

Grammaticalization of Nouns into Prepositions in Thai¹

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1. Introduction

In my study on parts of speech in Thai (Prasithrathsint 2010), I classified words in Thai into eight categories: *noun*, *verb*, *adjective*, *numeral*, *adverb*, *preposition*, *conjunction*, and *particle*. In this study I found several problems that hindered me from reaching a neat classification of words in Thai due to the lack of morphological marking, ambivalent environments, and homophony of forms. Among the problems are the equivocality of prepositions; i.e., a number of them can be regarded as other parts of speech: verbs or nouns.

The homophony of prepositions and verbs has been investigated by Intratat (1996), who came to a conclusion that there are 23 prepositions in Thai that are grammaticalized from verbs, such as *càak* 'from' (<'place'), *taam* 'following' (<'to follow'), *thīg* 'at' (<'to arrive'), *sùu* 'toward' (<'to go toward'), *pen* 'as' (<'to be'), *trog* 'right at' (<'to be straight'), etc. Intratat (1996) shows evidence that these forms are still used as verbs, but very rarely, compared to when they are used as prepositions. She argues that the forms are originally verbs and that they have been grammaticalized into prepositions due to syntactic reanalysis, semantic bleaching and metaphorical extension.

Prepositions and postpositions, generally named "adpositions," are divided into two kinds depending on the part of speech from which they are grammaticalized. The above-mentioned prepositions grammaticalized from verbs are *verb-based adpositions*, or *V-adpositions*. In contrast with these, there are prepositions in Thai which are homophonous with nouns and seem to derive from them. They belong to the *noun-based adpositions* or *N-adposition group*. They are words such as *thī* 'at' (<'place'), *khǒw* 'of' (<'thing'), *nâa* 'in front of' (<'face, front'), *lǎng* 'behind' (<'back, rear'), etc. These words have been controversially treated. Some linguists (e.g., Starosta 1988, 2000, Savetamalya 1989, Indrambarya 1994) regard all of them as *relator nouns*, arguing that they all behave as nouns in that they can occur with a determiner; i.e., *thī nī* 'this place', *khǒw nī* 'this thing', *nâa nī* 'this front', *lǎng nī* 'this rear', etc. Other linguists, as (Panupong 1989, Prasithrathsint 2010) classify them as prepositions because they behave like other prepositions and their occurrence is regular like other grammatical words. Indeed, the controversy is justified by the ambiguity of these words, as shown later in this article.

However, the point that should be emphasized here is that even though such words are found to function as prepositions, their homophonous forms still behave as nouns in certain contexts. Indeed, to determine whether such words belong to either the nominal or prepositional class is not as interesting as how to identify them; i.e., when to label each of these ambivalent forms as a noun and when to label it as a preposition.

¹ This article is based on the findings of the research project entitled "Parts of speech in Thai: A syntactic analysis based on a two-million-word corpus of current Thai" (completed in 2000) and the ongoing research on "Pan-dialectal Grammar of Thai," both financially supported by The Thailand Research Fund (TRF). In the course of improving this article, I would like to thank Ronald Langacker and Walter Bisang whose suggestions have helped me strengthen several arguments. Many thanks also go to Pranee Kullavanijaya for her comments and encouragement.

This paper focuses on this point. Its purpose is to argue that there are a number of identical word pairs in Thai that belong to the nominal and prepositional classes, and that the preposition counterparts derive from nouns through the process of grammaticalization.

The data on which the analysis is based was taken from a concordance of a number of ambivalent noun/preposition words from a corpus of Thai provided by the Department of Linguistics, Chulalongkorn University.²

It is hoped that the result of this study will contribute not only to specific and universal study of parts of speech but also to the theory of grammaticalization.

Following the theory of grammaticalization put forward by Sweetzer (1988), Heine et al (1991), Bybee et al (1994), and Traugott (1995), I hypothesize that some words the forms of which are identical with nouns are grammaticalized prepositions if they have the following characteristics:

- (1) Syntactically, they are constituents in a different syntactic construction: PP instead of NP (reanalysis).
- (2) Semantically, when compared to the noun counterparts, their meanings are generalized, bleached, metaphorical or figurative (semantic generalization, semantic bleaching or reduction, and metaphorical extension).

2. Syntactic differentiation of prepositions from nouns in Thai

Generally, as stated in Prasithrathsint (2010), we can separate nouns from prepositions by using the following criteria:

- 1) A noun can occur with a determiner, but a preposition cannot. For example:

- (1) *nǎŋsĕ̌ day* (*nǎŋsĕ̌* is a noun, occurring with *day*, a determiner.)
book any
'any book'
- (2) **phĕ̌a day* (*phĕ̌a* is a preposition. It cannot occur with *day*)
for any
'for any'

- 2) A noun can be subject or object of a verb, but a preposition cannot. For example.

- (3) *chǎn chŏwɔp nǎŋsĕ̌* (The noun *nǎŋsĕ̌* is object of the verb *chŏwɔp*)
I like book
'I like books'
- (4) **chǎn chŏwɔp phĕ̌a* (*phĕ̌a* is a preposition. It cannot be object of the
I like for verb *chŏwɔp*)
'I like for.'

² Retrived from the website *Thai Concordance Online* at this address: <http://ling.arts.chula.ac.th/ThaiConc/>

Analyzing the data in the present study, I found that these two criteria are not adequate for separating prepositions from nouns when they are homophonous and occur in the same syntactic environment; i.e., **both are followed by a noun**. In other words, when the context is ambiguous, it is not easy to distinguish a noun from a preposition, as in (5) the phrase means either 'the front of the house' or 'in front of the house'. With the former meaning, the word *nâa* is a noun but with the latter, it is a preposition.

- (5) *nâa bân*
front house
'the front of the house / in front of the house'

As the phrase structure rules in Thai allow both a noun and a preposition to be followed by a noun, we face a problem of testing whether the construction is a noun phrase or a prepositional phrase. To be specific, the construction *nâa bân* can be either an NP or a PP. **I propose that we use the marked possessive structure to test whether it is an NP or a PP in each particular context.** The marked possessive structure in Thai contains the word *khǎw* 'of', which precedes the possessor, as in (6) below.

- (6) *nǎngsǎi khǎw khruu*
book of teacher
'The teacher's book'

In (6) the word *nǎngsǎi* 'book' is a noun and can be possessed as evidenced in the possessive structure marked by the word *khǎw* 'of'. **A preposition cannot be possessed and cannot appear in such a construction.** Therefore, we can test whether the word *nâa* is a noun or a preposition in the context where it occurs. In (7) the word *nâa* is a noun meaning 'front' because we can add the possessive marker *khǎw* to form a possessive construction--*nâa khǎw wát* 'the front of the temple.'

- (7) *khǎw maa thîi nâa wát* (= *nâa khǎw wát*)
he come at front temple
'He came to the front of the temple.'

In contrast, in (8) *nâa* cannot be analyzed as a noun because we cannot form a possessive construction from it. Therefore, it is analyzed as a preposition.

- (8) *khǎw maa nâa wát* (**nâa khǎw wát*)
he come front temple
'He came in front of the temple.'

The same argument can also be applied to (9) and (10). In (9) the ambivalent word *nâa* 'front' is a noun because we can form a possessive construction from it; i.e., we can add the possessive marker 'of' between it and the following noun. In contrast, in (10) the

word *nâa* 'front' is a preposition because it would be ungrammatical to form a possessive construction from it.

- (9) *khăw yin wî phǒm trong nâa kracòk* (= *nâa khǎw kracòk*)
 he stand comb hair right at front mirror
 'He stood combing his hair right at the front of the mirror.'

- (10) *khăw yin wî phǒm nâa kracòk* (**nâa khǎw kracòk*)
 he stand comb hair front mirror
 'He stood combing his hair in front of the mirror.'

It should be noted that the syntactic environment of *nâa* as a noun and that of *nâa* as a preposition are different as shown in Figure 1 and Figure 2, respectively. In Figure 1, *nâa* (N) and another noun (*wát* 'temple') form a noun phrase (NP) which is object of the preposition (P) *thîi* 'at.' In Figure 2, *nâa* (P) + the noun *wát* 'temple' form a prepositional phrase (PP) modifying the main verb *maa* 'come.'

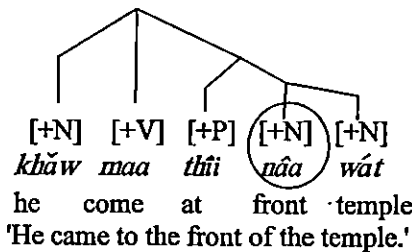


Figure 1: *nâa* as N

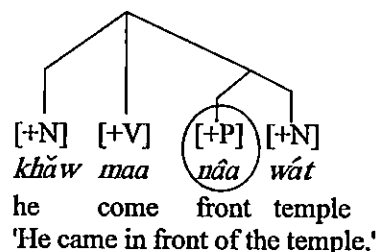


Figure 2: *nâa* as P³

3. Homophonous words that behave as nouns and prepositions

In addition to *nâa* shown above, there are 13 more ambivalent words that can be classified as nouns in some contexts and as prepositions in others. Based on the criteria of differentiating prepositions from nouns stated above, I will show how to distinguish them as follows. Note that if the word occurs alone without any other word as its constituent, it is clearly N. When it is followed by another N, then a test by adding the possessive marker *khǎw* will be conducted in order to decide whether the word is N or P.

- (11) a. *lǎŋ* 'back' (N) *khăw hǎn lǎŋ háy chǎn* (object of V *hǎn*)
 he turn back to I
 'He turned his back to me.'

- b. *lǎŋ* 'back' (N) *khăw waan nǎŋ-sǎi wáy thîi lǎŋ thoora-thát*
 he place book keep at back television set
 'He kept the book at the back of (behind) a television set.'

Test: *lǎŋ thoora-thát* = *lǎŋ khǎw thoora-thát*

³ The principles of syntactic parsing and notations used in tree diagrams representing syntactic structures used in this study are based on Lexicase Dependency Grammar put forward by Starosta (1988).

c. *lǎŋ* 'behind' (P) *mii baan-yàaŋ sǔwŋ yùu lǎŋ rɔɔy-yím nán*
 have something hide be back smile that
 'There is something hidden behind that smile.'

Test: *lǎŋ rɔɔy-yím; *lǎŋ khǒɔŋ rɔɔy-yím*

d. *lǎŋ* 'after' (P) *raw duu thiiwii lǎŋ aahǎan-yen*
 we watch TV after food-evening
 'We watch the TV after dinner.'

Test: *lǎŋ aahǎan-yen; *lǎŋ khǒɔŋ aahǎan-yen*

(12) a. *nǒɔk* 'the outer part' (N)

khǎw yàak pay nǒɔk⁴
 he want go abroad
 'He wants to go abroad.'

b. *nǒɔk* 'outside (place)' (P)

khon thay thǒɔt rɔɔŋ-tháaw wáy nǒɔk bǎan
 people Thai take off shoe keep outside house
 'Thai people take off their shoes and put them outside the house.'

Test: *nǒɔk bǎan; *nǒɔk khǒɔŋ bǎan*

c. *nǒɔk* 'outside (time)' (P)

nǒɔk weelaa-rian nák-rian phûut phaasǎa-thìn kàp khruu
 outside time-study student speak language-local with teacher
 'Outside the study time, students speak local dialects with their teacher.'

Test: *nǒɔk weelaa-rian; *nǒɔk khǒɔŋ weelaa-rian*

(13) a. *naɣ* 'the inner part' (N)

rǎŋ wɔŋ naɣ⁵
 matter circle inside
 'matter of the inner circle.'

⁴ I did not find the word *nǒɔk* used independently except in this example. The construction *pay nǒɔk* could be interpreted as a compound meaning 'to go abroad'. It seems that in present day Thai the word *nǒɔk* is no longer used as a noun. The expression *pay nǒɔk* is evidence supporting the argument that this word used to be a noun.

⁵ Similar to *nǒɔk*, I did not find any instance of *naɣ* occurring alone as a noun. It is found to be used as a modifier of another noun. Due to lack of evidence, to conclude that *naɣ* was used as a noun in earlier Thai is only a speculation.

- b. *nay* 'in (place)' (P) *năŋ-sĕnăy hŏŋ-samùt*
 book in library
 'books in the library.'
 Test: *năy hŏŋ-samùt*; **năy khŏwŋ hŏŋ-samùt*

- c. *nay* 'in (time)' (P) *năy chŭaŋ sètthakĭt-tòk-tàŋ*
 in period economy-depress
 'In the period of economic depression.'
 Test: *năy chŭaŋ*; **năy khŏwŋ chŭaŋ...*

(14) a. *bon* 'the upper part' (N)

*khăw khĭn pay yùu dāan bon*⁶
 he rise go be side upper
 'He went up to the upper part.'

b. *bon* 'on (concrete)' (P)

khăw năŋ loŋ bon kâw-ĭi
 he sit down on chair
 'He sat down on the chair.'

Test: *bon kâw-ĭi*; **bon khŏwŋ kâw-ĭi*

c. *bon* 'on (abstract)' (P)

kaan-miaŋ tŏŋ waŋ yùu bon khunnatham
 politics must lay be on moral principle
 'Politics must be based on moral principles.'

Test: *bon khunnatham*; **bon khŏwŋ khunnatham*

(15) a. *nĭa* 'north' (N)

khăw cá khĭn nĭa máycháy loŋ tŭay
 he will go up north not go down south
 'He will go up to the north, not go down to the south.'

b. *nĭa* 'above' (P)

cintanaakaan mii bòtbàat nĭa wĭthayaasàat
 imagination have role above science
 'Imagination has a role above science.'

Test: *nĭa wĭthayaasàat*; **nĭa khŏwŋ wĭthayaasàat*

(16) a. *tŭay* 'south' (N)

khăw dŏn-thaŋ càak nĭa cròt tŭay
 he travel from north reach south
 'He travels from north to south.'

⁶ The word *bon* is not found to be used alone as a noun even though it was in Sukhothai Thai. (e.g., *ĭlaw mŏwŋ bon* 'turn to look at the space above') Similar to *nay*, it is mostly found to occur with a noun and functions as a modifier.

- b. *tây* 'under' (P) *chiiwítkhăw yùu tây itthiphon*
 life he be under influence
khăw phanrayaa
 of wife
 'His life is under the influence of his wife.'
 Test: *tây itthiphon*; **tây khăw itthiphon*
- (17) a. *klaaŋ* 'middle' (N) *lăŋ-càak klaaŋ dian sǐŋhăakhom*
 after-from middle month August
 'after the middle of August'
 Test: *klaaŋ dian* = *klaaŋ khăw dian*
- b. *klaaŋ* 'in the middle of' (P) *khăw thaló kan klaaŋ ŋaan tɛŋ-ŋaan*
 they quarrel each other middle party wedding
 'They quarreled with each other in the middle of the wedding party.'
 Test: *klaaŋ ŋaan*; **klaaŋ khăw ŋaan*
- (18) a. *rim* 'edge' (N) *yàa waan kɛɛw bɔriween rim tó*
 do not place glass area edge table
 'Don't put the glass on the edge of the table.'
 Test: *rim tó* = *rim khăw tó*
- b. *rim* 'by' (P) *raw cà càtŋaan rim mɛɛ-náam*
 we will arrange party by river
 'We will arrange a party by the river.'
 Test: *rim mɛɛ-náam*; **rim khăw mɛɛ-náam*
- (19) a. *thîi* 'place' (N) *nîi pen thîi khăw chăŋ*
 this be place of I
 'This is my place.'
- b. *thîi* 'at' (P) *chăŋ cà payphóp khun thîi rúan-aahăan*
 I will go meet you at shop-food
 'I will meet you at the restaurant.'
 Test: *thîi rúan-aahăan*; **thîi khăw rúan-aahăan*
- (20) a. *khăaŋ* 'side' (N) *roŋ-tháaw sǔwŋ khăaŋ máy tháw kan*
 shoe two side not equal each other
 'The two shoes (of the pair) are not equal.'

- b. *khâaŋ* 'beside' (P) *chăn đơn maa nâŋ khâaŋ phw*
I . walk come sit beside father
'I walked hither to sit beside my father.'
Test: *khâaŋ phw*, **khâaŋ khw* *phw*
- (21) a. *dâan* 'side' (N) *dâan nî khw tik mây khw sây*
side this of building not quite pretty
'This side of the building is not quite pretty.'
b. *dâan* 'concerning' (P) *khăw sảmrẻt kaan-sẻksảa dâan bẻrihảan-thủrakẻt*
he finish education side business administration
'He graduated in business administration.'
Test: *dâan bẻrihảan-thủrakẻt*, **dâan khw bẻrihảan-thủrakẻt*
- (22) a. *thaaŋ* 'way' (N) *raw tẻŋ phẻp kan khẻŋ thaaŋ*
we must meet each other half way
'We must meet half way.'
b. *thaaŋ* 'concerning' (P) *khaan-kẻngkhản thaaŋ thủrakẻt mii mảak*
competition concerning business have much
'There is much competition in business.'
Test: *thaaŋ thủrakẻt*, **thaaŋ khw thủrakẻt*
- (23) a. *khw* 'thing' (N) *mẻe sả khw maa mảak-maay*
mother buy thing come many
'Mother bought many things.'
b. *khw* 'of' (P) *mẻew khw chản hảay pay sảam wan lẻew*
cat of I lose go a three daya already
'My cat had been missing for three days.'
Test: *mẻew khw chản*, **mẻew khw khw chản*
- c. *khw* 'of' (P) *khảw yẻm khw khảw khon diaw*
he smile of he person alone
'He smiles on his own.'
Test: *yẻm khw khảw*, **yẻm khw khw khảw*

As can be seen in the above examples, an N/P ambivalent word tends to be ambiguous when it is followed by a noun forming an NP (N+N) or a PP (P+N) construction. I proposed to test such a construction by adding the possessive marker *khw* between the ambivalent word and the noun that follows it. When *khw* is

added, we consider whether the construction becomes grammatical or not. If the construction becomes grammatical, then it must be NP, and thus the ambivalent word is N. If the construction is ungrammatical after *khǎwng* is added, then the construction is PP, and thus the ambivalent word is P. This kind of test should be a useful device for identifying whether an N/P homophonous word in a sentence is a noun or a preposition.

The fact that there are a number of such N/P homophonous words in Thai is due to a universal process of language evolution known as “grammaticalization,” which will be accounted for in the next section.

4. Grammaticalization of nouns into prepositions

According to Bybee et al (1994:4), grammaticalization is a process whereby grammatical morphemes develop gradually out of lexical morphemes or combinations of lexical morphemes with lexical or grammatical morphemes. The mechanisms of grammaticalization are both syntactic and semantic. In this study I will concentrate only on these mechanisms: reanalysis, semantic bleaching, semantic generalization, and metaphorical extension, which serve as explanations as to how nouns are grammaticalized into prepositions in Thai.

4.1 Reanalysis of NP as PP

According to Hopper and Traugott (1993: 40-49) and Bisang (1998), in a process of reanalysis, one syntactic position is reanalyzed; i.e., the condition of its co-occurrence with some other constituent has changed. In the present paper we will see that the position of N is reanalyzed as that of P; therefore, its relationship with the following head N has changed--the construction has changed from an endocentric construction (NP) to an exocentric construction (PP), as shown in Figure 3 and and Figure 4. Reanalysis of nouns into prepositions has brought about structural ambiguity, as shown in (24), in which the word *nâa* may be interpreted as a noun meaning 'front' or a preposition meaning 'in front of.'

- (24) *khǎw yùu nâa bâan*
 he be front house
 'He is at the front of the house.' (N)
 OR 'He is in front of the house.' (P)

Syntactically, there are two reasons why the construction *nâa bâan* in (24) can be interpreted as a noun followed by another noun. First, the N + N pattern⁷ is a very common type of NP in Thai; for example, *mêe phǎan* (mother+friend) 'friend's mother,' *lǎng-khaa bâan* (roof-house) 'the roof of the house.' In this type of NP, the first N is the head and the second N⁸ is a modifier. Secondly, the pattern of the verb *yùu* 'be/stay/live' followed by NP is also common. The NP after *yùu* 'be' signifies location; for example, *yùu*

⁷ N+N pattern here means an NP composed of a head noun and a modifying NP.

⁸ Head of another NP

bāan 'to stay home', *yùu rooŋ-rīan* 'to be at school', *yùu khondoo* 'to live in a condominium', *yùu miang-nōk* 'to be abroad/ live in a foreign country', etc. Therefore, to analyze *yùu nāa bāan* as V + NP meaning 'to be at the front of the house' is justified. The structure is represented by Figure 3 below.

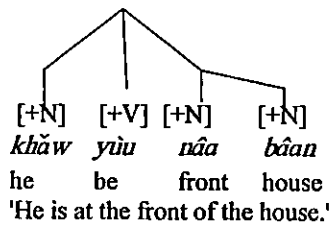


Figure 3: Structure of the sentence in which *nāa* is N⁹

Another interpretation of (24) is that *yùu nāa bāan* means 'to be in front of the house.' The syntactic pattern of this construction would be V+PP, where *nāa* is a preposition meaning 'in front of' followed by the N *bāan* 'house'. The pattern of *yùu* 'be' followed by a PP is also a common structure in Thai. Therefore, to analyze *nāa bāan* in (24) as a PP is also justified as shown in Figure 4.

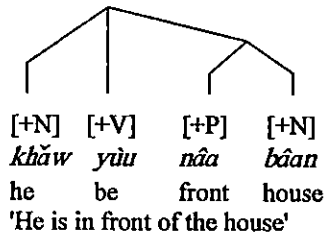


Figure 4: Structure of the sentence in which *nāa* is P

In present day Thai, it is more likely for *nāa* to be analyzed as a preposition than a noun because it cannot be possessed (**nāa khǎw*) in most contexts. However, since structurally it can be either a noun (see Figure 3) or a preposition (see Figure 4), it is possible that a reanalysis has occurred, which has caused the structure in Figure 3 to become that in Figure 4. However, the older structure (Figure 3), which, according to the theory of grammaticalization, is the one that is used less at present, still exists in the language. The following diagram (Figure 5) represents the mechanism of reanalysis of NP as PP in Thai.¹⁰

⁹ Note that this structural representation based on Starosta (1988) shows V as head of the sentence.

¹⁰ Note that NP is an endocentric construction, the head N of which is represented by a straight branch line longer than that of the modifier, whereas PP is an exocentric construction represented by two equal lines representing two heads (P+N).

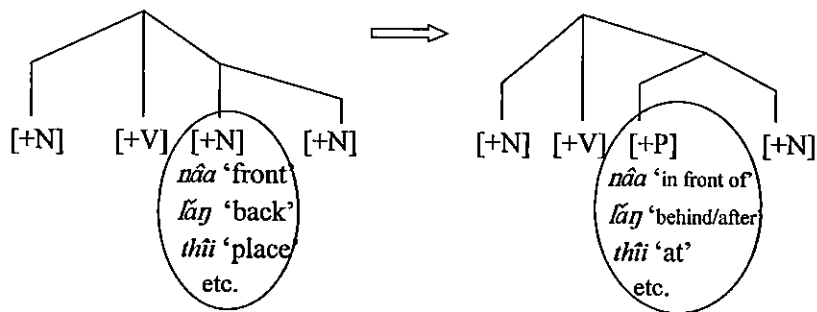


Figure 5: Reanalysis N as P

4.2 Semantic bleaching

Different linguists provide different definitions of “semantic bleaching.” According to Sweetser (1988), semantic bleaching means “fleshing out” of meaning. Heine (1984) says that it means “desemanticization.” Bybee and Pagliuca (1985: 59-63, cited in Heine et al 1991:40) explain that bleaching is “generalization or weakening of semantic content.” Heine et al (1991: 40) add that “grammaticalization is viewed from the perspective of the source concept, which carries the ‘full meaning,’ whereas the output of the process is interpreted as an impoverished form, one that is emptied of, or has bleached out, the semantic specificities of its source. Examples of semantic bleaching that they provide are spatial terms that are derived from body part terms, e.g., ‘behind,’ < ‘back,’ ‘in front’ < ‘breast,’ ‘toward’ < ‘eye,’ and ‘from’ < ‘hand.’ This phenomenon is commonly found in many languages.

In this study, the result of the comparison of the meaning of the nouns and the meaning of their preposition counterparts shows that the lexical meanings of the words have been reduced to grammatical meaning. Particularly speaking, when nouns become prepositions in Thai, they lose the sense of **entity** and **concreteness**. Indeed, the lexical meanings of the nouns under study are fairly concrete; i.e., specific, definite and vivid. Two of them refer to tangible entities, e.g., *khăwŋ* ‘thing,’ *thîi* ‘land/ place,’ Others denote location or direction, e.g., *năwŋ* ‘the outer part,’ *nay* ‘the inner part,’ *bon* ‘the upper part,’ *klaŋ* ‘the middle part,’ *rim* ‘edge,’ *khăaŋ* ‘side.’ In contrast, the meanings of the grammaticalized forms (prepositions) are fairly abstract; i.e., vague and intangible. All of them signify location and direction, not in themselves but in relation to the nouns that follow them. Table 1 below is a conclusion of semantic bleaching of the nouns that are grammaticalized into prepositions. Note that the semantic features of the set of nouns are opposite to that of prepositions.

Table 1: Semantic bleaching

FORM	MEANING	
	N [+concrete, +entity]	P [+abstract, +relation]
<i>khwǎŋ</i>	thing	of
<i>thǎi</i>	land, place	at
<i>nǎa</i>	front	In front of
<i>lǎŋ</i>	back	behind, after
<i>nǎwǎk</i>	the outer part	outside
<i>nay</i>	the inner part	in, inside
<i>bon</i>	the upper part	on
<i>nǎa</i>	north	above
<i>tǎay</i>	south	under
<i>klaaŋ</i>	the middle part	amidst, in the middle of
<i>rim</i>	edge	by, beside
<i>khǎaŋ</i>	side	beside
<i>dǎan</i>	side	concerning
<i>thaaŋ</i>	way	concerning

4.3 Semantic generalization

By “semantic generalization” is meant here the widening of the scope of meanings. Bybee and Pagliuca (1985) explain that it is so called because it correlates with a generalization of the contexts in which the gram¹¹ can be used. It is found here that the grammaticalized prepositions signify more related things than the original nouns, as can be seen in Examples 11-23 and Table 2 below.

¹¹ A gram means a grammaticalized form, which is a grammatical word or morpheme.

Table 2: Semantic generalization

FORM	MEANING			
	N [+specific]	Related concept	P [+general]	Related concepts
<i>khwǎn</i>	thing	non-human	of	human, non-human
<i>thǎi</i>	land, place	space	at	thing, place, human
<i>nǎa</i>	front	location	In front of	thing, place, human, period, season
<i>lǎn</i>	back	location	behind, after	thing, place, human, time
<i>nwǎk</i>	the outer part	location	outside	thing, place, period
<i>nay</i>	the inner part	location	in	thing, place, human, time
<i>bon</i>	the upper part	location	on	thing, place
<i>nǎa</i>	north	direction	above	thing, place, idea
<i>tǎay</i>	south	direction	under	thing, place, idea
<i>klaan</i>	the middle part	location	amidst, in the middle of	thing, place, time
<i>rim</i>	edge	location	by, beside	thing, place
<i>khâan</i>	side	location	beside	thing, place, time
<i>dǎan</i>	side	space, location	toward, concerning	direction, idea
<i>thaaŋ</i>	way	space	toward, concerning	direction, idea

4.4 Metaphorical extension

Some of the grammaticalized prepositions mentioned above can be cited as evidence of the process of metaphorical extension. According to Heine et al. (1991:55), The direction of semantic change in grammaticalization has to be from something that has to do with a **person** changing into something concerning an **object**, then a **process**, **space**, **time** and finally **quality** (PERSON>OBJECT>PROCESS>SPACE>TIME>QUALITY). They label this process “metaphorical extension.” Table 3 below shows how this process plays a role in the grammaticalization of nouns into prepositions in Thai.

Table 3: Metaphorical extension

form	PERSON	OBJECT	PROCESS	SPACE	TIME	QUALITY
<i>nâa</i>	N 'face'	N 'front, season'		P 'in front of'	P 'during'	
<i>lây</i>	N 'back' (human)	N 'back' (non-human)		P 'behind'	P 'after'	
<i>khwâj</i>		N 'thing'	P 'belonging to'			
<i>thîi</i>		N 'land'		N 'place' P 'at'		
<i>nwâk</i>		N 'outer part'		P 'outside'	P 'out of (period/season)'	
<i>nay</i>		N 'inner part'		P 'in'	P 'in/on (day/month/year)' 'during (period)'	
<i>bon</i>		N 'upper part'		P 'on'		
<i>nâa</i>		N 'north'		P 'above'		P 'beyond'
<i>tây</i>		N 'south'		P 'beneath'		P 'under (idea, influence)'
<i>klaaj</i>		N 'middle part'		P 'amidst'	P 'in the middle of (day, month...)'	
<i>rim</i>		N 'edge'		P 'by, beside'		
<i>khâaj</i>		N 'side'		P 'beside'		
<i>dâan</i>		N 'side, part'		P 'beside' 'toward'		P 'concerning, in the line of'
<i>thaaŋ</i>		N 'way'		P 'toward'		P 'concerning'

Examples of the use of grammaticalized prepositions with reference to PROCESS, TIME and QUALITY

PROCESS

(25) *khwâj* 'of / belonging to'

khwâj khruu 'of the teacher'

khwâj rooŋ-rian 'of the school'

khwâj rabòp 'of the system'

TIME

(26) *nâa* 'during'

nâa kèp-kìaw 'during harvest'

nâa thwîŋ-thiaw 'during tourism'

(27) lǎŋ	‘after’	<u>lǎŋ</u> hǎa-mooŋ-yen ‘after five in the evening’ <u>lǎŋ</u> wan-prakàat-phǎn ‘after the day of the result announcement’
(28) nǎw	‘out of’	<u>nǎw</u> weelaa prachum ‘out of the meeting time’ <u>nǎw</u> rǐduu kǎp-kǎaw ‘out of the harvest season’ <u>nǎw</u> chũang ló-ŋaakhaa ‘out of the sale time’
(29) nay	‘in’	<u>nay</u> wanní ‘today’ <u>nay</u> dian sǐnhǎakhom ‘in August’ <u>nay</u> chũa-mooŋ ní ‘in this hour’ <u>nay</u> pii nǎa ‘next year’ <u>nay</u> sǎpdaa kǎw ‘in the previous week’
(30) klaan	‘in the middle of’	<u>klaan</u> sǎŋkhraam ‘in the middle of the war’ <u>klaan</u> ŋaan-thalǎŋ-khàaw ‘in the middle of the press conference’
QUALITY		
(31) dǎan	‘part, side’	khoon-kaan <u>dǎan</u> kasèet ‘projects concerning agriculture’ khwaam-rúu <u>dǎan</u> kaan-miaŋ ‘knowledge of politics’
(32) thaan	‘way’	kaan-thót-law <u>thaan</u> wíthayaasàat ‘scientific experiments’ ŋaan-wícaŋ thaŋ phaasǎa-sàat ‘linguistic research’

5. Conclusion

The findings of this study may help solve the problem of conflict in word classification in Thai. Words that are ambiguous as to whether they are nouns or prepositions are shown here as two sets of homophonous words functioning either as nouns or prepositions. This paper provides evidence of their usage and proposes criteria to differentiating them. The most effective criterion seems to be possessive marking: *prepositions cannot occur in the possessive construction but nouns can*. Finally, this paper shows how prepositions are grammaticalized from nouns through the process of structural reanalysis and semantic change.

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