kingdom on its neighbors to the east. In addition to lexical borrowings, the syntactic borrowings explain why early attempts at classifying Khmer led to the false conclusion that it was a relative of Thai. These changes not only created similarities with Thai, but they further differentiated Khmer from other Mon-Khmer languages.

Most of the recorded Old Khmer inscriptions are limited in subject matter and form. With around half of the recorded words as slave names, a large number of the surviving texts entail lists and descriptions of property and gifts, inscribed into stone tablets and on walls of structures. One of the earliest recorded Khmer texts, the Sadec inscription (A.D. 578-67) provides an example of the simple syntactic structure of pre-Angkorian Khmer ("Chrestomathy III" 1):

vraḥ kamratān 'añ śrīpuṣpavaṭasvāmi puṇya mratāñ śucidatta ai kaṃluṅ kūdya vraḥ kaṃmratān 'añ mūlasthāna | kñuṃ 'aṃnoy mratāñ ta vraḥ [:] vā vrau l vā bhinava l vā noc vraḥ l | karoṃ sre 'aṃve cī sau slā slik teṃ l ai sruk slā slik tem

divine shining HON (diety name) gift lord (personal name) of inside walls High-Lord HON capital/headquarters | slave given/GEN lord shining lord : male-slave slavename slave slavename | below ricefield action toponym (settlement name) 400 CLF at settlement palm 400 CLF

'[This is the image of] the shining one Our High Lord Śrī Puṣpavatasvāmi, the gift of the lord Śucidatta [set up] within the walls of the shining one Our High Lord of the capital. These slaves are given by our lord to the shining lord: Vrau, Bhinava, and Noc. [Additional gifts include] 400 areca palms from Cī Sau.'

The first segment contains three NP's following the generic headword *vraḥ* ('divine'). The second segment contains 'aṃnoy ('given' or GEN?) in apposition of the preceding kñuṃ and preceding the possessor *mratāñ* ('lord'). The third segment contains the noun-numeral-classifier word order (slā slik teṃ 'palm 400 tree'), which is common to Tai languages, but not in Mon-Khmer. This data illustrates that the influence of Thai syntactic structure on Khmer can be traced back as far as early Old Khmer.

Summary

In the last two millennia, the Khmer language has maintained certain key properties, such as a refusal to accept the tones common to many of the neighboring language families and the use of monosyllabic word bases. Its syntactic structure has been heavily modified from a prolonged period of very close contact with Thai speakers. A wide variety of lexical borrowings have been introduced via religion, occupation, and trade, primarily from countries to the west of Cambodia. The phonology has undergone one important vowel shift, creating a second register. The most significant changes in the language marked the shift from Old Khmer to Middle Khmer, including these syntactic changes and the vowel shift. While the language continues to evolve away from its Proto-Mon-Khmer roots, it continues to be recognizable as a unique language in a very linguistically diverse part of the world.

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