## A syntactic study of the word HEAD compounding in the Thai language Nuchamon James, Kasem Bundit University, Thailand

In the span of 30 years (1990–2020), works related to /hŭa/, which means 'head' in Thai, have been scarce, and none challenged whether such compounds were indeed compounds. Moreover, they involved the endocentric/exocentric view that has lately been questionable to scholars. The present research aimed to investigate this Thai insertion manipulation compounding. involving instead of the usual endocentric/exocentric concept. Data were gathered from the 2011 Thai Royal Dictionary, and only compounds starting with /hǔa/ were selected. Three insertion tests, namely  $/t^{h}\hat{i}:/$  'that,'  $/k^{h}\hat{j}:n/$  'of,' and  $/m\hat{a}i/$  'no,' were employed to test if the socalled /hŭa/ compounds are true compounds. Results showed that not all of the compounds were full-fledged compounds. They were separated into three groups: Group I (containing full-fledged compounds), Group II (containing partially fledged compounds), and Group III (containing phrases). The study also revealed that most /hŭa/ compounds, those with a noun + noun structure, were actually compounds. However, some compounds, with a noun + verb structure, had two characteristics of being both compounds and relative clauses, and some compounds, with the same noun + verb structure, were essentially phrases. This confirmed the validity of the three insertion tests. Additionally, a cline concept was utilized to demonstrate the continuum of the three groups of strings since they had similar structure, but they possessed different compoundhood. The present study demonstrates that, by way of specific criteria, some so-called /hǔa/ compounds are not compounds. All of this leads to a better understanding of Thai compounding and can also be beneficial for those who desire to teach or study Thai.

Keywords: cline, compounding in Thai, head, syntactic study

### **1. Introduction**

The word /hǔa/, which means 'head' in the Thai language, is not a simple word. Beyond the prototypical meaning, which is head of a human being or an animal, /hǔa/ has several other meanings. These other meanings have related senses, making /hǔa/ a polyseme. The Thai language has classifiers, and /hǔa/ is also a classifier. In addition, there are numerous compounds and idiomatic expressions that contain /hǔa/.

The present paper will analyze properties of /hǔa/, where /hǔa/ occurs in a compounding environment. One taxonymy of compounding consists of endocentric and exocentric compounds. The distinction between these two types of compounding belongs to one of the most recognized concepts, that of headedness. The relevant structural property of compounds is headedness (Neef 2009). That is, in a general sense, a compound is comprised of two free morphemes that are joined to make a new unit, with a new meaning, where one morpheme or constituent acts as a head, and the other constituent acts as a modifier. Many linguists use this headedness criterion to distinguish endocentric compounds from exocentric compounds by considering the compound with a head as endocentric and the one without a head as exocentric.

The word /hua/ in the present study will be considered to be the head of a compound. This is due to the fact that, typologically, Thai compounds follow the headedness preference and have the head at the front or the leftmost position of the entire compound, leaving the modifier in the right position. However, the present researcher will not emphasize the terms endocentric or exocentric when discussing /hŭa/ compounds since the use of these two terms is often questionable to scholars (Štekauer 1998, as cited in Benczes 2015: 55). In order to avoid confusion, the /hŭa/ compounding studied in the present paper will not be considered endocentric or exocentric. Instead, it will be tested with insertion criteria, resulting in an alternate classification.

In the span of 30 years (1990–2020), works related to /hǔa/ have been limited. There have been eight works that are related to body part terms and the word /hǔa/ in Thai. Four of the eight works studied solely /hǔa/ in Thai, but the other four studied /hǔa/ in a slightly different way: Lamciaktet (1996) studied the Lanna Thai language; Hyun (2012) compared words in Thai and Korean; Lordee (2013) studied the Thai Lue language; and Gan (2015) compared words in Thai and Chinese. The present paper will involve only Central Thai, the official language of Thailand. In addition, of the eight works mentioned, there are only three works that dealt directly with compounds that contain /hǔa/. The authors include Juntanamalaga (1992), Lordee (2013), and Gan (2015). However, they did not explicitly determine if the so-called /hǔa/ compounds are indeed compounds or which specific criteria can be used for such a determination. These are some of the reasons why the present researcher will further investigate /hǔa/ compounds.

Compounds are quite complicated, and many are considered fuzzy, vague, unclear, or ambiguous. Frequently, context is needed to assist in interpreting compounds that are fuzzy. The HEAD /hůa/ compounds are complicated, as well. Some so-called compounds can be considered as true compounding, while others may not. These compounds have the structures of N + N, or N + V, with the emphasis that the first constituent is the word /hůa/, and the second constituent is either a N or a V. The structure of true compounds cannot be changed. The word /hůa/ remains in the first constituent position. (This is an issue of syntactic word order.) The present paper attempts to provide clarification of specific criteria used to determine whether /hůa/ compounds are indeed compounds or if they are actually phrases.

Several criteria have been used to test compounding in the Thai language. Works related to these criteria have been by Kuno & Wongkhomthong (1981), Iangubol (1982), Savetamalya (1996), Teekhachunhatean (2002), Singnoi (2005), Yaowapat & Prasithrathsint (2006), Kriengket et al. (2007), Prasithrathsint et al. (2011), Injan (2014), and Thamnium (2017). From these works, it can be ascertained that the one test that is utilized across the board is the insertion test.

Lieber & Štekauer (2009, as cited in Omachonu & Abraham 2012: 190) mentioned that it is not possible to insert a free morpheme within a compound. That is, no other element can freely penetrate the two constituents. The insertion test is also ranked by Altakhaineh (2016: 82) at the top of other criteria, in terms of its reliability, to determine whether a unit represents compounding. This stems from the view of lexical integrity, i.e., the inner structure of compounding is intact. It does not allow any interruption. On the contrary, a phrase's inner construction is loose and allows insertion of modifiers, prepositions, etc. This means that a compound has more inner structural integrity than a phrase, pointing to the fact that a compound does not allow any insertions. Therefore, to test if a string is compounding, insertion criteria can be most suitably employed.

#### 2. Phrase or compound

The present study utilizes three different insertion tests to group a string of words as a phrase or a compound. The three tests involve the insertions of  $/t^{h}i:/ that, /k^{h}i:\eta/ of, and /maj/ no.'$ 

2.1 A relative pronoun or relativizer  $/t^{h}\hat{i}$ :/ 'that' can be used to determine compoundhood (Yaowapat & Prasithrathsint 2006)

This is where elements of the unit or string are intervened by the insertion of  $/t^{h}$ :/, e.g., in a noun phrase (NP).

- (1)  $p^{h}\hat{a}:p\cdot p^{h}a\cdot yon t^{h}\hat{i}: di: tc\hat{a}\hat{i} mi: k^{h}on ma: du: m\hat{a}:k$ movie that good will have people come look a lot 'A movie that is good will have a large audience.'
- (2)  $t^h \acute{u}k \quad k^h on \quad tc^h \hat{\jmath}:p \quad d\grave{e}k \quad t^h \hat{\imath}: \quad di:$ every person like child that good 'Everyone likes a good child.'

It can be understood that Example (1) contains three words:  $/p^{h}\hat{a}:p \cdot p^{h}a \cdot yon/ + /t^{h}\hat{i}:/ + /di:/$ movie + that + good. The NP movie + good receives the insertion of the relativizer /t<sup>h</sup> $\hat{i}:/$ . The first word 'movie' is a noun (N); the second word /t<sup>h</sup> $\hat{i}:/$ , which is inserted, is a relativizer; and the third word 'good' is a verb (V). (According to Prasithrathsint 2000, /di:/ is a verb.) This creates a string that can be called a reduced relative clause (Yaowapat & Prasithrathsint 2006). Example (2) has the same structure as Example (1), where it contains three words /dèk/ + /t<sup>h</sup> $\hat{i}:/$ + /di:/ child + that + good. The NP child + good receives the insertion of the relativizer /t<sup>h</sup> $\hat{i}:/$ . The first word 'child' is a noun; the second word /t<sup>h</sup> $\hat{i}:/$ , which is inserted, is a relativizer; and the third word 'good' is a verb.

Example (1) shows that  $/p^{h}\hat{a}:p\cdot p^{h}a\cdot yon di:/movie + good, with the structure of N + V, is not a compound since it allows <math>/t^{h}\hat{i}:/$  insertion while remaining grammatically correct. This is due to the concept, mentioned earlier, that a compound has very tight lexical integrity which does not allow any insertion. It is the same for Example (2), where  $/d\hat{e}k$  di:/ child + good (N + V construction) is not a compound, either, since it allows  $/t^{h}\hat{i}:/$  insertion while remaining grammatically correct. This means that the insertion can appear elsewhere—outside of compoundhood, such as in a phrase. The insertion word is a functional word. When functional words are inserted, it demonstrates that each insertion is appropriate to test a compound. This is related to morphology/syntax/grammar/word formation. Therefore, the insertion of the relativizer  $/t^{h}\hat{i}:/$  can be used as a criterion to determine compoundhood, i.e., it is appropriate to use  $/t^{h}\hat{i}:/$  insertion to test a compound that has the structure of N + V, as in Examples (1) and (2) since, in Thai,  $/t^{h}\hat{i}:/$  is a relativizer that can appear between N and V in a phrase construction.

2.2 Another insertion that can interrupt a string with a possessive  $/k^h \check{J}:\eta/\hat{J}$ 

(3)	hŭ:	kħž:ŋ	mæ:w	tu:a	ní:	jàj	
	ears	of	cat	CLF	this	big	
	<b>'</b> This	cat's ear	s are large	e.'			

(4) *mu:*  $k^h \check{j}:\eta$   $p^h \hat{i}:\cdot s \grave{a} \cdot p \acute{aj}$   $s \check{u} aj$  t can hands of sister-in-law beautiful very

'My sister-in-law's hands are very beautiful.'

Example (3), above, demonstrates a NP /hů:/ ears + /mæ:w/ cat, with an insertion of a preposition /kh5:ŋ/, resulting in /hů: kh5:ŋ mæ:w/ ears + of + cat 'a cat's ears,' which is, again, grammatically correct. Example (4) is similar in that a NP /mu:/ hands + /phî:·sà·p áj / sister-in-law, with an insertion of a preposition /kh5:ŋ/, results in /mu: kh5:ŋ phî:·sà·p áj / hands + of + sister-in-law 'sister-in-law's hands,' which is grammatically correct, as well. (Both examples possess a N + N structure.)

Examples (3) and (4) illustrate that /hů: mæ:w/ ears + cat is not a compound since it allows the insertion of /k<sup>h</sup> $\check{}$ :ŋ/ and that /mu: p<sup>h</sup> $\hat{}$ :/ hands + brother is not a compound, either, for the same reason. Thus, /k<sup>h</sup> $\check{}$ :ŋ/ can be utilized as another insertion test to determine compoundhood, again, because this insertion can appear elsewhere, such as in a phrase, making this insertion appropriate to test compounds that contain the structure of N + N. (The preposition /k<sup>h</sup> $\check{}$ :ŋ/ can connect N + N in Thai.)

2.3 One more insertion that can be applied with the negative adverb /mâj/ 'no'

(5)	Ι	<i>mâj</i> no t like to o	like	<i>t<sup>h</sup>am</i> make	<i>kàp∙kʰâ:w</i> meals
(6)	<i>k<sup>h</sup>ǎw</i> he 'He do	no	sleep		<i>t<sup>h</sup>îaŋ·k<sup>h</sup>u:n</i> midnight .'

Example (5) exhibits a sentence with /tc<sup>h</sup>ǎn/ 'I' as a subject (S), /mâj/ 'no' as a negative adverb (ADV), and /tc<sup>h</sup>3:p/ as a verb (V). This makes the string /tc<sup>h</sup>ǎn tc<sup>h</sup>3:p/ a clause, with the structure of S + V. (The Thai language has an SVO structure.) The fact that it allows the insertion of /mâj/ proves that this string is not a compound; it is a clause, with the structure of Head N + ADV + V. Similarly, Example (6) demonstrates that /k<sup>h</sup>ǎw làp/ is a clause, not a compound, since, again, it allows the insertion of /mâj/. This insertion can be used to test compoundhood due to the fact that it can occur elsewhere in a phrase, clause, or sentence. In Thai, it is particularly appropriate to test strings with the structure of N + V, as in Examples (5) and (6), with the insertion of /mâj/ since /mâj/ can occur in a clause with a N + V construction.

# 3. Data

The three insertions of /t<sup>h</sup>î:/ 'that,' /k<sup>h</sup> $\check{$ :n/ 'of,' and /mâj/ 'no' were applied to the data of the present research. The data were obtained from the Thai Royal Institute Dictionary, 2011 edition, with the specific selection of /hũa/ compounding or strings. The data yielded 150 /hũa/ strings. Out of these 150 strings, /hũa/ strings that appeared as idiomatic expressions, archaic words, slang, or proper nouns, which were frozen and were not ambiguous strings that were the target of the present research, were excluded. Further exclusions consisted of the polite form of /hũa/ (/st̃i·sà/), the impolite or traditional form of /hũa/ (/krà?·baan/), and the royal

word for /hǔa/ (/pʰráʔ·sǐan/). In addition, only strings that started with the word /hǔa/ were studied. After the exclusions, 78 strings were examined and analyzed.

# 4. Criteria to test compoundhood

From the above discussion, the three insertion tests of  $/t^{h}i:/ that, /k^{h}i:\eta/ of, and /maj/ no' were applied to all selected data. The data were then sorted into three groups: a) full-fledged compounds, b) partially fledged compounds, and c) phrases.$ 

## 4.1 Group I with two sub-groups

Group I has two sub-groups, with sub-group one containing examples of the insertion between the N + V structure and sub-group two containing examples of the insertion between the N + N structure.

## 4.1.1 Sub-group I

Examples of  $/t^{h}$ :/ 'that' and  $/m\hat{a}$ j/ 'no' that are inserted within strings that contain the structure of N + V (those strings that have a co-occurrence of the opposite meaning or opposite pair) are shown in Table 1.

EXAMPLE	STRING/	TEST 1	TEST 2	TEST 3
	MEANING	INSERTION	INSERTION	INSERTION
		OF	OF	OF
		/thî:/	/kʰɔ̌:ŋ/	/mâj/
(7)	/húa t <sup>h</sup> úp/	*/húa t <sup>h</sup> î:	-	*/húa mâj
	head +	tʰúp/		tʰúp/
	opaque 'dumb'			
(8)	/húa sǎj/	*/húa tʰî: sǎj/	-	*/húa mâj
	head +			săj/
	transparent			
	'smart'			
(9)	/húa kàw/	*/húa t <sup>h</sup> î:	-	*/húa mâj
	head + old	kàw/		kàw/
	ʻold-			
	fashioned'			
(10)	/húa màj/	*/húa t <sup>h</sup> î:	-	*/húa mâj
	head $+$ new	màj/		màj/
	'progressive'			
(11)	/húa kʰǎŋ/	*/húa tʰî:	-	*/húa mâj
	head + hard	kʰǎŋ∕		kʰǎŋ/
	'stubborn'			
(12)	/húa ò:n/	*/húa t <sup>h</sup> î:	-	*/húa mâj
	head + soft	ò:n∕		à:n∕
	'obedient'			

Table 1: Sub-group I: Data with insertions of /thî:/ 'that' and /mâj/ 'no'

(13)	/húa t¢ <sup>h</sup> á:/ head + slow 'dumb'	*/húa t <sup>h</sup> î: t¢ <sup>h</sup> á:/	-	*/húa mâj t¢ <sup>h</sup> á:/
(14)	/húa waj/ head + fast 'smart'	*/húa t <sup>h</sup> î: waj/	-	*/húa mâj waj/

Table 1 demonstrates that different strings were tested with the insertions of /t<sup>h</sup>î:/ and /mâj/. These two insertions are used since the strings have the structure of N + V. It can be noted that these strings are compounds. The insertion is not allowed. It can also be noted that four of the strings, Examples (7), (9), (11), and (13) have opposite words or pairs, e.g., (7) has the opposite pair to (8); (9) has the opposite pair to (10), etc. This could be a reason why they do not allow the insertion of /mâj/, i.e., opposite pairs exist, resulting in the unnecessary use of the insertion of /mâj/. (It will be shown later that /mâj/ insertion is allowed for certain strings of N + V.) To elaborate, the fact that there are choices for an opposite word can contribute to the fact that these strings do not need /mâj/ to show the opposite meaning. This group belongs to the full-fledged compound category because it does not allow an insertion of either /t<sup>h</sup>î:/ or /mâj/, meaning that the lexical integrity of the string is very strong.

Moreover, strings from Table 1 have different status from Examples (1) and (2), shown earlier. Some of these examples can be compared, as exhibited in Table 2.

EX	STRING	TRANSLATION	COMPOUNDHOOD
AM			
PLE			
(1)	/pʰâ:p·pʰa·yon tʰî:	'a movie that is good'	not a compound
	di:/		
	movie that good		
(2)	/dèk thî: di:/	'a child that is good'	not a compound
	child that good		
(7)	*/húa t <sup>h</sup> î: t <sup>h</sup> úp/	*'not smart'	full-fledged
	head that opaque		compound
(8)	*/húa t <sup>h</sup> î: sǎj/	*'smart'	full-fledged
	head that transparent		compound
(9)	*/húa tʰî: kàw/	*'old-fashioned'	full-fledged
	head that old		compound
(10)	*/húa t <sup>h</sup> î: màj/	*'progressive'	full-fledged
	head that new		compound

Table 2: Comparison showing compoundhood with insertion of /thî:/ 'that'

#### 4.1.2 Sub-group II

Examples where  $/k^h 3:\eta$  of is inserted within strings that contain the structure of N + N are exhibited in Table 3.

EXAMPLE	STRING/	TEST 1	TEST 2	TEST 3
	MEANING	INSERTION	INSERTION	INSERTION
		OF	OF	OF
		/t <sup>h</sup> î:/	/kʰǎ:ŋ/	/mâj/
(15)	/húa bu:a/	-	*/húa kʰɔ̌:ŋ	-
	head + lotus		bu:a/	
	'nipple'			
(16)	/húa t <sup>h</sup> i:an/	-	*/húa kʰɔ̌:ŋ	-
	head +		t <sup>h</sup> i:an/	
	candle			
	'spark plug'			
(17)	/húa	-	*/húa kʰɔ̌:ŋ	-
	kun•t¢æ:/		kun•t¢æ:/	
	head + key			
	'railroad			
	switch'			
(18)	/húa nâ:/	-	*/húa kʰɔ̌:ŋ	-
	head $+$ face		nâ:/	
	'chief'			
(19)	/húa sâj/	-	*/húa kʰɔ̌:ŋ	-
	head +		sâj/	
	intestine			
	'hemorrhoid/			
	bladder'			

Table 3: Sub-group II: Data with insertion of /khɔ̌:ŋ/ 'of'

Sub-group II from Table 3 shows strings that have the structure of N + N; however, the insertion of /k<sup>h</sup>5:ŋ/ is not allowed, which is contrary to Examples (3) and (4), mentioned in Section 2.2. This means that the strings in Sub-group II belong to the full-fledged compound category, with a very tight inner structure. They do not allow an insertion and cannot be considered phrases. These examples can be compared with Examples (3) and (4), as exhibited in Table 4.

Table 4: Comparison showing compoundhood with insertion of /khɔ̌:ŋ/ 'o	Table 4: Com	Table 4: Comparison showing compoundhood with inserti	on of /kʰɔ̌:ŋ/ 'of
--	--------------	---	--------------------

EXAMPLE	STRING	TRANSLATION	COMPOUNDHOOD
(3)	/hǔ: kʰɔ̌:ŋ	'a cat's ears'	not a compound
	mæ:w/		
	ears of cat		
(4)	/mɯ: kʰɔ័:ŋ	'a brother's	not a compound
	phî:/	hands'	
	hands of		
	brother		
(15)	*/húa k <sup>h</sup> ð:ŋ	*'nipple'	full-fledged
	bu:a/		compound

	head of lotus		
(16)	*/húa k <sup>h</sup> ŏ:ŋ t <sup>h</sup> i:an/ head of candle	*'spark plug'	full-fledged compound
(17)	*/húa kʰɔ̌:ŋ kun·tɕæ:/ head of key	*'railroad switch'	full-fledged compound

## 4.2 Group II

Examples of /t<sup>h</sup>î:/ 'that' and /mâj/ 'no' that are inserted within strings that contain the structure of N + V (with no co-occurrence of the opposite pair) are shown in Table 5.

EXAMPLE	STRING/	TEST 1	TEST 2	TEST 3
	MEANING	INSERTION	INSERTION	INSERTION
		OF	OF	OF
		/t <sup>h</sup> î:/	/kʰǎ:ŋ/	/mâj/
(20)	/húa di:/	*/húa t <sup>h</sup> î: di:/	-	/húa mâj di:/
	head + good			
	'smart'			
(21)	/húa læn/	*/húa t <sup>h</sup> î:	-	/húa mâj
	head + move	læn/		lân/
	fast			
	'fast			
	thinking'			
(22)	/húa	*/húa t <sup>h</sup> î:	-	/húa mâj
	run∙ræ:ŋ/	run∙ræ:ŋ/		run•ræ:ŋ/
	head +			
	aggressive			
	'radical'			
(23)	/húa rán/	*/húa t <sup>h</sup> î:	-	/húa mâj rán/
	head + push	rán/		
	'stubborn'			
(24)	/húa sŭ:ŋ/	*/húa t <sup>h</sup> î:	-	/húa mâj
	head + high	sŭ:ŋ/		sŭ:ŋ/
	'extravagant'			
(25)	/húa sǐ:a/	*/húa t <sup>h</sup> î:	-	/húa mâj sĭ:a/
	head + ruin	sĭ:a/		
	'upset'			

Table 5: Group II: Data with insertions of /thî:/ 'that' and /mâj/ 'no'

Table 5 establishes that strings from Group II are unique in the sense that the strings do not allow the insertion of  $/t^{\hat{1}}$ ; however, they allow the insertion of  $/m^{\hat{2}}/.$  It can be explained by

stating that the structure of N + V (with no co-occurrence of the opposite pair) of this group has two characteristics: a) one that does not allow insertion of /t<sup>h</sup>î:/ and b) one that allows insertion of /mâj/. Those strings with the two characteristics do not share the same status. To elaborate, those in a) do not allow the insertion of /t<sup>h</sup>î:/ and can be considered partially fledged compounds, and those in b) allow the insertion of /mâj/ and can be considered relative clauses, having the potential to become full-fledged compounds in the future. Those in a) are different from Examples (1) and (2), as mentioned earlier in Section 2.1. These examples can be compared, as seen in Table 6.

EXAMPLE	STRING	TRANSLATION	COMPOUNDHOOD	RELATIVE
				CLAUSE
(1)	/p <sup>h</sup> â:p·p <sup>h</sup> a·yon	'a movie that is	not a compound	yes
	t <sup>h</sup> î: di:/	good'		
	movie that			
	good			
(2)	/dèk t <sup>h</sup> î: di:/	'a child that is	not a compound	yes
	child that good	good'		
(20)	*/húa t <sup>h</sup> î: di:/	*'smart'	partially fledged	no
	head that good		compound	
(21)	*/húa t <sup>h</sup> î: læn/	*'fast thinking'	partially fledged	no
	head that		compound	
	move fast			
(22)	*/húa t <sup>h</sup> î:	*'radical'	partially fledged	no
	run∙ræ:ŋ/		compound	
	head that			
	aggressive			

Table 6: Comparison showing relative clauses and compounding

In addition, when the strings from Group II allow insertion of  $/m\hat{a}j/$ , they behave like Examples (5) and (6), from Section 2.3. They have the same structure of Head N +  $/m\hat{a}j/$  + V. In other words, when used in a different context, Examples (20) through (25), in Table 5, become relative clauses like Examples (5) and (6). Table 7 exhibits the comparison.

Table 7. Comparison showing an relative eladises					
EXAMPLE	STRING	TRANSLATION	COMPOUNDHOOD	RELATIVE	
				CLAUSE	

 Table 7: Comparison showing all relative clauses

(5)	/tɕʰǎn mâj tɕʰô:p/ I no like	'I don't like it'	not a compound	yes
(6)	/k <sup>h</sup> ǎw mâj làp/ he no sleep	'He's not sleeping'	not a compound	yes
	-	-		
(20)	/húa mâj di:/ head not good	'not smart'	not a compound	yes
(21)	/húa mâj læn/ head not move fast	'not thinking fast'	not a compound	yes
(22)	/húa mâj run∙ræ:ŋ/ head not aggressive	'not radical'	not a compound	yes

# 4.3 Group III

Examples of  $/t^{h}i$ :/ 'that' and /maj/ 'no' that are inserted within strings that contain the structure of N + V, similar to Sub-group I and Group II, are displayed in Table 8.

EXAMPLE	STRING/	TEST 1	TEST 2	TEST 3
	MEANING	INSERTION	INSERTION	INSERTION
		OF	OF	OF
		/t <sup>h</sup> î:/	/kʰɔ̌:ŋ/	/mâj/
(26)	/húa lá:n/	/húa tʰî: lá:n/	-	/húa mâj
	head + bald 'bald'			lá:n/
(27)	/húa ló:n/	/húa t <sup>h</sup> î: ló:n/	-	/húa mâj
	head + bald			ló:n/
	'shaved			
	head'			
(28)	/húa t <sup>h</sup> à:k/	/húa tʰî:	-	/húa mâj
	head +	t <sup>h</sup> à:k/		t <sup>h</sup> ì:k/
	recede			
	'balding'			
(29)	/húa mèŋ/	/húa t <sup>h</sup> î:	-	/húa mâj
	head +	mèŋ/		mèŋ/
	gleam			

## Table 8: Group III: Data with insertions of /thi:/ 'that' and /mâj/ 'no'

'shiny		
head'		

Even though strings from Group III in Table 8, when compared with Sub-group I in Table 1 and strings from Group II in Table 5, have the same structure of N +V, they are different in that strings from Group III can be considered phrases since the strings allow the insertion of both /t<sup>h</sup>î:/ and /mâj/ while remaining grammatically correct. As mentioned earlier, /t<sup>h</sup>î:/ and /mâj/ can be inserted between two elements of a phrase. Therefore, strings from Group III belong to the phrase category, which is the opposite of Sub-group I (containing full-fledged compounds) and Group II (containing partially fledged compounds), even though strings from all three groups have a similar N + V construction. In other words, strings from Group III in Table 9 and Table 10 do not qualify as compounds. These examples can be compared in Table 9 and Table 10.

EX	STRING	TEST 1	TEST 2	COMPOUND-	RELA-
AM		INSERTION	INSERTION	HOOD	TIVE
PLE		OF	OF		CLAUSE
		/t <sup>h</sup> î:/	/mâj/		
(7)	/húa	*/húa t <sup>h</sup> î:	*/húa mâj	full-fledged	no
	tʰúp/	tʰúp/	tʰúp/	compound	
	head +				
	opaque				
	'dumb'				
(8)	/húa sǎj/	*/húa t <sup>h</sup> î: sǎj/	*/húa mâj sǎj/	full-fledged	no
	head +			compound	
	transparen				
	t				
	'smart'				
	[]		ſ	I	
(26)	/húa lá:n/	/húa t <sup>h</sup> î: lá:n/	/húa mâj lá:n/	not a compound	yes
	head +				
	bald				
	'bald'				
(27)	/húa ló:n/	/húa tʰî: ló:n/	/húa mâj ló:n/	not a compound	yes
	head +				
	bald				
	'shaved				
(5.0)	head'				
(28)	/húa t <sup>h</sup> à:k/	/húa t <sup>h</sup> î: t <sup>h</sup> à:k/	/húa mâj t <sup>h</sup> ì:k/	not a compound	yes
	head +				
	recede				
	'balding'				

Table 9: Comparison of Group III and Sub-group I (with /thî:/ and /mâj/ insertions)

Table 10: Comparison of Group III and Group II (with /thî:/ insertion only)					
EXAMPLE	STRING	TEST 1	COMPOUND-	RELATIVE	

		INSERTION OF /t <sup>h</sup> î:/	HOOD	CLAUSE
(20)	/húa di:/ head + good 'smart'	*/húa t <sup>h</sup> î: di:/	partially fledged compound	no
(21)	/húa læn/ head + move fast 'fast thinking'	*/húa t <sup>h</sup> î: læn/	partially fledged compound	no
	· · · · ·			
(26)	/húa lá:n/ head + bald 'bald'	/húa t <sup>h</sup> î: lá:n/	not a compound	yes
(27)	/húa ló:n/ head + bald 'shaved head'	/húa tʰî: ló:n/	not a compound	yes
(28)	/húa t <sup>h</sup> ì:k/ head + recede 'balding'	/húa t <sup>h</sup> î: t <sup>h</sup> ì:k/	not a compound	yes

### **5.** Conclusions and discussion

It can be summarized that /húa/ is polysemous and has been studied by very few scholars. Furthermore, those few scholars employed only the endocentric/exocentric view. Compounds, especially /húa/ compounds, are multifaceted and can be studied without using the endocentric/exocentric concept. The present researcher examined strings that have characteristics of /húa/ compounding to decide whether the strings are indeed compounds. In the past, several insertion tests have been utilized to assist in determining if a string is a compound or a phrase. The present study employed three specific insertion tests, namely /t<sup>h</sup>î:/ 'that,' /k<sup>h</sup>5:ŋ/ 'of,' and /mâj/ 'no,' to test the structure of the strings since the three insertions are appropriate to test compoundhood for the reason that they can be inserted elsewhere, such as in a phrase or a clause.

After the analysis, results established that the data can be separated into three groups, with one group having two sub-groups (Group I being the group with the two sub-groups). Sub-group I contains compounds that can be considered full-fledged. They also have an aspect of having opposite pairs. Sub-group II has full-fledged compounds as well; however, they do not have opposite pairs. Group II contains partially fledged compounds and has a unique aspect since after having applied the insertion tests, these partially fledged compounds do not pass the

/t<sup>h</sup>î:/ insertion test, but they pass the /mâj/ insertion test, yielding strings that can also be considered relative clauses. The last group, Group III, has strings that pass both the /t<sup>h</sup>î:/ and /mâj/ insertion tests; therefore, they have the property of phrases and do not qualify as compounds. In addition, the full-fledged compounds are not compositional whereas the phrases are more compositional, as shown in Figure 1. In addition, the partially fledged compounds were situated on a compositional cline between the full-fledged compounds and the phrases. The partially fledged compounds may become full-fledged compounds in the future if they become entrenched.

To assist in clarifying the results, it can be added that the three groups are related to the concept of continuum or cline, which can be considered a scale of continuous gradation. The cline is shown in Figure 1.

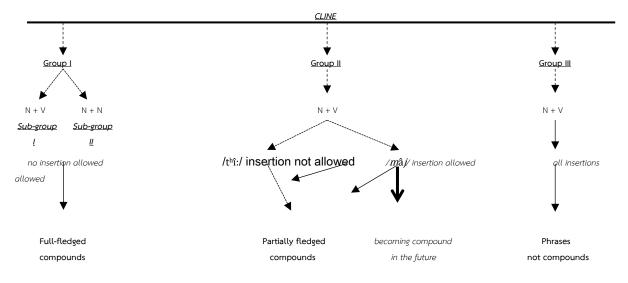


Figure 1: Cline of compounds and phrases

The continuum starts on the far left of the cline, with the full-fledged group consisting of two sub-groups. The partially fledged group is placed in the middle, and the group with phrases is positioned on the far right of the cline. Group 2 has a distinctive position, with strings allowing /mâj/ insertion that can lead in the direction of becoming compounds in the future if they are used often enough and become entrenched or conventionalized. This demonstrates that not all so-called compounds are true compounds even though their structure is similar, and the relationship is shown in the gradation of the cline. All of this is proven by the three insertion criteria /thî:/, /kh5:ŋ/, and /mâj/, which can be used for future study in order to better understand compounding in Thai. In addition, future research can use these insertion words to test other Thai compounds of similar structure. It can also shed further light on the classification of Thai compounds. As Bauer (2017) mentioned, distinguishing between compounds as words and similar constructions as phrases is vital.

#### References

- Altakhaineh, Abdel Rahman. 2016. What is a compound? The main criteria for compoundhood. *ExELL* 4(1). 58-86. doi:10.1515/exell-2017-0007
- Bauer, Laurie. 2017. Compounds and compounding. 19. Cambridge: Cambridge University Press.
- Benczes, Réka. 2015. Are exocentric compounds really exocentric? *SKASE Journal of Theoretical Linguistics* 12(3). 54-73.
- Gan, Yuyuan. 2015. A comparative study of compounds containing the word meaning 'head' in Thai and Chinese. Kasetsart University, Bangkok: Thailand. (Master's thesis.)
- Hyun, Yangwon. 2012. A comparative study of the process of noun categorization by classifiers in Thai and Korean. Chiang Mai University, Chiang Mai: Thailand. (Master's thesis.)
- Iangubol, Anong. 1982. An analytical study of compound words in Thai. Chulalongkorn University, Bangkok: Thailand. (Master's thesis.)
- Injan, Alisa. 2014. Coordinate compounds in Thai. Chulalongkorn University, Bangkok: Thailand. (Master's thesis.)
- Juntanamalaga, Preecha. 1992. On the semantics of Thai compounds in hua 'head.' In Compton and Hartmann (eds.). 168-178.
- Kriengket, Kanyanut & Kosawat, Krit & Anchaleenukul, Sunant. 2007. A computational linguistics study of compound nouns in Thai. (Academic Poster presented at NAC, 2007.)
- Kuno, Susumo & Wongkhomthong, Preya. 1981. Relative clauses in Thai. Studies in Language 5.
- Lamciaktet, Nantariya. 1996. Function words developed from body-part and plant-part nouns in Lanna Thai. Chulalongkorn University, Bangkok: Thailand. (Doctoral dissertation.)
- Lieber, Rochelle & Štekauer, Pavol. (eds.). 2009. *The Oxford handbook of compounding*. Oxford: Oxford University Press.
- Lordee, Sarawut. 2013. A study of semantic changes of head in compound words of Tai Lue language. *Journal of Humanities and Social Sciences University of Phayao* 1(2). 47-60.
- Neef, Martin. 2009. IE, Germanic: German. In Rochelle Lieber & Pavol Štekauer (eds.). *The Oxford handbook of compounding*. 386-399. Oxford: Oxford University Press.
- Omachonu, Gideon & Abraham, David 2012. Compounding in Igala: Defining criteria, forms and functions. *Unizik Journal of Arts and Humanities* 13(2). 184-206.
- Prasithrathsint, Amara. 2000. Adjectives as verbs in Thai. *Linguistic Typology* 4. 251-272. 10.1515/lity.2000.4.2.251.
- Prasithrathsint, Amara & Indrambarya, Kitima & Chaicharoen, Nattawut. 2011. *Grammar of standard Thai*. 14-28. Bangkok: Office of Higher Education Commission & The Thailand Research Fund.

- Savetamalya, Saranya. 1996. Verbal relative clauses as adnominal modifiers in Thai. Pan-Asiatic Linguistics: Proceedings of the Fourth International Symposium on Languages and Linguistics, January 8-10, 1996, Volume 2. 627-646.
- Singnoi, Unchalee. 2005. *Kham narm prasom: Sart lae sil nai karn sarng kham thai [Nominal compounds: Science and arts in construction of Thai words]*. 106-121. Bangkok: Chulalongkorn University Press.
- Štekauer, Pavol. 1998. An onomasiological theory of English word-formation. Amsterdam: John Benjamins.
- Teekhachunhatean, Roongaroon. 2002. Indefinite pronouns and interrogative pronouns: A historical study. Chulalongkorn University, Bangkok: Thailand. (Doctoral dissertation.)
- The Thai Royal Institute Dictionary. 2011. (http://www.royin.go.th/dictionary/) (Accessed 2019-2-5.)
- Thamnium, Unthika. 2017. A historical study of /daj/ /raj/ /njă/ in Thai. Kasetsart University, Bangkok: Thailand. (Doctoral dissertation.)
- Yaowapat, Natchanan & Prasithrathsint, Amara. 2006. Reduced relative clauses in Thai and Vietnamese. (Paper presented at the Sixteenth Annual Meeting of the Southeast Asian Linguistics Society (SEALS XVI), Jakarta: Indonesia, September 20-21, 2006.)

Nuchamon James Department of English for Communication Kasem Bundit University Bangkok, Thailand nuchamon.jam@kbu.ac.th nuchamonjames@gmail.com

In SKASE Journal of Theoretical Linguistics [online]. 2020, vol. 17, no. 5 [cit. 2020-12-01]. Available on web page http://www.skase.sk/Volumes/JTL47/pdf\_doc/10.pdf. ISSN 1336-782X