

SYNCHRONIC LEXICAL DERIVATION IN SOUTHEAST ASIAN LANGUAGES

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Synchronic derivation--derivation by productive lexical derivation rule--is common in all languages. Some particular lexical derivations in Southeast Asian languages include such areal characteristics as 1) locus prepositions derived from a class of locus verbs, 2) locus adverbs derived from the same class of locus verbs, 3) transitive verbs derived from a class of intransitive motion verbs, 4) intransitive "passive" verbs derived from agentive transitive verbs, and 5) intransitive incorporated-object verbs derived from a class of transitive verbs, and a small class of secondarily derived transitive verbs from these same intransitive incorporated-object verbs. At least two languages--Vietnamese and Hmong--derive deictic nouns from locative relator head nouns. The derivation of restrictive possessive nouns from animate nouns in Hmong appears to be peculiar to that language.¹

1.1 Historical derivation

The term 'derivation' has traditionally been used to describe a process by which one lexical item is derived from another lexical item and the semantic/syntactic/phonological changes are such that the derived item has become lexicalized; that is, it is no longer--or never has been--predictable by rule and occurs separately in the basic lexicon (Starosta 1971:85).

An example in English of lexicalized derivation is that of a noun having been derived from an intransitive verb which has in turn been derived from another intransitive verb:

- (1.1) Vi spring (IE*spergh-, Gmc*spreng-, OE springan)² 'leap up, emerge suddenly (from coiled position)' → Vi spring 'come into being (by growth)' → N spring 'season of year characterized by budding and growth'

1.2 Idiosyncratic synchronic derivational relationship

Sometimes two words are so close phonologically and semantically that native speakers think of them as one word and it is clear that they have a synchronic derivational relationship. In this case, the close relationship of the two words is revealed by the similarity of some of their semantic and grammatical features. However, they exist in the lexicon as separate lexical items because they are called upon to fill different grammatical roles. Therefore, there is not a general derivational rule such that one item is predictable from the other.

Such a phenomenon can be seen in the verbs used to express existential and possessive constructions in most Southeast Asian languages and in Chinese. The two verbs--the possessive verb and the existential verb--are kept apart in the lexicon by the difference in their grammatical requirements; the main difference being that the possessive verb is transitive whereas the existential verb is subjectless. (See Clark 1982 for more detailed discussion of existential and possessive constructions in Southeast Asia.) Sentences from Thai, Khmer, Vietnamese, Hmong, and Mandarin Chinese illustrate the similarities and differences between the two verbs.³

(1.2)	'have, possess'	'have/be in existence'
	[+ [+NM, +COR] ___ [+PAT] ([+LOC])]]	[- [+NM] ,+ ___ [+PAT] ,+ ([+LOC])]]
	'She has three bowls/dishes.'	'There are three bowls on the table.'
Thai	Khǎw <u>mii</u> caan sǎam bay. 3P have dish 3 Clsf.	<u>Mii</u> caan sǎam bay bon tó'. have dish 3 Clsf. top table
Khmer	Koət <u>miən</u> caan bəy. 3P have dish 3	<u>Miən</u> caan bəy læ tok. have dish 3 top table
Vietnamese	Nàng <u>có</u> ba cái chén. she have 3 thing bowl	<u>Có</u> ba cái chén trên bàn. have 3 thing bowl top table
Hmong	Nw̄ <u>m̄a</u> pé lú ntì? 3P have 3 thing bowl	Nyó pè? rōng <u>m̄a</u> pé lú ntì? at top table have 3 thing bowl
Mand. Chi.	Tā <u>yǒu</u> sān ge wǎn. <u>Yǒu</u> sān ge wǎn zài zhuōzi-shang. 3P have 3 Clsf. bowl have 3 Clsf. bowl at table-top	

([+NM]=Nominative case form, [+COR]=Correspondent case relation, [+PAT]=Patient case relation, and [+LOC]=Locus case relation.)

There are many of these idiosyncratic derivations in the lexicons of these languages, but it is not such unproductive--albeit common--derivations that are the focus of this paper. Rather, we will discuss productive synchronic derivations, those which are predictable by general rule.

1.3 Class synchronic derivation

A productive synchronic derivation is one in which two sets of words are related in such a way that one set is predictable from the other; that is, there exists a general lexical derivation rule which states that, given certain features in a set of words, a new set of words can be produced. A general derivation rule states the condition for potential new words and describes the relationship between the old set and the new set.

To return to the English verb spring and one of its derivatives, the noun spring, we can see that two productive derivation rules in English derive two new words. One is the rule which allows causative transitive verbs to be derived from intransitive verbs:

(1.3) Vi spring 'emerge suddenly (from coiled position)'

→ Vt spring 'cause to spring, actuate, as in spring the trap'

and another is the rule which allows adjectives to be derived from nouns:

(1.4) N spring 'season of the year'

→ Adj spring 'pertaining to the spring season, as in spring
flowers'

Two of the most productive derivation rules in English are the one which derives verbs from nouns:

(1.5) 'Put it in a box.' → 'Please box it for me.'

'That was done on the stage.' → 'They staged that act very well.'

and the one which derives nouns from verbs:

(1.6) 'She likes to run.' → 'She went for a run.'

'They're always talking.' → 'We had a good talk.'

It is this type of derivation--where two sets of words are related by a general derivation rule--that is the focus of this paper. The derivations to be discussed are, first, some derivations common to the Southeast Asian area: prepositions derived from verbs (V → P); adverbs derived from verbs (V → A); derivations between transitive and intransitive verbs (Vi → Vt, Vt → Vi), to be illustrated in Thai; then derivations involving locative nouns, with discussion of a resultant tone change in Hmong and Vietnamese; and finally a derivation peculiar to Hmong--possessive nouns derived from animate nouns.

2. Prepositions derived from verbs

One synchronic derivation that is common throughout Southeast Asia is the derivation of locus case-marking prepositions from a set of locus verbs. Examples from some languages are shown in Table 1.

V → P	be at→ at, in, on		reach to→reaching to		[+anmt] give to→ to, for		go to→to	
Thai	yùu	yùu	thǎn	thǎn	hây	hây	pay	pay
Khmer	niw	niw	dɔl	dɔl	ʔaoy	ʔaoy	tiw	tiw
Vietn.	ở	ở	đến, tới	đến, tới	cho	cho	về	về
Hmong	nyó	nyó	txô	txô			go	back
MandChi.	zài	zài	dào	dào	gěi	gěi	back	to

Table 1 Locus prepositions derived from locus verbs

The following sentences exemplify the V → P derivation, the a sentences containing the source locus verb and the b sentences containing the derived locus preposition.

(2.1) Thai a. Khǎw yaŋ yùu nay rooŋsǎi.

3P still be at inside mill

'She's still at the mill.'

b. Arúnee tham-ŋaan yùu thi Krunthēep.

Arunee work at place at Bangkok

'Arunee works in Bangkok.'

(2.2) Thai a. Khǎw cà thǎn Krunthēep prŭŋ-níi cháaw.

3P will reach Bangkok tomorrow morning

'She will arrive in Bangkok tomorrow morning.'

b. Khǎw maa thǎn thfi-nfi mfa cháaw níi.

3P come reaching to here when morning this

'She came/arrived here this morning.'

The [+terminus] preposition 'reaching' often occurs marking an abstract locus case relation. An example is the Hmong sentence in (2.3) b.

(2.3) Hmong a. ...xa rau qh³ no thfa-li txo⁶ k³.
 send to place this consequently reach I
 'Send it here and it will get to me.'

b. Txhó póng-sía txo⁶ ntàw? k³ cǒ khòng?
 don't be troubled reaching place at my group thing
 'Don't worry about my things.'

(2.4) Viet. a. Chị ấy cho tôi một cái rồi.
 older sister that give I one thing already
 'She gave me one already.'

b. Chị ấy g³ởi một cái cho tôi.
 sister that send one thing to I
 'She sent one to me.'

The preposition cho in (2.4) b marks an animate locus (dative) phrase.

In (2.5) b the Thai preposition with much the same meaning marks a benefactive phrase.

(2.5) Thai a. Khăw hăy ɲən chă.
 3P give money I
 'She gave me money.'

b. Khăw yìp khǝǝŋ hây chǎn.

3P pick up thing for I

'She picked the thing up for me.'

(2.6) Khmer a. Yǝǝŋ tɨw srok Kmae khæe kraoy.

we go country Khmer month behind

'We're going to Cambodia next month.'

b. Yook ʔəywan nih tɨw bəntup.

take thing this to room

'Take these things to the room.'

This synchronic derivation appears to be part of an historical derivation process of prepositions being derived from verbs, with some prepositions having already become lexicalized, as for example:

(2.7) Mandarin V *bǎ 'take, hold' → P bǎ 'being the object of action'

Vietnamese V(*)tù 'leave, abandon' ? → P tù 'from, since'

(in Sino-Vietnamese compounds; may not be the source for P tù)

Vietnamese V(*)giùm 'do for' → P giùm 'for'

(regional and restricted)

Hmong V(*) rau 'put on/into' (restricted) → P rau 'to, for'

3. Adverbs derived from verbs

The same set of locus verbs which can produce prepositions is, on the whole, the same set which can produce adverbs which occur as attributes to locus verbs. In the following examples, the verbs in the b sentences which are modified by derived adverbs, klàp 'return', dək 'carry', nqa 'carry', gỏi 'send', ngồi 'sit', and viết 'write' are verbs with inherent locus case relations.

(3.1) Thai a. Chăn khəy maa thfi-nfi ləw.

I used to come here already

'I have been here before.'

b. Khăw klàp maa ləw.

3P return hither already

'She came back already.'

(3.2) Khmer a. Kee mɔɔk kənlaeŋ nih thəə ʔəy?

3P come place this do what

'What have they come for?'

b. Tuuk nuh dək tnam mɔɔk pii Kəmpuəŋ-Caam.

boat that carry tobacco hither from Kampong Cham

'That boat is bringing tobacco from Kampong Cham.'

(3.3) Hmong a. Tàʔsìʔ no pé mù pèʔ róng tsì tau.

moment this we go above mountain not able

'We can't go up to the mountains now.'

b. Nẵ nqa rá txùà mù.

3P carry tool brush knife away

'He carried the brush knife away.'

(3.4) Viet. a. Tôi sẽ về Huế ăn Tết.

I will come back Hue eat festival

'I'll return to Hue to celebrate the New Year.'

b. Lan mua một bưu-ảnh gửi về.

Lan buy one picture send back

'Lan bought a picture postcard to send back (home).'

(3.5) Viet. a. Lan xuống nhà bếp nấu bữa cơm.

Lan go down house kitchen cook meal rice

'Lan went down to the kitchen to cook a meal.'

b. Mời cô ngồi xuống.

invite aunt sit down

'Please, miss, sit down.'

(3.6) Viet. a. Xin cho tôi một cái đẹp hơn.

request give I one thing pretty be more

'Please give me a prettier one.'

b. Để tôi viết cho.

leave I write for

'Let me write it for you.'

In the Black Tai sentence in (3.7), the first ʔɔʔ² 'out' looks to be an adverb, while the second ʔɔʔ² 'go out' is clearly a verb.

- (3.7) ʔɛ² sui¹ man⁴ ʔɔʔ² siə¹, ha:⁴ man⁴ ko³ bau² ʔɔʔ²
 want push 3P go-out become-gone but 3P not go out
 'He tried to push the child off his lap, but the child didn't
 get off.'

4. Transitivity and derivation

Transitivity is traditionally understood as a global property of an entire clause, such that an activity is "carried over" or "transferred" from an agent to a patient (Hopper & Thompson 1980:251). Starosta (1980:1) defines transitive verbs as those with Agent, Instrument, or Correspondent in their case frames. Derivational processes which involve transitivity, that is, those which derive intransitive verbs from transitive ones or vice versa (as in Kullavanijaya 1974, Starosta 1971, S. Thompson 1974) are very common in the languages of Southeast Asia. Some of these processes will be illustrated in Thai.

Three types of derivations which involve transitivity found in Thai and some minority Tai languages will be discussed here. They are the derivation of transitive causative verbs from intransitive verbs, the derivation of intransitive passive verbs from transitive active ones, and that of intransitive incorporated-object verbs from transitive verbs plus their objects.

4.1 Transitive verbs derived from intransitive verbs

There is a process in Thai which derives transitive causative verbs from a class of intransitive verbs. The following sentences are examples of Vi → Vt [+causative] from Thai and Phu-Tai, the a sentences giving the source verb and the b sentences the derived verb.

Thai:

- (4.1) a. Khǎw wɪŋ rew.

3P run fast

'He runs fast.'

- b. Khǎw tɔŋ wɪŋ rɛaŋ nán.

3P must cause to run matter that

'She must push that matter.'

- (4.2) a. Khǎw ?ɔk pay khǎaŋ nɔk.

3P go out to side outside

'She went outside.'

- b. Khǎw pay ?ɔk khɔŋ thɪi thǎa-rɛa.

3P go take out thing place harbor

'He went to get the things out at the shipping agent's office.'

- (4.3) a. Khǎw klàp maa lǎaw.

3P return hither already

'She has come back already.'

b. Khăw klàp khây nay kàthá'.

3P turn over egg inside pan

'She turned the egg over in the pan.'

Phu-Tai:

(4.4) a. Mân kaliŋ yôu kàaŋ thâaŋ.

3P roll at middle path

'He is rolling in the middle of the path.'

b. Mân kaliŋ yàaŋ rôtñôn din.

3P cause to roll tire car play

'He rolled a tire for fun.'

It should be noted that the intransitive verbs that undergo this derivational process in Thai are locus verbs of motion and direction. Apart from those in the examples above, there are others, as dæen 'walk', phàan 'pass', mũn 'spin', hăn 'turn around', khayəp 'move over'.

4.2 Intransitive verbs derived from transitive verbs

There is a kind of intransitive clause in Thai of which the subject is the receiver--i.e. patient--of the action, but the verb has the same form as the corresponding transitive verb. In other words, the clause is passive but the verb appears not to be. This type of clause is called a "receptive clause". (Halliday 1976: 161,

Ruangchotivit 1981). However, we may look at this particular type of clause from the point of view of synchronic derivation and hold that the verb in such a clause is derived from its transitive counterpart. In fact, there is a set of such intransitive verbs derived from a class of agentive transitive verbs. This derivation is very productive, as we can predict one set from the other, and a general derivation rule can be formulated showing that the intransitive (passive) class is derived from the transitive (agentive) one.

The following sentences are examples of $Vt \rightarrow Vi$ [+passive] in Thai.

(4.5) a. Chăn sák phǎa kooŋ nán lǎew.

I wash cloth heap that already

'I have washed those clothes already.'

b. Phǎa kooŋ nán sák lǎew.

cloth heap that wash already

'Those clothes have already been washed.'

Some people may argue that (4.5) b. is a topicalized version of (4.5) a, in which the subject 'I' is deleted or understood (see, for example, Clark 1974 for Vietnamese). This is not very probable because (4.5) b. does not seem to mean exactly the same as (4.5) c. below, which is a real topicalized version of (4.5) a. and in which the particle nā usually occurs to mark the topic.

(4.5) c. Phâa kooŋ nán nâ chăŋ sák lăew.

cloth heap that Part. I wash already

'Those clothes, I have washed already.'

Unlike sák in (4.5) a. and c, sák in (4.5) b. marks the completion and result of the action that affects the subject patient. This is supported by the fact that we can add a pronoun copying the subject, as in (4.5) d.

(4.5) d. Phâa kooŋ nán man sák lăew.

cloth heap that it wash already

'Those clothes, they have already been washed.'

Also, the derived intransitive passive verb may mark the quality or characteristic of the subject, as shown in (4.6) a. and b. and (4.7) b. and c.

(4.6) a. Phâa bəep nîi sák ɲây.

cloth type this wash easy

'this kind of cloth washes easily.'

('It's easy to wash this kind of cloth.')

b. Phâa bəep nîi man sák ɲây.

cloth kind this it wash easy

'This kind of cloth, it washes easily.'

(4.7) a. Khăw kin khanôm thúk wan.

3P eat dessert every day

'She eats dessert every day.'

b. Khanǒm yàaŋ níi kin mǎy dii.

dessert kind this eat not good

'This kind of dessert is not good for eating.'

c. Khanǒm yàaŋ níi man kin mǎy dii ná.

dessert kind this it eat not good Part.

'This kind of dessert, it is not good for eating.'

As can be seen from the above examples, the verbs in the "passive" examples are clearly intransitive verbs, and we may say that they are derived from their transitive counterparts. They may be characterized as [+passive] if we define a passive verb as one whose subject is the receiver of the action.

This type of derivation is quite productive in Thai. It affects all transitive verbs with agentive subjects. Non-agentive transitive verbs, for example, volitional verbs such as like, are not subject to this derivational rule.

4.3 Intransitive incorporated-object verbs derived from transitive verbs

Besides passive intransitive verbs derived from agentive transitive verbs, there is another class of intransitive verbs which are derived from transitive verbs. This is a derivation which incorporates in the derived verb the object of the underived transitive source verb.

This process of verb-object incorporation has been found in several languages, as Mandarin Chinese, Sora, and Kusaiean⁴, and exists in some languages in Southeast Asia. In Thai, incorporated-object verbs are common. Some of them are well-established compounds, as recognized by grammarians.

The following are examples of transitive verbs (a sentences) and their corresponding derived intransitive incorporated-object verbs (b sentences), from Thai.

- (4.8) a. Khǎw síi khǒɔŋ níi maa mɛ́awaan.
3P buy thing this hither yesterday
'She bought this thing yesterday.'

- b. Khǎw pay síi-khǒɔŋ thúk wan.
3P go buy-thing every day
'She goes shopping every day.'

- (4.9) a. Khǎw tɕŋ tham ɲaan níi sèt kòɔn.
3P must do work this finished before
'She has to finish this work first.'

- b. Khǎw tham-ɲaan nàk.
3P do-work hard
'She works hard.'

As can be seen from (4.8) b. and (4.9) b, the incorporated-object verbs are single intransitive verbs. The objects -khɔɔŋ and -ŋaan are inseparable from the verbs; they do not take modifiers and cannot be topicalized, as shown in the following ungrammatical sentences.

(4.10) *Khɔɔŋ nâ khăw pay sɨi thúk wan.
 thing Part. 3P go buy every day
 'Things, she goes to buy every day.'

(4.11) *ŋaan nâ khăw tham nàk.
 work Part. 3P do hard
 'Work, she does hard.'

(4.12) *Khăw tham-ŋaan níi nàk.
 3P do work this hard
 'She does this work hard.'

This derivation is quite productive in Thai. There are many more examples, as yáy-baan 'move house' wáat-rúup 'draw picture', rian-năŋsɨi (learn book) 'study', mii-ŋən (have money) 'be rich', etc.

The following examples from Phu-Tai may suggest that this process of verb-object incorporation is common to Southeast Asian languages.

Phu-Tai:

(4.13) Mân pây ?ét-we?
 3P go do-work
 'He went to work.'

(4.14) Caw cǎaw ʔàw-mēe lǎew.

title Chaw get wife already

'Chaw is married.'

(4.15) ʔfinaay ʔàn nán day-luʔ.

woman Clsf. that receive-child

'That woman gave birth to a child.'

(4.16) ʔfitaa ʔàn nán thǎy-nāa lǎew.

man Clsf. that plough-rice field already

'That man has already ploughed.'

It is interesting to note that some derived incorporated-object verbs, which are intransitive, may, in turn, produce secondarily derived transitive verbs with other objects. The Thai sentence in (4.17) a. has a derived intransitive incorporated-object verb, while the verb in (4.17) b. is a transitivized incorporated-object verb, illustrating the Vt + Object → Vi → Vt derivations.

(4.17) a. Khǎw mǎy rúu-rʔaŋ.

3P not know-story

'She doesn't understand.'

b. Khǎw mǎy rúu-rʔaŋ rʔaŋ thǎi khun phǔut.

3P not know-story story that you speak

'She doesn't understand what you said.'

The Phu-Tai sentences in (4.18) and (4.19) have secondarily derived transitive incorporated-object verbs.

(4.18) Mân hót-nám kók-máy lăw.
 3P pour-water plant already
 'She has watered the plants already.'

(4.19) Caw tǎa kə-hâm mǔu lăw.
 title Ta give-bran pig already
 'Ta has fed the pigs.'

5. Derivation between classes of locative nouns

In most of the languages of Southeast Asia there is a set of locative nouns which, following L. Thompson (1965:200-202), we will call relator nouns.⁵ A relator noun occurs as a head noun and is restricted in that it requires another, attributive noun by which it is inalienably possessed. A relator noun is further restricted in that it never takes classifiers or enumerators. The relator noun serves to specify the position of the attributive noun relative to the speaker or hearer and to the action or state of the verb, and frequently fulfills localistic requirements of prepositions and of locus verbs in much the same way that prepositions do.

The following table gives examples of some of the most common of these nouns in several Southeast Asian languages.

	place inside	place outside	top	place above	bottom	place below	front, before	place behind, after	middle	place at
Viet.	trong	ngoài	trên	trên	dưới	dưới	trước	sau	giữa	(tận)
Khmer	knoŋ	kraw	læ	læ	kraom	kraom	muk	kraoy	kəndaal	
Sre	dəlam	bədi	daŋ		dəm					
Thai	nay	nɔk	bon	nǎa	lāaŋ	tāy	nāa	lǎŋ	klaaŋ	thīi
Hmong	hǎu	nràw?	sàw?	pè?	qá	nrà?	(ntla)	(qá)	nrúa	ntàw?

Table 2 Locative relator nouns in some Southeast Asian languages

Following are some sentences with relator nouns.

(5.1) Kñom caŋ mcul knoŋ sac.

Khmer I insert needle inside flesh.

'I stuck a needle in her skin.'

(5.2) Man⁴ ju² kaa⁴ noʔ⁵ sau².

Black he stay at outside them

Tai 'He stayed outside the group.'

(5.3) Waanníi nóoŋ hòklóm bon kraday thīi taʔlàat.

Thai yesterday sister fall top stairs place at market

'Yesterday, at the market, sister fell down on the steps.'

(5.4) Nó thọc tay (vào) duới chiếu tìm hộp nữ-trang.

Viet. 3P thrust hand into place under mat seek box jewelry

'He stuck his arm under the mat looking for the box of jewelry.'

(5.6) KØ txhó póng-síab txô ntàw? qhǒ
Hmong you don't be worried reaching to place at subject
 no nǎw.
 this one sure
 'Don't worry about this matter, OK?'

It should be noted that not all scholars analyze these as nouns, even as special nouns. They have been variously treated as locative nouns, prepositions, stative verbs, or functionally undefined particles.⁶

In Mandarin such locative words or morphemes as li 'inside' and shang 'top' occur at the end of the noun phrase and so have sometimes been called postpositions. The head noun in Mandarin does occur phrase finally, so these words could be considered to be head nouns, but they are unstressed and do not carry distinctive tone; nor does the preceding noun ever have the attributive marker de. This last characteristic, however, is to be expected because of the inalienable relationship between these words and the nouns with which they occur.⁷

They do occur in compounds which are clearly relator nouns and the heads of their constructions. Some examples are shàngmian 'top-face', shàngtou 'top-head', shàngbian 'top-side', all meaning in general 'above, on top of'; wàitou 'outside-head: outside'. But these compounds do not help us to determine the grammatical category of unstressed noncompounded li, shang, wai, etc. At an earlier stage of the language, it seems quite clear that they were nouns. Chu (1972:89) gives examples from Late Archaic Chinese in which some of these relative position words

are separated from the preceding noun by a "modification" marker, Apparently, this marker dropped out of use with these inalienably possessed nouns. The question is whether these words have retained their noun category or have become another category or simply inflections on nouns.

In any case, in the Southeast Asian languages cited, these locative words seem to function as nouns. They state relative position, never directionality except by implication. The Khmer sentence in (5.7) uses the directional preposition coul 'into' to explicitly specify direction, followed by the relator noun knoŋ to specify position relative to the action of the verb and to the speaker and hearer.

(5.7) Yook qəywan nuh coul knoŋ pteəh.

take thing that into inside house

'Take those things into the house.'

In the sentence in (5.8), from Hmong, the same relator noun hău 'inside' occurs in both source and goal phrases. In Hmong, there is no locative preposition meaning 'from'. The verb rho 'extract' in (5.8) is a [+path] source verb which allows both source and goal phrases. The first hău phrase is interpreted as source because of the source verb and the second hău phrase is marked as goal by the goal preposition rau. Hău serves simply to state the "inside" position and to satisfy the verb's requirement for a locus phrase.

(5.8) Nw rho pláu chõ nyĩa hău hná lò rau

3P extract four bar silver inside bag hither to

hău ă.

inside earth

'He took four bars of silver out of the bag (and put them) onto the ground.'

In Vietnamese and Hmong at least, these words can occur with determiners instead of attributive nouns (see Vietnamese examples in Sec. 5.2) or with determiner-like nouns, as illustrated in the Hmong sentence in (5.9).

(5.9) Kũ múa í lú me-me rau hău no.

I hand one thing small to inside this one.

'I have enclosed a small piece here.'

Finally, the position nouns regularly occur after prepositions, as seen in all but three of the preceding sentence examples, --an unlikely slot for another preposition or for a stative verb.

In view of these arguments and the general patterning of these languages, we will consider these position words to be nouns, until there is strong evidence to the contrary. Further, we consider them to be the heads of their noun phrase constructions.

In Hmong and Vietnamese, and seemingly in Thai (see (4.2) a above), attributive and free nouns can be derived from these locative inalienably possessed head nouns. In White Hmong and the southern dialect of Vietnamese, a tone change results. The case in White Hmong will be discussed first.

are separated from the preceding noun by a "modification" marker, Apparently, this marker dropped out of use with these inalienably possessed nouns. The question is whether these words have retained their noun category or have become another category or simply inflections on nouns.

In any case, in the Southeast Asian languages cited, these locative words seem to function as nouns. They state relative position, never directionality except by implication. The Khmer sentence in (5.7) uses the directional preposition coul 'into' to explicitly specify direction, followed by the relator noun knoŋ to specify position relative to the action of the verb and to the speaker and hearer.

(5.7) Yook qaywan nuh coul knoŋ pteəh.

take thing that into inside house

'Take those things into the house.'

In the sentence in (5.8), from Hmong, the same relator noun hău 'inside' occurs in both source and goal phrases. In Hmong, there is no locative preposition meaning 'from'. The verb rho 'extract' in (5.8) is a [+path] source verb which allows both source and goal phrases. The first hău phrase is interpreted as source because of the source verb and the second hău phrase is marked as goal by the goal preposition rau. Hău serves simply to state the "inside" position and to satisfy the verb's requirement for a locus phrase.

(5.8) Nw rho pláu chō nyĩa hău hná lò rau

3P extract four bar silver inside bag hither to
hău ă.

inside earth

'He took four bars of silver out of the bag (and put them) onto
the ground.'

In Vietnamese and Hmong at least, these words can occur with
determiners instead of attributive nouns (see Vietnamese examples in
Sec. 5.2) or with determiner-like nouns, as illustrated in the Hmong
sentence in (5.9).

(5.9) Kǔ mũa í lú me-me rau hău no.

I hand one thing small to inside this one.

'I have enclosed a small piece here.'

Finally, the position nouns regularly occur after prepositions,
as seen in all but three of the preceding sentence examples, --an
unlikely slot for another preposition or for a stative verb.

In view of these arguments and the general patterning of these
languages, we will consider these position words to be nouns, until
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to be the heads of their noun phrase constructions.

In Hmong and Vietnamese, and seemingly in Thai (see (4.2) a
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inalienably possessed head nouns. In White Hmong and the southern
dialect of Vietnamese, a tone change results. The case in White Hmong
will be discussed first.

and to in (5.15) are clearly nouns and have the same shape as the determinerlike attributes in (5.11) and (5.13) respectively. (Note the relator noun sàu? in (5.15).)

(5.14) Pé lò nyó ntăw mà no no li năw.
 we come stay there and then cold cold so sure
 'We came to live over here ('there' to hearer) and it's
 very very cold.'

(5.15) Nong ya tõ lò tsàw sàu? ru tsě.
 bird fly there hither to land top roof house
 'The bird flew from over there hither to the roof of the house.'

That is to say, a derived free locative position noun has the same tone as the corresponding derived attributive noun. Whenever relator nouns with `-? tone produce free common or attributive nouns, the tone of the derived noun changes to ~. With relator nouns of other tones, the tone does not change in the derivation. In (5.16) hău is a relator noun. In (5.17) hău, with the same tone, occurs alone.

(5.16) W' nyó hău zò Hmóng Ntsúa tau í ntù.
 we two stay inside village Hmong green get one period of time
 'We lived for a while in a Green Hmong village.'

(5.17) Npua txèng? qhǒ tsě lò hău.
 pig penetrate hole house return inside
 'The pig slipped through a hole in (the wall of) the house
 and came inside.'

The relator noun pũa 'far extent' seems not to have a phrasefinal derivative. But the time relator noun thàu? 'time at' (in (5.18)) has a derived attributive noun thầu 'that time', as in (5.19).

(5.18) Nw nrô^ô Tong thà? thàu? lú tsí hli
3P with Tong chat time at bulk(of time) five month
làw?.

already

'She talked with Tong in May.'

(5.19) Pé li, yă hlúa thầu, mà pé...

we 's period of time young that (time) then we

'As for us, that time when we were young, we...'

In Green Hmong, the other major dialect of Hmong in Laos and Thailand, there is no tone change when a position noun occurs phrase finally. Note that the attributive noun ntàw? in the sentence in (5.20), has the same tone as the relator noun ntàw?.

(5.20) Kô nce mông múa xú nong ntàw?.

you ascend go take nest bird that

'You climb up and grab that bird nest.'

However, there is evidence that another dialect of Hmong, Wei-ning A-Hmo Miao in northwest Gui-zhou province in China, may have the same tone change phenomenon. In texts collected by Wang Fu-shi, there are examples of a noun v'ae31 'place', with a low falling tone, which appears to be a relator noun, as illustrated in (5.21).

- (5.21) I55 lae35 tw55nw55...tq'au33 v'ae31 i55 lu55
A-Hmo one classifier person pass place one Clsf.
 tau55.
 mountain
 'A man was passing a hill.'

What appears to be a derived attributive noun or a determiner v'ae35, has a high rising tone, as in (5.22).

- (5.22) tae55 b'am35 kull lie55 v'ae35.
A-Hmo Clsf. flower Adj.marker red that
 'that red flower

There are several examples (Wang 1972:137) of other position determiners having the same tone, which suggests a correlation between position word and tone:

- (5.23) ts'ae35 that (on the side)
A-Hmo nq'u35 that (below)
 b'i35 that (above)
 d'i35 that (in front)

5.2 Vietnamese derived locative nouns

Locative position nouns in Vietnamese can occur as attributive nouns without change of tone, as shown in (5.24) and (5.25). In (5.24) attributive noun trong occurs with the relator noun bên 'side'. (The

noun chốt 'bolt' is incorporated in the transitive verb đóng 'close', making a derived intransitive verb 'bolt-close'.)

(5.24) C^hu^oe đóng -ch^ot bên tr^ong.

door close-bolt side inside

'The door was bolted on the inside.'

(5.25) Không nên xét-đ^oán b^ê ng^oàⁱ.

not should judge side outside

'One should not judge by appearance.'

We presume these attributive nouns are derived from corresponding relator nouns, as are those which can occur as the only noun in the noun phrase. In (5.26) ng^oàⁱ is the only noun in the locative noun phrase; the prepositional phrase ở ng^oàⁱ is a common expression meaning 'outside (the house)'.

(5.26) Ngày mai chúng ta sẽ ăn ở ng^oàⁱ.

day morning Plural 1 P Inclus. will eat at outside

'Tomorrow we'll eat outside (in the garden/at a restaurant).'

When a locational phrase refers to something previously understood, the locative position noun can occur as the only noun in the noun phrase, followed by a determiner such as áy, as in (5.27), or the typically Southern đó, as in (5.28).

(5.27) Anh làm gì trên áy?

older brother do what top that

'What are you doing up there?'

- (5.28) Ở bên đó em sẽ cố-gắng học.
 at side that younger sibling will try study
 'Over there I'll try to study.'

In the Southern dialect, when a position noun occurs as the only noun and is followed by the determiner ấy, the two words coalesce to create a single word, a new noun. When the source noun is in one of the "even" tones--the low falling (huyền) or the unmarked high level (bằng) --the tone of the noun changes to the mid dipping and rising tone (hỏi). L. Thompson (1965:149) gives the following list of position relator nouns and corresponding solo nouns with incorporated determiner and their meanings. (He lists only trong, ngoài, and trên as relator nouns.

bên	side, area	bên	that side, there
trong	inside, interior	trong	inside (it)
ngoài	outside, exterior	ngoài	outside there, outside (of it)
trên	top, upper surface	trên	on top (of it)
đang	location	đang	there

Among the examples which he gives (p.150) are the two sentences in (5.29). The first sentence illustrates that the coalesced noun ngoài in the second sentence is anaphoric. As shown in the second sentence, the determiner đó does not coalesce with the noun.

(5.29) Họ đang làm gì ở ngoài vườn?

they in progress do what at place outside garden

'What are they doing out in the garden?'

Họ đang ăn cơm ở ngoài / ở ngoài đó.

they in progress eat rice at outside at outside that

'They are eating out there.'

(5.30) Tôi thấy chị ấy (or chỉ) mới bỏ trong.

I perceive sister that just put inside

'I just saw her put it in there.'

In the Hue and Hanoi dialects, the locative noun and determiner do not coalesce, although in Hue dialect, ấy reduces, as in

(5.31).

(5.31) Cô lấy cái đó bỏ trong à.

she take thing that put inside that

'She put that one inside.'

Again, the inalienably possessed relator noun and its corresponding free noun are two separate lexical items, due to their differing grammatical environments. We presume that the free noun is derived by lexical rule from the relator noun lexical entry.

6. Hmong derived possessive nouns

In his paper on classifiers in Southeast Asia, Jones (1970: 2-3) points out that the languages of Southeast Asia and South China fall into two general groups with respect to word order in the noun phrase. The primary group, including Vietnamese, Hmong and Chinese, has a numeral-classifier-noun pattern. The other group, including Khmer, Thai, and Burmese, has a noun-numeral-classifier pattern. The division appears to be areal rather than genetic, since representatives of Mon-Khmer, Tai and Sino-Tibetan fall into both groups. In this paper, we consider classifiers to be nouns, that there is no separate category "classifier", although the classifier nouns belong to a particular class of [+definitive] nouns, In the languages of the numeral-classifier-noun pattern--Jones' first group, the classifier is the head of the noun phrase construction in which it occurs.

Thompson (1965:123, 179ff) suggests that, in Vietnamese, restrictive elements precede the phrase head and descriptive elements follow the head. This seems to be the general pattern in the area. Jones(1970:5-6) shows that adjectival attributes follow the head noun in all the languages he has represented, except Modern Chinese, Amoy (SE Chinese), and Cebuano (Pacific Austronesian). In Vietnamese, Sre, Khmer, and Thai, possessor nouns occur as descriptive attributes, following the head noun and other descriptive attributes,

as shown in the examples in Table 3. In this case, derivation is not involved in the expression in the noun phrase. In Hmong, however, noun phrase possessors do not follow the Hmong pattern of descriptive attribution. They occur as restrictive attributes, coming before the possessed head noun, at the beginning of the noun phrase. The sentence examples in Table 3 show the order of restrictive possessor noun (in the case of Hmong), head noun, classifier noun where it is not the head noun, numeral, noun and adjectival attributes, possessor attributive noun, possessive relator noun where applicable, and determiner in several Southeast Asian languages.

	Poss Noun	Nu	HEAD	Noun Attr	Noun Attr	Adj. Attr	(Clsf) Nu	N.Attr	Det	[+rltn] N.Attr	Poss N.Attr	Det
Hmong	kǔ my	pé	tǔ	dě	xì ⁸	dú						ntǎw that
		3	anim.	dog	color	black						
Viet.		ba	con	chó	màu	đen			đó	của	tôi	
		3	anim.	dog	color	black			that	possn.	I	
Sre		pe	nəm	ʔasə		jù ⁹					ʔaŋ	ne
		3	thing	dog		black					I	that
Khmer			siəwphiw			liəŋ	pii (kbaal)			rəbəh	kñom	nuh
			book			yellow	two Clsf.			thing	I	that
Thai			nǎŋsǐi		(sǐi)	lǎŋ	sǒŋ	lēm		khǒŋ	phǒm	nán
			book		color	yellow	two	Clsf.		possn.	I	that

Table 3 Noun phrase order in some Southeast Asian languages,
showing position of possessor noun

The Hmong sentence (6.1) further illustrates the tendency in Hmong noun phrases for attributes to follow the head noun. In (6.1) the two most complex noun phrases, each headed by lú 'thing', have been bracketted, as has the relative noun phrase which is an attribute to the second lú. Note that the only attributes preceding the head noun are possessors and numerals.

(6.1) Kǔ xǎ rho [Zǔa pé lú hná pântáu dai nyfa]
 I want extract Youa's 3 thing bag stitchery hang silver
 tàw? thía [nè í lú pântáu tàw?lâu
 out and 3P's one thing stitchery cross-stitch embroidery
 xì? ntsúa dā [ùà í-pùà-tsícâu dùa]].
 color green yellow which 150 dollar
 'I want to take out Youa's three silver-hanging bags and her
 yellow-green embroidery piece which is \$150.'

Inanimate inalienable possession, i.e. pè? rông 'the table's top surface' in (6.2), follows the usual attribution pattern: posses-
 see head noun - possessor attributive noun. It is animate possessors
 that occur at the beginning of the noun phrase, as kǔ and tù in (6.2).

(6.2) Kǔ tù mùa? rá kóng nyó pè? rông.
 my animate being's sister tool needle be at place above table
 'My sister's needle is on the table.'
 (Lit.: 'my sister-animate-being's needle tool is at the place
 (which is) the table's top.')

When a possessive construction occurs in the same noun phrase with a locative relator noun, as in the sentence in (6.3), the relator noun is the head of the higher noun phrase and occurs preceding the possessive phrase, which is attributive to the relator noun. That is, the relator noun hău 'inside, which is the head, precedes the possessive phrase lăw lú vâ 'their garden', of which lú is the head. Both noun phrases are bracketted.

- (6.3) Nyó [hău [lăw lú vâ]] mŭa í tũ dẽ tò? npua.
 at inside their area garden have one anim. dog bite pig
 'In their garden there's a dog which bites pigs.'

In Hmong a possessor rarely occurs without a classifier noun as the head of the construction; that is, a classifier noun is almost always the head possessee. Even in most cases of immediate kinship, the classifier for animate beings is necessary. For example, 'my sister' in (6.2) above is correct, but in (6.4), without a classifier, it is ungrammatical.

- (6.4) *Kũ mùa? mù tì? ko.
 my sister go place across there
 'My sister went across there.'

An interesting contrast is between inalienable father and alienable husband, as shown in (6.5). Also shown is inalienable mother; the wife has her own title.

- (6.5) kǔ txǐ, kǔ tù txǐ, kǔ nǎa?, kǔ (tù)
 my male my anim. male my woman/mother my anim.
 'my father' 'my husband' 'my mother' 'my wife'
 pǒnǎa?
 woman (pǒ=female)

However, it does not work the other way; offspring are "alienated" by a classifier:

- (6.6) kǔ tù ntshàì, kǔ tù tú
 my anim. girl my anim. son
 'my daughter' 'my son'

The cooccurrence between possessor and classifier may have to do with definiteness rather than alienable/inalienable possession. In Hmong, classifier nouns are used for definiteness. Note that in (6.3) above the specific dě 'dog' is marked with the numeral 'one' and a classifier, while the indefinite npua 'pig' needs no classifier. In (6.7) dě, specific and definite, is marked with a classifier; indefinite tsǒ 'tiger' in (6.8) is not.

- (6.7) Tù dǎ dú no tò? kǔ tù nyǎ.
 anim. dog black this bite my anim. cattle
 'This black dog bit my cow.'

- (6.8) Nyó tò? hǎ-zǒo mǎa tsǒ kǎw.
 at place there jungle have tiger very much
 'In the jungle there are many tigers.'

Again, 'woman' in (6.9) is definite, while 'woman' in (6.10) is indefinite.

(6.9) Tù pō Hmóng Dáw tù ntĩa tsho xĩa xĩa li.

anim. female Hmong white strip front jacket blue blue so

'That White Hmong woman's jacket trim is very blue.'

(6.10) Pōnià? Hmóng Ntsúa tù ntĩa tsho mũa xì? ntau

woman Hmong green strip front jacket have color much

ntau yà?.

much sort

'Green Hmong women's jacket trim is many colored.'

'The jacket trim of Green Hmong women is many colored.'

It can be seen that the derivation of [+animate] nouns in

Hmong to become restrictive possessive attributes is very productive and differs markedly from the ways in which other languages in Southeast Asia express possession within the noun phrase.

NOTES

1. We are grateful to Stanley Starosta for many discussions on theory, and for language consultation we wish to thank Lertdow Sayankena on Phu-Tai, Ton-nu Kim-Chi and Ho Thi Quang on Vietnamese, Pranee Kullavanijaya on Thai, Saveros Pou on Khmer, and many helpers on Hmong, especially Joua Vang, Vangkoua Cheurtong, Neng Chue Yang, Youa Yang, Sai Xiong, and Cheng Lee. Phu-Tai is a minority Tai language spoken in northeast Thailand. It is closely related to Black Tai, also used in this paper. The Hmong (Miao) used in this paper is southern Hmong, primarily the White Hmong of Laos. Sre is a southern Mountain Mon-Khmer language in Viet Nam.

2. The American Heritage Dictionary, 1970: 1250, 1542.

3. The romanized transcriptions of Thai and Khmer are those used in Kullavanijaya 1974 and Huffman 1970 respectively. Vietnamese standard orthography is used, and standard pinyin is used for Mandarin. The orthography used in the Hmong sentences is the 'standard' romanized orthography used by the Hmong in Laos (see Smalley 1976:87-88 and Bertrais 1979), with these exceptions: Instead of consonant symbols for tone, we use the diacritics customarily used for Thai with the addition of * for the low falling breathy tone (-g in Bertrais) and ~ for the low rising and falling tone (-d in Bertrais; see Sec. 5 for further discussion of this tone). Instead of double vowel symbols to represent that vowel followed by -ŋ, we use Vng. The orthographies used in the Black Tai and Sre examples below are those used in the specific references cited, while the transcription used for Phu-Tai is patterned after that used for Thai.

The Khmer examples were culled from Huffman 1970:138, 140, 183, 229, 493, and Ehrman 1972:107. The Vietnamese example in (3.6b) was culled from Nguyen D.H. 1966:68, in (5.24,25,27) from Nguyen V.K. 1967:910,915, and in (5.30,31) from Ton-nu Kim-Chi (pers.comm.). The Black Tai is from Fippinger 1975:152,153-4. The White Hmong in (5.17,19) is from Bertrais 1979:449,498, the Green Hmong in (5.20) from Lyman 1974:234, and the Wei-ning A-hmo Miao in (5.21,22,23) from Wang 1972:136,137,163-4). The Sre is from Manley 1972:156-7, et al.

4. See Chao 1968, Starosta 1979b:57-59, Starosta 1971:94, Lee 1974:120.

5. Also see Clark 1978 and Manley 1972; the term "noun auxiliary" to designate the same function is used by Kullavanijaya 1974, Liem 1975, Starosta 1971, and Tran 1972.

6. Such words are considered to be some kind of locative noun in many works, including Haas 1964 for one of the Thai words--thii, possibly Fippinger 1975 for Black Tai, Ehrman 1972 for Khmer, Nguyen D.H. 1972, Nguyen K.T. 1975 and Nguyen P.P. 1976 for Vietnamese, and Heimbach 1979 and Lyman 1979 for Hmong. Other works present them as prepositions, e.g. Noss 1964 and Vichin 1970 for Thai, Huffman 1970 for Khmer, Cadiere 1958 for Vietnamese, Honey & Simmonds 1963 for Thai, Vietnamese and Chinese, and IREG #15, Mottin 1978 and Savina 1916 for Hmong; as stative verbs, e.g. Haas 1964 for Thai and Jones & Thong 1960 for Vietnamese; or as functionally undefined particles, e.g. Jacob 1968 for Khmer and Le Van Ly 1968 for Vietnamese.

7. These relative position words in Mandarin are considered to be nouns in DeFrancis 1963 and Liang 1971 and by Y.C. Li (pc). However, Chao (1968:397) refers to them as localizers which compound with nouns, and Li & Thompson 1981 treat them as locative particles, choosing not to define them in terms of grammatical function, though they suggest (Li & Thompson 1981:25) that locative particles might be post-positions. Starosta (1982a:42ff) makes a rather different argument for these locative morphemes in Chinese not being free words at all but derivational or inflectional suffixes on nouns which are free nouns not compounds.

8. xi' is the Lao word for 'color'; it seems to be used more often than the Hmong word tsò.

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