

An Analytical Study of the Nominalizers in Thai Language

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Keywords: Thai; grammaticalization; distribution; expansion; function; asymmetry

Abstract: In the study of Thai nominalization, previous studies have suggested that *kaan* and *khwaam* are symmetric. That is to say, they have similarity in function, but they are different in meaning. Based on the views of distribution and function of structural linguistic theory and, expansion theory, this paper aims to study the distribution of *kaan* and *khwaam*, and analyzes the grammatical properties of the nominalizations composed of *kaan* and *khwaam*. It is argued in this paper that there are asymmetries between *kaan* and *khwaam* in semantics, distribution, internal structure, and syntactic function. Therefore, the views of previous studies are debatable, and there is an asymmetry in *kaan* and *khwaam*.

1. Introduction

Nominalization is a common phenomenon in language. Thai nominalizations have been studied for a long time, and scholars at home and abroad have discussed this issue. Regarding the research of Thai nominalization, Pan Deding (2011, 2012)[1-2], Pei Xiaorui, and Bo Wenzhe(2017)[3] have important guiding significance for Thai teaching in China. Phraja Upakit Silapasarn(1937), Mary Haas(1964), Prapa Sookgasem (1996)[4], Lev Morev(2004)[5], Amara Prasithrathsint(2005, 2014)[6-7], Iwasaki & Ingkaphirom (2005)[8], and Comrie & Thompson(2007)[9], and Mark Post (2008)[10] provide new ideas for the study of Thai nominalization.

Thailand is located on the Southeast Asian Peninsula in Asia from the ground position. Its official language is Thai, which belongs to the Tai branch of the Dong-Tai language of the Sino-Tibetan language family. This paper is studied in central Thai. From the perspective of language form, Thai is an isolated language, which usually lacks morphological changes. In syntactic structure, it is mainly based on word order, grammatical words, and other grammatical means to express the relationship between words or other grammatical functions. Thai, however, as an isolated language is different from other isolated languages in nominalization. Because Thai nominalizations have morphological changes, that is, there are affixal morphemes adding in front of verbs and adjectives when nominalized (e.g., *rak*> *kaanrak*, *khwaamrak*; *jen*> *khwaamjen*; *caidii*>*kaancaidii*, *khwaamcaidii*).

From the perspective of typology, the study of nominalization in typology mainly analyzes the nominalization phenomenon of most languages in the world and summarizes the classification with general meaning through the analysis of these specific language examples. These types of nominalization can be roughly divided into morphological nominalization, syntactic nominalization, or semantic nominalization. Comrie & Thompson (2007) proposed that the difference of derivational nominalizations composed of *kaan* and *khwaam* is process and nonprocess.

From the perspective of regional typology, Foong Ha Yap et al. (2010) [11] compute the nominalization of Asian languages. The author thinks that the function and form of nominalization markers and nominalization structure are diverse and extensible. Nominalized structures in Asian languages are also regarded as adverbial clauses, complements, or main sentences. It is a pity that the book by Foong Ha Yap et al. did not include articles on Thai nominalization.

From the point of view of the isolated language, nominalization has been discussed in Chinese academia. Chinese has the same characteristics of the isolated language as Thai. Zhu Dexi (1961), Shi Guangan (1981), Xiang Mengbing (1991), Lu Jianming (1993), and Kuo Rui (1997, 2000, 2010) all made an in-depth analysis of nominalization in Chinese and generally thought that verbs can directly distribute on subject and object positions. Kuo Rui (2010) proposed that the essence of nominalization is nominalization at the syntactic level and nominalization at the lexical level.

Whether we examine nominalization in Thai from the perspective of typology, regional typology, or isolated language, it will show different phenomena from the general principles of typology and the characteristics of isolated language. Therefore, this article needs to do further research on the nominalization of Thai and its related issues.

In previous studies, with regard to the form of nominalization, some scholars thought that *kaan* and *khwaam* were nouns and prefixes, while some others think that it is a nominalized morpheme. Some scholars think that they are nominalizers. Some scholars believe that *kaan* and *khwaam* can only make verbs into nominalizations. Some scholars believe that *kaan* primarily nominalizes verbs and *khwaam* primarily nominalizes adjectives. Therefore, the nouns formed by *kaan* and *khwaam* are different in meaning. As for the grammatical meaning of nominalization, some scholars think that it is the difference between behavior and state. Some scholars think that it is the difference between generalized meaning and specific meaning. Some scholars think that it is the difference between process and nonprocess. Some scholars think that it is the difference between abstract nouns and abstract thing nouns. Through these differences, it can be seen that previous studies think that *kaan* and *khwaam* are symmetric. That is to say, they have similarity in function, but are different in meaning.

However, in this paper, it is found that *kaan* and *khwaam* evolved from lexical nouns to nominalizers, which is a grammaticalization pathway. On a synchronic level, the distribution of *kaan* and *khwaam* in front of different parts of speech is asymmetric. Moreover, the internal structures of nominalizations with *kaan* could expand freely, but nominalization with *khwaam* expand limitedly. The difference of internal structures also makes their external functions different.

Based on the views of distribution and function of structural linguistic theory and expansion theory, this paper attempts to investigate the development of nominalizers *kaan* and *khwaam*, the expansion of nominalization constructions, and the syntactic function of nominalizations. In addition, the theory of process structure and the tense-aspect category of verbs also has great significance for the analysis of this paper, for example, Kuo Rui (1993), Vendler, Zeno (1957), östen Dahl (1985), Comrie, Bernard (1976), Thiengburanathum, Prangang (2013, 2014).

2. The development of nominalizers *kaan* and *khwaam*

The usage of *kaan* and *khwaam* was attested as early as the ancient Inscription of the Sukhothai period (11th to 16th century AD). Before being grammatical forms, both *kaan* and *khwaam* were lexical nouns. After that, the meanings of *kaan* and *khwaam* began to be changed and evolved into light nouns, which can appear in front of a group of nouns regularly. Finally, the meanings of *kaan* and *khwaam* were bleached and became nominalizers. In this section, we will examine how *kaan* and *khwaam* evolves from lexical nouns into nominalizers in Modern Thai.

2.1. Kaan and khwaam as lexical nouns

When kaan and khwaam are lexical nouns, they are free morphemes and could be modified by quantifiers and demonstratives, such as sentences (1-2). When kaan and khwaam are used as lexical nouns, there are two situations: one is a semantically transparent noun (such as sentence3, 5); the other is a semantically opaque noun (such as sentence4, 6). Their meanings undergo a semantic bleaching process; that is, the semantics of kaan and khwaam evolve from transparent into less transparent. The kaan and khwaam can be distributed regularly in front of a group of nouns, and for this reason kaan and khwaam are treated as light nouns.

(1) thân thánlăay thî dâay chûay raw thamkaan annîi hây sãm rêt pay dâay khuan rúusuk plûumcai(TNC ACHM058)

thân	thánlăai	thî	dâi	chuâi	rau	tham	kaan
guests	all	ATRBM	PST	help	we	do	thing
ʔan	ní	hâi	sãm rêt	pai	dâi	khuan	rúusuk
CLF	DEM	CAUS	success	go	can	should	feel
plûumcai							
haapy							

All the guests who helped us make this thing a success should be happy.

(2) naai khuan rian hây rúukhwaam khô ní sĩa bân(TNC ACHM047)

naai	khuan	rian	hâi	rú	khwaam	khô	ní	sĩa	bân
you	should	study	make	know	meaning	CLF	DEM	die	some

You should know the meaning a little.

In addition, kaan and khwaam could have become dependent morphemes and form a fixed phrase with other words, such as sentences (3-6).

(3) thúkkhon tàankô mii ʔaankaan tham pen khõj tuaʔeej(TNC PRSH011)

thúkkhon	tàankô	mi	ʔaankaan	tham	pen	khõj	tuaʔeej
everyone	all	have	thing	do	be	POSS	own

Everyone has their own things to do.

(4) nójkhài pen khon ʔaukaanʔau ʔaan(SEAlang)

nójkhài	pen	khon	ʔaukaanʔau ʔaan
brother-in-law	be	person	struggling

My brother-in-law is a hard worker.

(5) bòt ní mi núakhwaam jaau mâak(TNC ACHM011)

bòt	ní	mi	núakhwaam	jaau	mâak
article	DEM	have	content	long	very

This article has a long content.

(6) ʔajúʔkhwaam cà rêm náptèè mûadai(TNC ACSS068)

ʔajúʔkhwaam	càʔ	rêm	náptèè	mûadai
Statute of limitations	will	begin	from	when

When does the statute of limitations begin?

2.2. Kaan and khwaam as light nouns

The term ‘light noun’ is used in the sense of semantically generalized or bleached nouns (e.g., Huang 2008; Aldridge 2008). Here, we need to compare the meaning of nouns and the nominal components with kaan and khwaam. The nominal components with kaan and khwaam show two

situations: one is explicit changes, which is different from the meaning of the noun. The other is basically unchanged, which is similar to the meaning of the noun. For example, sentences (7)-(10).

In sentence (7a), khrua is a noun, meaning kitchen, which refers to the room where meals are cooked. In sentence (7b), kaankhrua is a nominal component, meaning cooking, and refers to the affairs related to cooking. In this nominal component, the meanings of kaan and khrua are no longer recognizable and merge to develop a new meaning.

(7) a. thanjayùu bâan léu chòp loᅇ pai nai khrua tham kàpkhâau(TNC BIO009)

thanja	jù	bâan	léu	chòp	loᅇ	pai	nai	
Tan Ya	reside	house	then	like	down	go	in	
khrua	tham	kàpkhâau						
kitchen	do	meal						

When Tan Ya is at home, she likes to cook in the kitchen.

b. khâphá?châu triam ?ùppà?kɔn kaankhrua lé? khruaᅇpruᅇ phrómsàp(TNC NACHM107)

khâphá?châu	triam	?ùppà?kɔn	kaankhrua	lé?
I	prepare	equipment	cooking	and
khruaᅇpruᅇ	phrómsàp			
seasonings	various			

I prepared cooking equipment and various seasonings.

In sentence (8a), phanit is a noun, which means commerce and trade, indicating the activity of making goods flow by means of buying and selling, and focusing on the concept of commerce. In sentence (8b), kaanphanit is a nominal component, which still means commerce and trade, but it contains the meaning of commercialization and has an attribute meaning. In this nominal component, the original meanings are retained and the meaning of the whole word is a combination of them.

(8) a. khâu pay rian phaanít kô mâi chòp rian phró? khâu chòp wâatruᅇp(TNC BIO030)

khâu	pai	rian	phanít	kô	mâi	chòp	rian	phró?
he	go	study	business	also	NEG	like	study	because
khâu	chòp	wâatruᅇp						
he	like	paint						

He went to study business, but didn't like it because he liked painting.

b. má?hãná?khɔn nán pen sũunklaaᅇ kaanphanít(TNC COM001)

má?hãná?khɔn	nán	pen	sũunklaaᅇ	kaanphanít
big city	DEM	be	center	commercial

That big city is a commercial center.

In sentence (9a), lang is a noun, which means back, which refers to the part behind space or position. In sentence (9b), khwaamlang is a nominal component, the meanings of khwaam and lang are no longer recognizable, and they have merged to develop a new meaning. Sentence (9a) means back, which means the concept of space, while sentence (9b) means past, which means the concept of time.

(9) a. phĩ buakhài bøk kɛ wâa lăᅇ bâan thĩ raw jù thúkwaní mi khõᅇdidi khõᅇ kàu kàu jù já?
(TNC NWCOL017)

phĩ	bua	khài	bøk	kɛ	wâ	lăᅇ	bâan	thĩ	rau
brother	Bua	once	tell	he	COMP	back	house	RELZ	we
jù	thúkwaní	mi	khõᅇ	di~di	khõᅇ	kàu~kàu	jù	já?	
reside	now	have	thing	good	thing	old	have	many	

Bua's brother once told him that there are many valuable things behind the house where we live now.

b. chaai nùm lum khwaamlǎŋ mǎidǎi(TNC ACHM041)

chaai	nùm	lum	khwaamlǎŋ	mǎidǎi
man	young	forget	past	cannot

Men cannot forget the past.

In sentence (10a), sat is a noun, meaning sincerity, which means that words and deeds are consistent with inner thoughts. In sentence (10b), khwaamsat is a nominal component, which means faithfulness or sincerity. In this nominal component, the original meanings are retained and the meaning of the whole word is a combination of them. Sentence (10a) focuses on expressing sincerity, while sentence (10b) focuses on expressing the state attribute of sincerity.

(10). a. raw hǎi sàt kè thə phrɔʔ thə pen thǎrǎk hɛɛŋ rau(TNC NACSS074)

rau	hǎi	sàt	kè	thə	phrɔʔ	thə	pen	thǎrǎk
we	give	sincerity	to	you	because	you	be	favorite
hɛɛŋ	rau							
POSS	we							

We will give you sincerity because you are my favorite.

b. khwaamsàt jôm pen sɨŋ sǎmkhan jɨŋ nai sàatsàʔnǎa thǎŋsɨn nay lôok(TNC ACSS147)

khwaamsàt	jôm	pen	sɨŋ	sǎmkhan	jɨŋ	nai	
sincerity	must	be	thing	important	more	in	
sàatsàʔnǎa	thǎŋsɨn	nai	lôok				
religion	all	in	world				

Sincerity must be an important element of all religions in the world.

To sum up this section, with kaan and khwaam as light nouns, there is no change in parts of speech, but the semantics of nominal components with kaan and khwaam have changed. This change can be divided into two situations: one is explicit change (the meaning of the whole nominal component develops a new meaning); the other is implicit change (the meaning of the whole nominal component is the combination of light nouns and headed nouns, sometimes it can express subtle difference in meaning of nouns).

We use capital letters to represent the above content, which can be expressed in the following ways: NP means nouns or noun phrases, which is marked by kaan or khwaam in front of it, which formed [kaan NP] or [khwaam NP]. In the form of [kaan NP], kaan usually makes the meaning of the whole change in nominal component. In the form of [khwaam NP], khwaam usually leaves the meaning of the whole noun component basically unchanged. Therefore, there is an asymmetry on kaan and khwaam as light nouns.

2.3. Kaan and khwaam as nominalizers

In this section, we need to compare the meaning of verbs and their nominalizations. When a verb acts as a predicate, its meaning usually indicates an action or behavior. After the verb is nominalized, that is, the meaning of nominalizations shows two situations: one is explicit changes, which is different from the meaning of the verb. The other is basically unchanged, which is similar to the meaning of the verb.

In sentence (11a), bin is an intransitive verb which means to fly and refers to (birds, insects, etc.) stirring their wings in the air. The verb acts as a predicate. In sentence (11b), the nominalized construction of kaanbin means aviation industry, and refers to the commercial affairs related to the behavior of flying. It expresses a lexical nominalization. In sentence (11c), the nominalized construction means flight of birds. It expresses an event nominalization.

(11). a. nókkràcàap thǎ thùuk plǎi bin pai dǎi dǎi klai nǎk kô mòt rǎureŋ(TNC ACHM005)

nókkra?càap	thĩ	thùuk	plǎi	bin	pai	daĩ	daĩ	k lai
sparrow	ATRBM	PASS	released	fly	go	can	NEG	far
nák	kô	mòt	rĩaurεεη					
very	then	without	strength					

The released sparrow has no strength before it flies far.

b. thá?hǎan ?aasǎa thai dǎipai sǒŋkhraam jú?ròp lé? klápma rêm sǎan kaan bin khúm(TNC ACSS093)

thá?hǎan	?aasǎa	thai	daĩ	pai	sǒŋkhraam	jú?ròp	lé?
army	voluntary	Thai	PAST	go	Campaign	European	and
kláp	ma	rêm	sǎan		kaanbin		khúm
return	come	begin	establish		aviation industry		up

The Thai voluntary army went to the European Campaign and established the aviation industry after returning home.

c. láksà?nǎ? lé? rúupbêep kaan bin khǒŋ nók tèelá? chanít jaŋ tèektàan kan (TNC MG013)

láksà?nǎ?	lé?	rúupbêep	kaanbin	khǒŋ	nók	tèelá?
characteristics	and	way	flight	POSS	bird	each
chá?nít	jaŋ	tèektàan	kan			
kind	still	different	RECP			

Each bird has different flight characteristics and ways.

In sentence (12a), rak is a transitive verb, meaning love, which means having deep feelings for people or things. This verb acts as the predicate of a sentence. In sentence (12b), the nominalized construction of khwaamrak khong chai jing means love between men and women. Love here refers to the feelings of love between men and women. It expresses a lexical nominalization. In sentence (12c), the nominalized construction of khwaamrak means love. It expresses an event nominalization.

(12). a. khǎu rák mēe khǒŋ khǎu mâak (TNC ACHM041)

khǎu	rák	mēe	khǒŋ	khǎu	mâak
he	love	mother	POSS	he	very

He loves his mother very much.

b. pom rúan nai nǎ?wá?ní?jaai kət cǎak panháa khwaamrák khǒŋ jĩŋ chaai(TNC ACHM005)

pomrúan	nai	na?wá?ní?jaai	kət	cǎak	panháa	khwaamrák
plot	in	novel	begin	from	problem	love
khǒŋ	jĩŋ	chaai				
POSS	woman	man				

The plot of the novel begins with the love between men and women.

c. dèk thĩ dǎiráp khwaamrák ma jàan di nán mûa tǎpto khúm cǎ? rák khon ?ùn pen(TNC NACHM081)

dèk	thĩ	dǎiráp	khwaamrák	ma	jàan	di	nán	
child	RELZ	receive	love	PST	ATRBM	good	DEM	
mûa	tǎpto	khúm	cǎ?	rák	khon	?ùn	pen	
when	grow	up	up	will	love	person	other	can

Children who have received much love will love others when they grow up.

If VP is used for verbs or verb phrases, it is marked in front of kaan or khwaam and is denoted as [kaan/khwaam VP] after nominalization. After the verb is nominalized, the semantics of the nominalized form formed by kaan/khwaam have two situations: one is the explicit change, the semantics of s [kaan/khwaam VP] is different from that of VP, and the meaning of s [kaan/khwaam VP] combines the meanings of khwaam and VP to develop a new meaning, which represents a

concept of things. The other is basically unchanged, and the form of [kaan/khwaam VP] is basically the same as the semantics of VP.

Next, we need to compare the meaning of adjectives and their nominalizations. If kaan could nominalize these adjectives, then also khwaam does. However, if Khwaam could nominalize these adjectives, kaan not always. We need to analyze the differences and connections between the meanings of adjectives and their nominalizations. When adjectives are predicate or attribute, they usually indicate a nature or attribute. After being the nominalizations, they usually express a behavioral concept or an abstract concept or similar to the meaning of adjectives, such as sentences (13-14).

In sentence (13a), caidii is an adjective, which means the character of kindness and is characterized by purity of heart, no malice, and emphasis on the expression of kindness. In sentence (13b), the nominalized construction of kaancaidii means acts of kindness, with emphasis on expressing such acts of kindness. In sentence (13c), the nominalized construction of khwaamcaidii means kindness, and focuses on expressing the abstract concept of kindness.

(13). a. tua thaaj sèetthĩ ʔeeŋ pen chaai caidi(TNC NACHM091)

tua	thaaj	sèetthĩ	ʔeeŋ	pen	chaai	caidi
CLF	side	rich-man	self	be	man	kind

The rich man himself is a kind man.

b. baajkhraŋ kaancaidii kənpai ʔaathamhăi sĩa kaanpòkkhrəŋ(TNC NACHM087)

baajkhraŋ	kaancaidii	kənpai	ʔaathamhăi	sĩa	kaanpòkkhrəŋ
sometimes	kindness	excessive	may	lead to	lose management

Sometimes, excessive kindness may lead to management failure.

c. pháʔlaŋ hēeŋ khwaamcaidii nán sāmphət phũakrau thúk khon(TNC NACHM048)

pháʔlaŋ	hēeŋ	khwaamcaidii	nán	sāmphət	phũakrau	thúk	khon
power	POSS	kind	DEM	touch	we	each	persor

That kind of power touched each of us.

In sentence (14a), jen is an adjective, meaning cool, cold, which means low temperature. The adjective acts as a predicate. In sentence (14b), the nominalized construction of khwaamjen means cold air, which refers to the low temperature air produced by air conditioning and other refrigeration methods. It expresses a lexical nominalization. In sentence (14c), the nominalized construction of khwaamjen means cold. It expresses an event nominalization.

(14) a. chăñ khít wă nám khonj càʔ jen mâak mâak (TNC BIO028)

chăñ	khít	wă	nám	khonj	càʔ	jen	mâak~mâak
I	think	COMP	water	may	will	cold	very

I think the water may be very cold.

b. tônmaid khàʔnàat jài 1 tôn hăi khwaamjen pràʔmaan 12,000 biithijuu(TNC NACET014)

tônmaid	khàʔnàat	jài	1	tôn	hăi	khwaamjen	pràʔmaan
tree	CLF	big	1	CLF	produce	cold air	about
12000	biithijuu						
12,000	BTU						

The cold air produced by a big tree is about 12,000 BTU.

c. thă măi mi khwaamrón rau kô măi rú wă ʔàʔrai khu khwaamjen(TNC NACMD088)

thă	măi	mi	khwaamrón	rau	kô	măi	rú	wă	ʔàʔrai
if	NEG	have	heat	we	yet	NEG	know	COMP	what
khu	khwaamjen								
be	cold								

If there is no heat, we don't know what cold is.

If AP is used for adjectives or adjective phrases, it is marked in front of *kaan* or *khwaam* and is denoted as the form of [kaan/khwaam AP] after nominalization. When an adjective is nominalized, it is basically unchanged in semantics. The form of [kaan AP] is similar to the semantic meaning of AP, which mainly embodies the meaning of AP and expresses the meaning of action, while [khwaam AP] expresses an abstract concept or similar to the meaning of adjectives.

To sum up this section, it can be seen that *kaan* can make any verb into nominalization, but only few adjectives. Verbs are nominalized by *kaan*, and the meaning of the nominalizations are changed and unchanged. There are two kinds of meaning: one expresses the concept of materialization, while the other expresses an action. Adjectives are nominalized by *kaan*, and the meaning of the nominalization is unchanged, which expresses an action. On the other hand, *khwaam* can nominalize any adjectives and some verbs. Adjectives or Verbs are nominalized by *khwaam*, the meaning of the nominalizations are changed and unchanged. There are two kinds of meaning: one expresses an abstract concept, while the other expresses the concept of objectification. In short, there are transparent and less transparent in the semantics of nominalizations composed of *kaan* and *khwaam*.

Therefore, the development of *kaan* and *khwaam* has gone through a grammaticalization pathway, that is, lexical nouns, light nouns, and nominalizers. This pathway shows that *kaan* and *khwaam* can be distributed in front of nouns, verbs, and adjectives, but they are different in front of these parts of speech. Apart from some of the semantic differences mentioned above, the distribution of *kaan* and *khwaam* in front of nouns, verbs, and adjectives is different.

Nouns that can be preceded by *kaan* but not by *khwaam* to form nominal components. However, nouns that can be preceded by *khwaam* cannot be preceded by *kaan* to form nominal components, and *kaan* and *khwaam* cannot be distributed on the same noun. For example, in sentences (15-16).

(15). *khrua* kitchen → *kaankhrua* cooking

**khwaamkhrua*

(16). *läŋ* back → **kaanläŋ*

khwaamläŋ past

Verbs that can be preceded by *khwaam* also by *kaan* to form nominalizations. However, verbs that can be preceded by *kaan* may not always be preceded by *khwaam* to form nominalizations, and *kaan* and *khwaam* can, respectively, be distributed on the same verb. For example, in sentences (17-18).

(17). *bin* fly → *kaanbin* aviation industry; fly

**khwaam¹bin¹*

(18). *rák* love → *kaanrák* loving

khwaamrák love

Adjectives that can be preceded by *kaan* and also by *khwaam* to form nominalizations. However, adjectives that can be preceded by *khwaam* may not always be preceded by *kaan* to form nominalizations, and *kaan* and *khwaam* can, respectively, be distributed on the same adjective, but only on few adjectives. For example, in sentences (19-20).

(19). *caidii* kind → *kaancaidi* kind

khwaamcaidi kindness

(20). *jen* cold → **kaanjen*

khwaamjen cold air; cold

The grammaticalization and distribution of *kaan* and *khwaam* show that there is an asymmetry between *kaan* and *khwaam*. The asymmetry between *kaan* and *khwaam* needs to be further examined. This asymmetry could be reflected in the internal structure and the external function of the verb nominalizations composed of *kaan* and *khwaam*.

3. The expansion of nominalization constructions

Wells (1947) suggested that sometimes two sequences occur in the same environment, even though they have different internal structures. When one of sequence at least as long as the other (contains at least as many morphemes) and is structurally diverse from it (does not belong to all the same sequence classes as the other), we call it an expansion of that other sequence, and the other sequence itself we call a model. If A is an expansion of B, B is a model of A.[12]

According to this definition, we examine the corpus in Thai and find that there are bare verb forms (model) and verb-phrase forms (expansion) in the nominalizations with *kaan* and *khwaam*, and these two nominalization constructions will show differences in the expansion.

In sentence (21), the nominalized form is the nominalization of the verb, in which case there is no expansion. In sentences (22-24), the nominalized constructions are the nominalization of verb phrases, which are the expanded structures of verbs. These structures include verb-adverbial structure (such as sentence 22), predicate-object structure (such as sentence 23), and union structure (such as sentence 24).

(21). a. *kaanfanj tōŋ cháí khwaamphá?jajaam jàaŋ sà?màmsà?mǎ*(TNC ACSS145)

<i>kaanfanj</i>	<i>tōŋ</i>	<i>cháí</i>	<i>khwaamphá?jajaam</i>	<i>jàaŋ</i>	<i>sà?màmsà?mǎ</i>
listening	must	use	practice	ADVLM	regular

Listening requires regular practice.

b. *khwaamrák mi dáí kô tē nai jam sà?ŋòp sǎntì?*(TNC PRNV03)

<i>khwaamrák</i>	<i>mi</i>	<i>dáí</i>	<i>kô</i>	<i>tē</i>	<i>nai</i>	<i>jam</i>	<i>sà?ŋòp</i>	<i>sǎntì?</i>
love	have	can	yet	only	in	moment	calm	peace

Love happens only in calm moments.

(22). a. *kaan wí?khrǎ? kaankrà?tham khǒŋ má?núť dooi phúntǎan pràťjaa cà? pen kaantòp khamthǎam kiaukàp khānì?jom khǒŋbúk khon*(TNC ACSS130)

<i>kaanwí?khrǎ?</i>	<i>kaankrà?tham</i>	<i>khǒŋ</i>	<i>má?núť</i>	<i>dooi</i>	<i>phúntǎan</i>
analyzing	behavior	POSS	human	PRE	basis
<i>pràťjaa</i>	<i>cà?</i>	<i>pen</i>	<i>kaantòp</i>	<i>khamthǎam</i>	<i>kiaukàp</i>
philosophy	will	be	answer	question	about
<i>khānì?jom</i>	<i>khǒŋ</i>	<i>búkkhon</i>			
value	POSS	people			

Analyzing human behavior on a philosophical basis may be an answer to people's values.

b. *lamdàp khān thī 4 pen chūaŋ thī sǎŋkhom rēm mi khwaamcà?rən khūn ruāiruāi* (TNC ACSS129)

<i>lamdàp</i>	<i>khān</i>	<i>thī4</i>	<i>pen</i>	<i>chūaŋ</i>	<i>thī</i>	<i>sǎŋkhom</i>	<i>rēm</i>
stage	stage	fourth	be	period	REL	society	begin
<i>mi</i>	<i>khwaamcà?rən</i>	<i>khūn</i>	<i>ruāi~ruāi</i>				
have	prosper	up	gradually				

The fourth stage is the period in which the society begins to prosper gradually.

(23) a. *kaan khāi nǎŋsūu pen ŋaan kù?sǎn*(TNC PRNV020)

<i>kaan khāi</i>	<i>nǎŋsūu</i>	<i>pen</i>	<i>ŋaan</i>	<i>kù?sǎn</i>	
selling	book	be	thing	merit	

Selling books is a merit.

b. *ʔúadāiphóp kàp sǎuŋaam khon nūŋ pen lūukphà?sǎm thai cin mǔan ʔúa tē mi khwaampenthai mǎak*(TNC PRNV037)

ʔúa	daĩ	phóp	kàp	sáau	ɲaam	khon	nuɲ	pen
I	PST	meet	with	girl	beautiful	CLF	one	be
lúukphàʔsóm	thai	ciin	mũan	ʔúa	tè	mi		
hybrid	Thai	Chinese	like	I	but	have		
khwaampenthai	mâak							
Thai	very							

I saw a beautiful girl, a Chinese-Thai hybrid like me, but more Thai.

(24) a. kaan hâijaa phít rǔ chĩityaa phít jôm mâaithũn ʔantàʔraai thĩcàʔ kət khũn kàp rânkaai rǔ chiwít khõn phúpùai (TNC ACSS089)

kaanhâijaa	phít	rǔ	chĩitjaa	phít	jôm	mâaithũn	
prescribing	wrong	or	inject	wrong	must	mean	
ʔantàʔraai	thĩcàʔ	kət	khũn	kàp	rânkaai	rǔ	chiwít
danger	COMP	occur	up	with	body	or	life
khõn	phúpùai						
POSS	patient						

Prescribing the wrong medicine or injecting the wrong needle must mean that the patient's body or life will be in danger.

b. khwaam mi rǔ mâi mi mâi chài phawáʔ dètkhàat lɔitua (TNC ACHM046)

khwaam mi	rǔ	mâi	mi	mâi	chài	phawáʔ	
having	or	NEG	having	NEG	be	state	
dètkhàat	lɔitua						
definitely	float						

Having or not being is not a static state.

Although the nominalized constructions formed by kaan and khwaam have similarities in internal extensibility, but there are differences in these similarities. In the case of bare verb nominalizations (nonexpanded structure), it is reflected that there are two types of verb in Thai: one is that verbs can only be nominalized by kaan (such as sentence 21a), and the other is either by kaan or by khwaam (such as sentence 21b). In the case of the verb-phrase nominalizations (expanded structure), it is reflected that there are some differences between kaan and khwaam: the verb phrase nominalized by kaan can be a long structure, and the verb itself can be freely matched with adverbials, objects, or other verbs (such as sentence 22a, 23 a, 24 a). However, the verb phrase nominalized by khwaam is usually a short structure, which forms a meaning-fixed combination with the verb phrase and its syntactic function like a word. (such as sentence 22b, 23 b, 24b).

In summary, it can be seen that the expansion ability of [kaan VP] is strong, while that of [khwaam VP] is weak. The difference of this expansion ability reflects the asymmetry between kaan and khwaam, thus forming the difference between the two nominalization constructions. Therefore, in the same syntactic structure, once a verbal component is nominalized by kaan and khwaam, the expansion ability of this verbal component will be divided into strong and weak. This distinction could be more explicit in case that kaan and khwaam can, respectively, be distributed on the same verb, such as sentence (25).

In sentence (25a), ru is a transitive verb, meaning to know, meaning to have knowledge of facts or reasons. The verb acts as a predicate. In sentence (25b), the nominalization of kaan ru prawat phuteng means knowing the author's background. This nominalization is an expansion of kaanru, which can be expressed at a structural level, kaan [ru [prawat phuteng]]. In sentence (25c), the nominalization of khwaamru means knowledge, which refers to the sum of people's knowledge and experience gained in social practice. In other words, the verb of ru is nominalized by kaan, the characteristics of the verb

are retained, while it is nominalized by khwaam, the characteristics of the verb are lost. We can say kaan ru prawat phuteng, but we cannot say *khwaam ru prawat phuteng.

(25). a. bükkhon dankläau cà? rú thúkthúk jàaη kìaùkàp thammá?châat(TNC ACSS100)

bükkhon	dankläau	cà?	rú	thúk~thúk	jàaη
people	abovementioned	will	know	every	kind
kìaùkàp	thammá?châat				
about	nature				

Those people know everything about nature.

b. kaan rú prà?wàt phùtèηη ?àat chùai hâykhâucai dâi wâ thammai khâu khít lé? sà?dεη ?òk chéen nán(TNC ACSS073)

kaan rú	prà?wàt	phùtèηη	?àat	chùai	hâi	khâucai	
knowing	history	author	may	help	CAUS	understand	
dâi	wâ	thammai	khâu	kít	lé?	sà?dεη	?òk
can	COMP	why	he	think	and	express	out
chéen	nán						
way	DEM						

Knowing the author's background may help to understand why he thinks that way and expresses that way.

c. krà?buankaan thàaithôt khwaamrú prà?kòpdúai phúwí?cai phú?àan lé? kaanraaijaanphôn(TNC ACSS017)

krà?buankaan	thàaithôt	khwaamrú	prà?kòpdúai	phúwí?cai
process	transmit	knowledge	consist of	researcher
phú?àan	lé?	kaanraaijaan	phôn	
reader	and	reporting	result	

The process of transmitting knowledge consists of researchers, researchers, and reporting results.

To sum up this section, the difference in this expansion ability shows that: When the verb or verb phrase is nominalized by kaan, this nominalization retains the same meaning as when the verb or verb phrase acts as a predicate verb. The function of kaan is primarily to make this verb component into nominalization. When the verb or verb phrase is nominalized by khwaam, this nominalization often has different meanings from the verb or verb phrase when it acts as a predicate verb. The function of khwaam is primarily to make this verb component into lexicalization.

4. The syntactic function of nominalizations

4.1. The ability of an external syntactic combination of nominalizations

Nominalizations with kaan and khwaam can be modified by other components, such as noun structure, preposition structure, quantifier structure, predicate structure, pronoun structure, and demonstrative, such as sentences (26-31)

(26). a. dèk jaη tôηkaan [kaan chùailüa]1 khõη phômê(TNC ACHM055)

dèk	jaη	tôηkaan	[kaanchùailüa]	khõη	phômê
children	still	need	help	POSS	parents

Children also need the help of their parents.

b. [khwaamtònüaη] khõη khômüun thamhâi phôn khõη kaanwí?khró? nâ chùathü (TNC ACET010)

[khwaamtònúan]	khǒŋ	khômuun	thamhaï	phǒn	khǒŋ
consistency	POSS	data	CAUS	result	POSS
kaanwí?khrǒ?	ná	chúathũ			
analysis	worthy	reliable			

The consistency of the data makes the analysis results reliable.

(27). a. kaanwí?cai ní cà? sǎaŋ khwaamrú mài lé? khwaamkhǎucaï ?an mài sũŋ kô khuu

kaanwí?cai	ní	cà?	sǎaŋ	khwaamrú	
research	DEM	will	build	knowledge	
mài	lé?	khwaamkhǎucaï	?an	mài	sũŋ
new	and	understanding	CLF	new	RELR
kô	khuu	[kaanphà?sǒmkan]	rá?wàaŋ		
yet	be	integrationRECP	between		
wátthá?ná?tham	phuínbǎan	kàp			
culture	local	and			
wátthá?ná?tham	tà?wantòk				
culture	western				

This research brings a new understanding to the integration of local culture and western culture.

b. [khwaamkhúnkhǎi] rá?wàaŋ rau nácà? kàtkhúun tâŋtè wí?nathi rêek thî sòpta(TNC PRNV008)

[khwaamkhúnkhǎi]	rá?wàaŋ	rau	nácà?	kàt	khúun	tâŋtè
familiarity	between	we	ought to	occur	up	from
wí?nathi	rêek	thî	sòpta			
second	first	ATRBM	meet			

The familiarity between us may occur at the second when we meet our eyes.

(28). a. nai kǒra?ni ní nǎp dǎi wǎ pen [kaan klua] jǎaŋ nuŋ(TNC ACSS043)

nai	kǒra?ni	ní	nǎpdǎiwǎ	pen	[kaanklua]	jǎaŋ	nuŋ
in	situation	DEM	regard	be	fear	kind	one

This situation can be regarded as a kind of fear.

b. nai khǎ?nàdiaukan ŋaan khrǎŋ ní kô mi [khwaamkhliikhlaai] baanjàaŋ thî nǎsǒncai(TNC NWCOL098)

naikhǎ?nà?diaukan	ŋaan	khrǎŋ	ní	
at the same time	work	CLF	DEM	
kô	mi	[khwaamkhliikhlaai]	baanjàaŋ	thî
still	have	relaxation	some	ATRBM
nǎ	sǒncai			
worthy	attention			

At the same time, this work also reflects some relaxation worthy of attention.

(29). a. mékrà?thâŋ [kaanplianplɛɛŋ] thî lék thîsùt kô mâi khuan pha?jajaam tham dooi mí?dâi sùksǎ yàaŋ thithuân(TNC ACPL004)

mékrà?thâŋ	[kaanplianplɛɛŋ]	thî	lékthîsùt	kô	mǎi
even	change	ATRBM	smallest	still	NEG
khuan	phá?jajaam	tham	dooi	mí?dâi	sùksǎ
should	try	do	ADVLM	without	study
jǎaŋ	thithuân				
ADVLM	consideration				

Even the smallest changes should not be made without careful consideration.

b. *khǎu mi klin hɛ̃ɛŋ [khwaamtaai] thī nā saiʔòtsaʔjǒŋ*(TNC PRNV011)

khǎu	mi	klin	hɛ̃ɛŋ	[khwaamtaai]	thī	nā	sàʔjòtsaʔjǒŋ
he	have	smell	POSS	death	ATRBM	worthy	frightening

He exudes a frightening smell of death.

(30). a. *thā lūuk rian phasǎ thai hǎi phɔ ʔaan ʔòk khīan dāi kô khonçàʔ pen kaan di tò [kaankhá] khǒŋ rau mâinó*(TNC PRNV012)

thā	lūuk	rian	phasǎ	thai	hǎi	phɔ	ʔaan	ʔòk	khīan
if	child	learn	language	Thai	CAUS	enough	speak	out	write
dāi	kô	khonç	çàʔ	pen	kaandi	tò	[kaankhá]	khǒŋ	rau
can	yet	may	will	be	good	for	business	POSS	we
māi	nó								
NEG	few								

If you learn Thai to be able to speak and write, it will definitely be good for our business.

b. *[khwaamhuanjai] khǒŋ thāan thamhǎi khā rançiat*(TNC PRNV030)

[khwaamhuanjai]	khǒŋ	thāan	thamhǎi	khā	rançiat
concern	POSS	you	CAUS	I	disgust

Your concern makes me feel disgusted.

(31) a. *[kaanwíʔçai] ní mi çùpràʔsoŋ thīçà sũksǎ thũŋ khwaamkháuçai thaŋ kaanmuaŋ léʔ kaan misúanrúam thaŋ kaanmuaŋ khǒŋ pràʔchachon ʔamphəmuəŋ chonbùʔri*(TNC PRNV014)

[kaanwíʔçai]	ní	mi	çùpràʔsoŋ	thīçàʔ	sũksǎ
study	DEM	have	purpose	COMP	analyse
thũŋ	khwaamkháuçai	thaŋ	kaanmuaŋ	léʔ	kaanmisúanrúam
to	understanding	side	politics	and	participation
thaŋ	kaanmuaŋ	khǒŋ	pràʔchachon		
side	politics	POSS	people		
ʔamphəmuəŋ	chonbùʔri				
city	Chunburi				

The purpose of this study is to analyze people's understanding of politics and political participation in Chunburi.

b. *dúai [khwaam mâikháuçai] nán sǎtharaʔnaʔchon sǎmât tòk pen juà*(TNC ACSS103)

dúai	[khwaammaïkháuçai]	nán	sǎtharaʔnáʔchon
becauseof	incomprehension	DEM	people
sǎmât	tòk	pen	juà
can	fall low	be	bait

Because of that incomprehension, people may become bait

These sentences show that the nominalizations composed of *kaan* and *khwaam* have a strong combinatorial ability. The nominalizations are head nouns, which could be modified by other components. These combinatorial abilities highlight the symmetry of the ability of an external syntactic combination of nominalizations with *kaan* and *khwaam*. But this situation belongs to the internal non-expansion (bare-verb nominalization constructions) of nominalizations. If the internal expansion is taken into account (verb-phrases nominalization constructions), the ability of external syntactic combination of nominalizations with *kaan* and *khwaam* will show differences.

4.2. The symmetry and asymmetry of the ability of external syntactic combination of nominalizations

Before discussing the asymmetry of the ability of external syntactic combination of nominalizations with *kaan* and *khwaam*, let us compare the symmetry of them. The ability of external syntactic combination of nominalization constructions divided into two situations: one is that there is no internal expansion in nominalizations, so their external syntactic combination ability is strong and can be modified by many other components, such as sentences (32-37). This situation reflects the symmetry of the ability of an external syntactic combination of nominalizations with *kaan* and *khwaam*.

(32) a. [kaantèekjêek] khǒŋ khrôpkhrua

[kaantèekjêek]	khǒŋ	khrôpkhrua
division	POSS	family

[division] of the family

b. [khwaamtònnûaŋ] khǒŋ khômun

[khwaamtònnûaŋ]	khǒŋ	khômun
coherence	POSS	information

[coherence] of information

(33). a. [kaanphà?sòmkan] rá?wàaŋ wáttha?natham phúnbâan kàp wáttha?natham tà?wantòk

[kaanphà?sòmkan]	rá?wàaŋ	wáttha?natham	
integration	RECP	between	culture
phúnbâan	kàp	wáttha?ná?tham	tà?wantòk
local	and	culture	western

[integration] of local culture and western culture

b. [khwaamkhúnkhài] rá?wàaŋ rau

[khwaamkhúnkhài]	rá?wàaŋ	rau
familiarity	between	we

[familiarity] between us

(34). a. [kaan klua] jàaŋ nuŋ

[kaanklua]	jàaŋ	nuŋ
fear	kind	one

A kind of [fear]

b. [khwaamrák] khráŋ mài

[khwaamrák]	khráŋ	mài
love	CLF	new

A new [love]

(35). a. [kaanpà?ti?pàt] thī mǎi thǎuthiamkan

[kaanpà?ti?pàt]	thī	mǎi	thǎuthiam	kan
treatment	ATRBM	NEG	equal	RECP

unequal [treatment]

b. [khwaamkhâucai] thī làaklǎai

[khwaamkhâucai]	thī	làaklǎai
understanding	ATRBM	various

various [understandings]

(36). a. [kaantòsû] dai

[kaantòsuf]	dai
struggle	what

what [struggle]

b. [khwaamchûailüa] thâurài

[khwaamchûailüa]	thâurài
help	how much

how much [help]

(37). a. [kaanwí?cai] ní

[kaanwí?cai]	ní
research	DEM

this [research]

b. [khwaamhũnhũaŋ tháŋsîn tháŋpuan] ní

[khwaamhũnhũaŋ tháŋsîn tháŋpuan]	ní
jealousy all	DEM

this [all the jealousy]

The other is that the internal structures of nominalizations are expanded, so their abilities of external syntactic combination will be very weak and cannot be modified by any other components, such as sentences (38-40). This situation reflects the asymmetry of the ability of external syntactic combination of nominalizations with kaan and khwaam.

(38). a. [kaan ?au râatsà?dɔŋ pen sùklaaŋ] ní

[kaan?au]	râatsà?dɔŋ	pen	sùklaaŋ]	ní
using	people	be	medium	DEM

this [using people as a medium]

b. [khwaam penpòkkà?ti?] jàaŋ ní

[khwaampenpòkkà?ti?]	jàaŋ	ní
normality	kind	DEM

this [normality]

(39). a. [kaankâaunâ jàaŋ lôotphoon lé? rúatreu] khǒŋ pha sǎ prà?camchâat jài jai thúkwanní

[kaankâaunâ]	jàaŋ	lôotphoon	lé?	rúatreu]	khǒŋ
development	ATRBM	peculiar	and	rapid	POSS
phasǎ	prà?camchâat	jài-jài	nai	thúkwanní	
language	national	major	in	today	

the [peculiar and rapid development] of today's major national languages

b. [khwaammaĩkhâucaí] nán

[khwaammaĩkhâucaí]	nán
incomprehension	DEM

that [incomprehension]

(40). a. [kaan sâaŋsǎn siŋ nùŋ dooi mâimi phûkhon pen kamlan cai rǔ neurúam] ø2

[kaansaŋsǎn]	siŋnùŋ	dooi	mâimi	phûkhon	pen
creating	something	ADVLM	without	people	be
kamlancai	rǔ	neurúam]	ø		
encouragement	or	resonance			

[creating something without encouragement or resonance]ø

b. [khwaamchûathû dai sũuŋ]ø

[khwaamchûathũ	daĩ	suũŋ]	ø
credibility	ADVLM	high	

[extremely high credibility] ø

In other words, when the internal structure of nominalizations with kaan and khwaam cannot expand, their ability to combining external syntactic is very strong; when the internal structure can expand freely, their ability to combining external syntactic is very weak.

5. Conclusions

The results of this study show that kaan and khwaam go through a grammaticalization pathway, which evolved from lexical nouns, light nouns, into nominalizers. In this pathway, the grammatical functions of kaan and khwaam are embodied at each different stage and are a continuum of grammaticalization. This continuum shows the asymmetry in the distribution of kaan and khwaam in the following ways: kaan can be distributed in front of a lot of nouns, any verbs, and very few adjectives. However, khwaam can be distributed in front of some nouns, any adjectives, and some verbs. kaan and khwaam can, respectively, be distributed on the same verb. kaan and khwaam can, respectively, be distributed the same adjective, but on few adjectives. kaan primarily nominalizes verbs, khwaam primarily nominalizes adjectives, and some verbs.

VP in [kaan VP] and [khwaam VP] can be bare verbs or verb phrases, which are verb-adverbial structures, predicate-object structures, and union structures. However, there are explicit differences among these same structural types. VP in [kaan VP] can expand more freely, while VP in [khwaam VP] is limited. Therefore, [kaan VP] and [khwaam VP] are two forms with different structures.

Both [kaan VP] and [khwaam VP] can be modified by the noun structure, preposition structure, quantifier structure, predicate structure, pronoun structure, and demonstrative. When the internal structures of [kaan VP] and [khwaam VP] are not expanded, their ability to combine external syntactically is strong. When the internal structures of [kaan VP] and [khwaam VP] expanded freely, their ability to combine external syntactically is weak.

In summary, the nominalizers of kaan and khwaam have similarity in the diachronic development process but have asymmetry in distribution at the synchronic level. kaan primarily nominalizes verbs, which express an event nominalization. And khwaam primarily nominalizes adjectives and verbs, which makes adjectives and verbs into lexicalization or express a lexical nominalization. The nominalizations composed of kaan and khwaam are asymmetric in their abilities of internal expansion and external syntactic combination. Therefore, kaan and khwaam have a lot of differences in semantics and function, and they are not symmetric. In other words, [kaan VP] and [khwaam VP] are asymmetric.

In Thai, there must be a symmetry in two kinds of constructions, and the grammatical functions of kaan must be more versatile than khwaam, which need to be discussed in another article.

Abbreviations

1	first person
ATRBM	attributive marker
ADVLM	adverbial marker
CLF	classifier
NMLZ	nominalizer
CAUS	causative,
COMP	complementizer,
DEM	demonstrative,
LOC	locative
NEG	negative

PER	preposition,
PST	past
PASS	passive,
POSS	possessive,
RECP	reciprocal marker
RELR	relativizer,
VP	verbal phrase,
NP	noun phrase,
AP	adjective phrase,

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