Conditional Negative, Reflexive Constructions, And Negated Quantifier Noun Phrases In Thai: Insoluble Problems For Lexicase Dependency Grammar?

Savetamalya, Saranya

1. Introduction

Those who have been working on syntax using lexicase dependency gramma realize that lexicase is a formal and explicit kind of framework that provides a simple too to account for almost every construction in any language better than other contemporary syntactic theories. Working under this kind of constrained dependency grammar, it will be pointed out in this paper that not every construction in Thai can be successfully accounted for. The constructions that will be discussed in this paper include the conditional negative mây--mây '(if) not, (then) not' construction, the reflexive tud?ee of the paper to attempt to explain how a syntactic theory with considerable explanatory adequacy, like lexicase dependency grammar, can account for these kinds of syntactic phenomena in Thai. The result of this study will contribute to a better understanding of the diversity of languages and shows that the universality of linguistic features can still be ligitimately claimed.

2. Conditional negative mây--mây '(if) not, (then) not' construction

The first construction in Thai that is difficult for lexicase dependency grammar to accommodate is the conditional negative $m\hat{a}y$ -- $m\hat{a}y$ '(if) not, (then) not' construction. If Thai, a negative construction is formed by using the negative adverb $m\hat{a}y$ 'not' to negat a verb. (It is not the purpose of this paper to discuss the syntactic evidence for treating may 'not' as an adverb. Those who are interested in this should read Indrambarya 1994.)

There are two main types of negative constructions in Thai. The first type, which is the common one, is to negate the first commanding verb of a sentence, as in (1-2). The second type is to negate a resultative verb, if there is one, rather than negating the first commanding verb, as in (3-5):

- p⊃m mây d∂∂n pay rooŋri∂n
 Pom not walk go school
 'Pom did not walk to school.'
- naa mây klaâ khàp rót eeη
 Na not brave drive car oneself 'Na did not dare to drive by herself.'
- 3. nók tàt kradaàt khaàt Nok cut paper tear 'Nok cut paper into pieces.'
- 4. pàt klxxη mây khàtcay mxx Pat pretend not offend mother

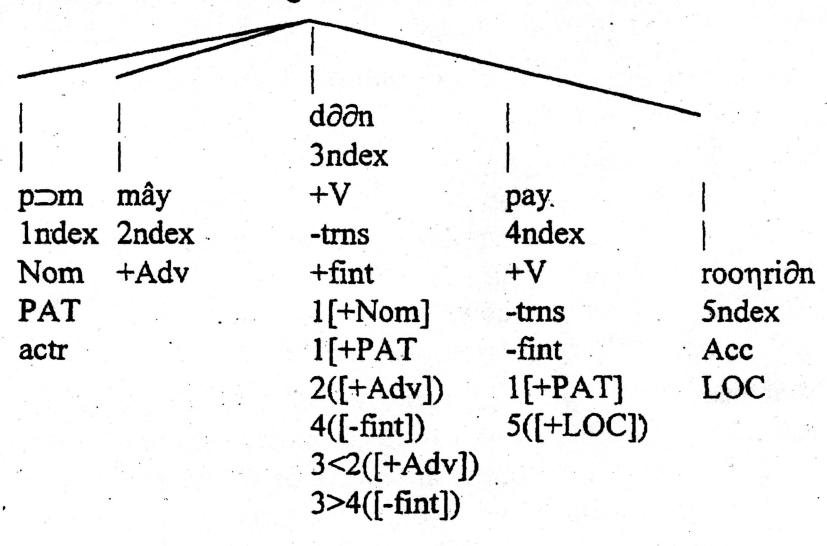
'Pat pretended not to offend her mother.'

5. n baan sokkaprok
Noy do cleaning not give house dirty
'Noy cleaned the house so that it would not be dirty.'

In sentences (1-2), the adverb $m\hat{a}y$ 'not' negates the first commanding verbs $d\partial\partial l$ 'walk' and $kla\hat{a}$ 'be brave', respectively, whereas in sentences (3-5), $m\hat{a}y$ negates the resultative verbs $kha\hat{a}t$ 'tear', $kh\hat{a}tcay$ 'offend', and $h\hat{a}y$ 'give', respectively. Sentences (3-5) would be ungrammatical if the adverb $m\hat{a}y$ negated the first commanding verbs, as seen in the following sentences:

*nók 6. mây tàt kradaàt khaàt Nok not cut paper tear 7. klaâ khàtcay *pàt mây mxx offend mother Pat pretend not 8. khwaamsa?aàt hây $*n \supset y$ mây tham baân sòkkapròk cleanliness Noy not do give house dirty

The internal structure for the negative construction in which the adverb mannegates the first commanding verb is illustrated as follows:



STEMMA I

The tree stemma demonstrates that the adverb may 'not' negates the fir commanding verb $d\partial \partial n$ 'walk' of sentence (1).

The internal structure for the type of negative construction in which the advermây negates the resultative verb is illustrated as follows:

	tàt			
	2ndex			
nók	+V	kradaàt		khaàt
1ndex	+trns	3ndex	mây	5ndex
Nom	+fint	Acc	4ndex	+V
AGT	1[+Nom]	PAT	+Adv	-trns
actr	1[+AGT]			-fint
	3[+PAT]	1		+rstv
	4([+Adv])			1[+actr]
	5([-fint])			1[+PAT]
	2>4([+Adv]))		
	2>5([-fint])			

STEMMA II

The tree stemma demonstrates that the adverb mây 'not' negates the resultative verb khaàt 'tear', instead of negating the first commanding verb tàt 'cut'.

Now, consider the following conditional negative mây--mây '(if) not, (then) no constructions in Thai:

- mây híw mây kin
 not hungry not eat
 (If I / you) don't feel hungry, (I / you) will not eat.'
- 10. mây l⊃⊃η mây ruú
 not try not know
 '(If I / you) don't try, (I / you will) not know.'

Sentences (9-10) are not imperative because the interpretation of a pronoun both sentences can be either 'I' or 'you' which depends on the speaker. If the speaker talking about himself or herself, the interpretation of the pronoun is 'I'. If the speaker referring to the person with whom he or she is speaking, the interpretation of the pronoun is 'you'. Another reason why sentences (9-10) cannot be treated as imperative is the normally imperative sentences in Thai are negated by the negative word yaà 'do not' thaâm '(it is) prohibited', as in (10) and (11), respectively.

- 11. yaa phuût si∂η daηdo not speak voice loud'Do not speak loudly.'
- 12. haâm kin khanom nay h⊃⊃ηri∂n prohibit eat desert in classroom '(It is) prohibited to eat some dessert in the classroom.'

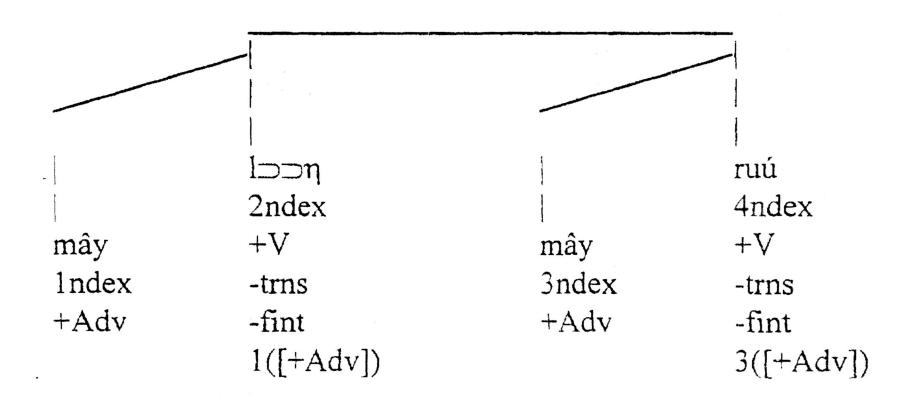
Sentences (9) and (10) cannot be negated by either yaà 'do not' or haâm '(it i prohibited', as (13-16) illustrate:

13.	*yaà	híw	yaà kin	
	do not	hungry	do not eat	
14.	*haâm	híw	haâm	kin
	prohibit	hungry	prohibit	eat
15.	*yaà l⊃⊃η	yaà ruu		
	do not try	do not know		
16.	*haâm	$l \supset \supset \eta$	haâm	ruú
	prohibit	try	probihit	know

The question arises as to how to determine the internal structure of sentences containing conditional negative construction. Consider sentence (10), repeated here as (17):

mây l⊃⊃η mây ruú
not try not know
'(If I / you) do not try, (I / you) will not know).'

There are three possible ways to assign the internal structure to sentence (17). The first hypothesis is that $m\hat{a}y \ l \supset \eta$ and $m\hat{a}y \ ru\hat{u}$ are treated as a coordinated clause. The structure would look like the following:



STEMMA III

However, this structure is not possible because if $may l = \eta$ and may ruu were to be coordinated, it means that the criteria for justifying a coordinate clause would be applicable with $may l = \eta$ may ruu clause. Let consider these criteria step by step. The first criterion is that constituents that are coordinated must have a coordinate conjunction as in (18). However, ther is no coordinate conjunction that can combine $may l = \eta$ and may ruu, as in (19):

- 18. maa kàp mxxw pen sattruu kan dog and cat be enemy reciprocal 'Dogs are cats are enemies.'
- 19. *mây l⊃⊃η kàp mây ruú not try and not know

The second criterion is that constituents in a coordinate clause can be reversible as in (20). However, $m\hat{a}y l \supset \eta$ and $m\hat{a}y ru\hat{u}$ cannot be coordinated as in (21):

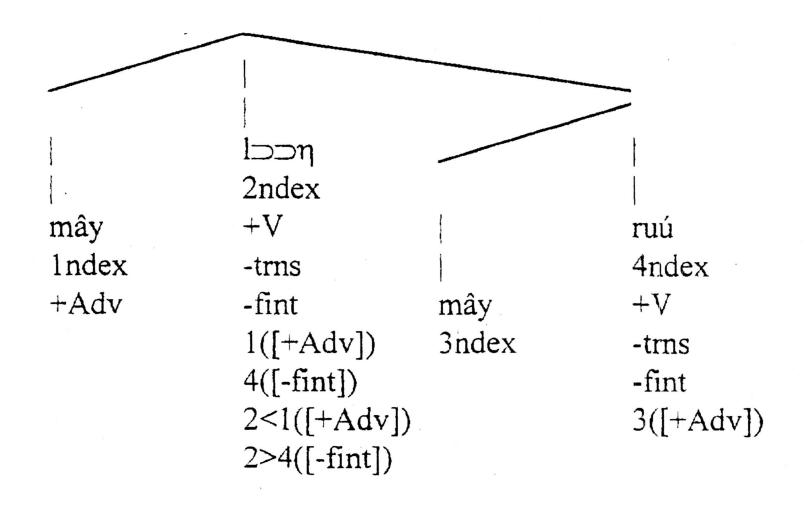
- 20. nákri∂n lx? aajaan khâw òprom myywaannií student and teacher participate work-shop yesterday 'Students and teachers participated in the workshop yesterday.'
- 21. *mây l⊃⊃η mây ruú not try not know

The third criterion is that constituents in a coordinate clause can be multiple in number, as in (22). Again, the conditional negative $m\hat{a}y \ l \supset \eta$ and $m\hat{a}y \ ru\hat{u}$ cannot be multiple, as in (23):

- 22. maa kàp mxxw lx? kày pen satruu kan dog and cat and chicken be enemy reciprocal 'Dogs, cats, and chickens are enemies.'
- 23. *mây l⊃⊃η kàp mây ruú lx? mây faη not try and not know and not listen

The conclusion is that the double negative clause $m\hat{a}y \ l \supset \eta \ m\hat{a}y \ ru\hat{u}$ cannot be coordinated because their syntactic manifestation is against the criteria of justifying coordinate construction.

The second hypothesis is that $m\hat{a}y \mid D D\eta$ 'do not try' is treated as the first commanding verb of the clause, the internal structure would look like the following:



STEMMA IV

The internal structure illustrated in stemma IV will be discussed along with the third hypothesis.

The third hypothesis is that mây ruú 'do not know' is treated as the fir commanding verb, the internal structure would be like the following:

	4		ruú
			4ndex
	1⊃⊃η	mây	+V
	2ndex	3ndex	-trns
mây	+V	+Adv	-fint
Index	-trns		2([-fint])
+Adv	-fint		3([+Adv])
	1([+Adv])		4<2([-fint]) 4<3([+Adv])

STEMMA V

Ordinarily, in Thai, the criterion used to find the commanding verb in a clause is that the highest verb can be negated by the negative adverb mây 'not', e.g.,

- 24. khaw wîη pay khyn rótmeehe run go board bus'He ran to board the bus.'
- 25. khaw may wîη pay khyn rótmee he not run go board bus 'He did not run to board the bus.'
- 26. *khaw wîη mây pay khyn rótmee he run not go board bus
- 27. *khaw wîη pay mây khyn rótmee he run go not board bus

(Sentence (27) is grammatical if it is treated as having two separate predicate clauses instead of one predicate clause. The two clauses would be khaw wî η pay 'he ran in which $wi\eta$ is the first commanding verb and the clause may khyn rótmee '(he does not board a bus' in which khyn is the first commanding verb.)

The adverb $m\hat{a}y$ 'not' can negate only the verb $w\hat{i}\eta$ 'run' in sentence (25), but not the verbs pay 'go' or khyn 'board'. This means that $w\hat{i}\eta$ is the commanding verb in the clause. Neither pay nor khyn can serve this function. Thus, the verb $w\hat{i}\eta$ is the verb that commands the other two verbs but not vice versa.

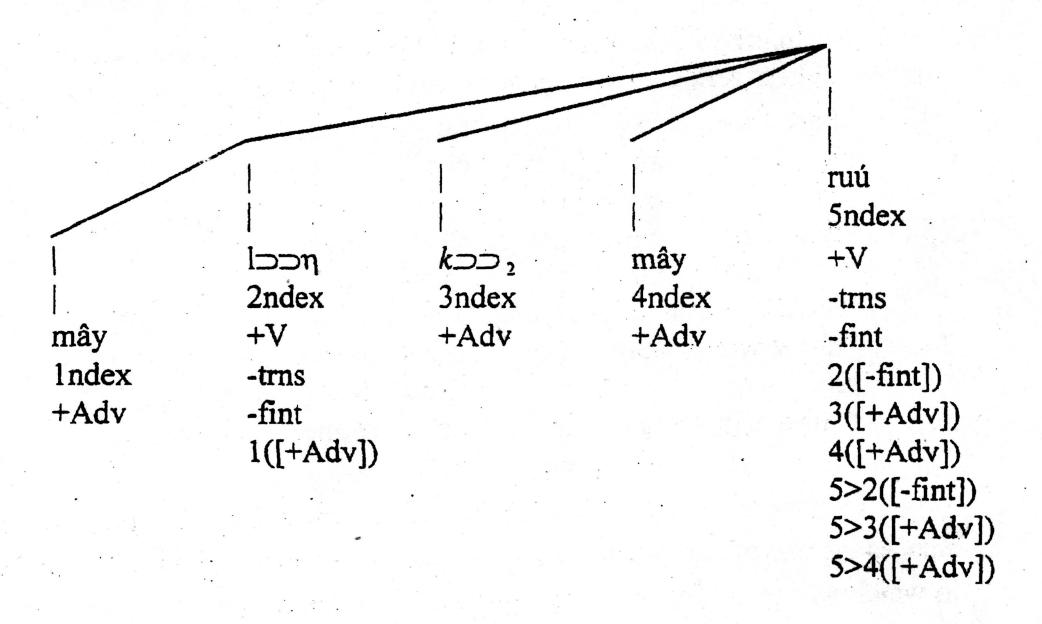
However, the negation test $m\hat{a}y$ 'not' cannot be used to determine the commanding verb for sentence (17) because sentence (17) both clauses has been negated by the conditional negative $m\hat{a}y$ -- $m\hat{a}y$. The verbs $l\supset \eta$ 'try' and $ru\hat{u}$ 'know' in both clauses can be treated as commanding verbs, and they could appear as formulais structures.

Nonetheless, there is another way to justify the internal structure of sentence (17). That is by an insertion of $k \supset \infty$ 'then'. In Thai, there are two different lexical entries of

functioning as an adverb: $k \supset j$ meaning 'also' and $k \supset j$ meaning 'then'. The differ in their syntactic distribution. That is, $k \supset j$ appears without a preceding predicate dependent sister, whereas $k \supset j$ always appears with a preceding predicate dependent sister (Savetamalya 1996). Based on the syntactic characteristic of $k \supset j$, the internal structure of entence (17) would favor stemma V over stemma IV. That is, if $k \supset j$ inserted, it must be inserted after $may l \supset j$ which would bring about sentence (28):

28. mây l⊃⊃η k⊃⊃₂ mây ruu
not try then not know
'(If you) don't try, then (you) would not know.'

Sentence (28) indicates that $k \supset 2$ as an adverb requires a preceding predicated dependent sister which will appear on the left side of the stemma. The structure would look like the following:



STEMMA VI

The structure illustrated in stemma VI helps validifying that the internal structure of the conditional negative clause $m\hat{a}y \ l \supset \eta \ m\hat{a}y \ ru\hat{u}$ must be the same as that illustrated in stemma V.

The conclusion here is that by using lexicase dependency grammar in analyzin the conditional negative $m\hat{a}y-m\hat{a}y$ '(if) not, (then) not' construction in Thai, there is strong syntactic argument which could justify selecting one structure over other structure and would conform with native speaker's interpretation of this type of construction.

3. Reflexive construction

In Thai, a reflexive construction is introduced by the reflexive pronoun $tu\partial ee \eta$ 'oneself'. Generally, in an accusative language, the reflexive pronoun is coindexed with the actor, not a nominative case form marked a constituent (which bears a case relation), or in other words, "An antecedent of a reflexive pronoun is an actor which is not necessarily the grammatical subject of a sentence." (Starosta 1996: p.c.). If the reflexive pronoun is not coindexed with the actor, the grammar would predict that the sentence is ungrammatical. Compare (29) and (30):

phim laán 29. caan du∂y tu∂?eeŋ AGT PAT MNS Nom actr Pim oneself dish by wash 'Pim washed the dishes by herself.' du∂y tu∂?een *caan laán 30.

PAT MNS
Nom
-actr
dish wash by oneself

In (29), the reflexive pronoun $tu\partial_t^2 ee\eta$ 'oneself' coindexes with the actor of the clause phim 'Pim', which in this case is also the grammatical subject marked by the feature [+Nom] (nominative). If there is no actor, but a nominative subject, the reflexive pronoun cannot be coindexed with the actor, thus resulting in the ungrammaticality of the sentence (30).

In Thai, the reflexive pronoun $tu\partial ee\eta$ is always coindexed with the noun marked with the feature actor [+actr], as in (31). The interpretation of the reflexive pronoun $tu\partial ee\eta$ 'oneself' is interpreted as associating with one single event. Consider the following sentences:

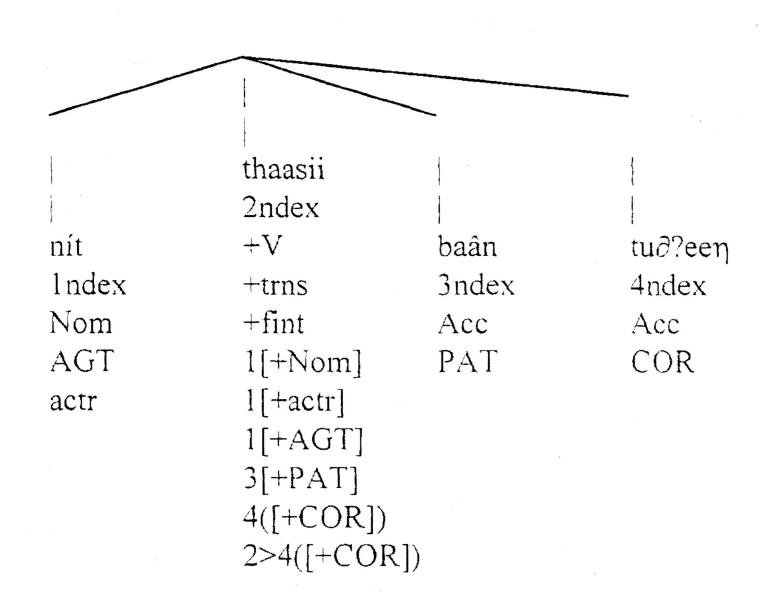
- 31. nít thaasii baân tu∂?eeηNit paint house oneself'Nit painted the house herself.'
- 32. nít chom tu∂?eeŋ Nit admire oneself 'Nit admired herself.'
- 33. nít hen tu∂?eeη nay kracòkNit see oneself in mirror'Nit saw herself in a mirror.'

The interpretation of the reflexive pronoun $tu\partial ee\eta$ 'oneself' in sentence (31-33) corresponds to only one single event. In sentence (31), the interpretation is that 'Nit painted the house herself'. In sentence (32), the interpretation is that 'Nit admires (only) herself'. And in sentence (33), the interpretation is that 'Nit saw (only) herself in a mirror'. However, if the actor nouns are coordinated, the interpretation of the reflexive

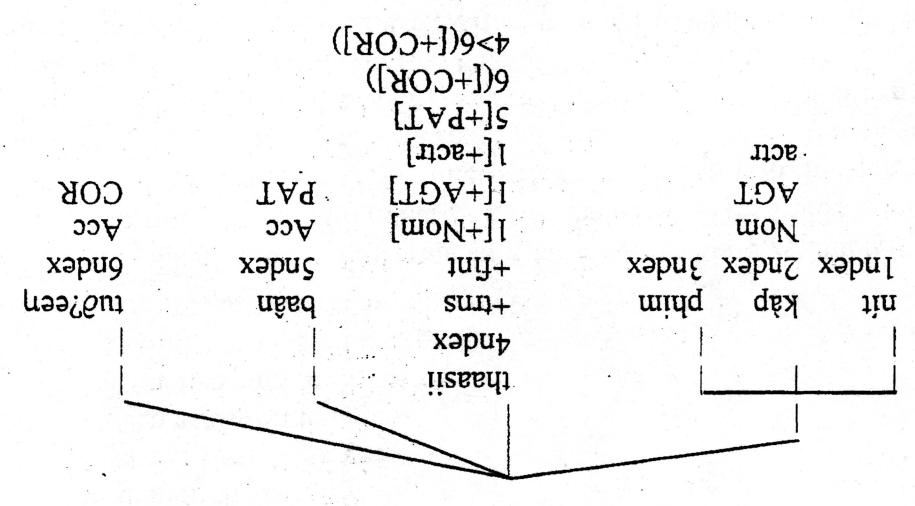
pronoun $tu\partial ee\eta$ 'oneself' can be interpreted as associating with either one single event or multiple events, as in (34-36):

- 34. nít kàp phim thaasii baân tu∂?eeηNit and Pim paint house oneself
 - a. 'Nit and Pim painted the house themselves.'
 - b. 'Nit and Pim painted their own houses.'
- 35. nít kàp phim chom tu∂?eeη Nit and Pim admire oneself
 - a. 'Nit and Pim each admired themselves.'
 - b. 'Nit and Pim admired themselves.'
- 36. nít kàp phim hen tu∂?eeη nay kracòk Nit and Pim see oneself in mirror
 - a. 'Nit and Pim each saw themselves in a mirror.'
 - b. 'Nit and Pim saw themselves in a mirror.'

Semantically, a coordinate subject noun phrase regards a reflexive pronoun as a separate participant, which correspond to the interpretation of a single event, represented in the (a) meaning of sentences (34-36), or as one single unit, which corresponds to the interpretation of multiple events, represented in the (b) meaning of sentences (34-36). Syntactically, by looking at the internal structure of a sentence there is no way to capture the two different interpretations. The two-way interpretation is directly assigned by the predicate of the clause. That is, the predicate would interpret an action which would consequently refer back to the actor nominative subject. The presence or absence of reflexive pronoun has nothing to do with the two-way interpretation of a whole clause. The multiple interpretation is built-in in a coordinate noun phrase and results in this two way interpretation. Consider the following tree stemmas of sentence (31) and (34) respectively:



STEMMA VII



STEMMA VII

There is only one interpretation for sentence (31), which is 'Nit admired herself'. On the contrary, there is a two-way interpretation for sentence (35). The reflexive pronoun tutter of that 'Nit admired herself, and Pim admired herself. The reflexive pronoun tells who interpretation is that 'Nit and Pim admired themselves'. The reflexive pronoun tells who admires who but does not directly determine the two-way interpretation. The two-way interpretation. The two-way interpretation with the coordinate noun phrase nit kôp phim 'Nit and Pim'. This kind of two-way interpretation which is imposed by a predicate in association with an antecedent noun is quite common in the reflexive pronoun is inflected in a verb form, not on a noun. This indicates that the for a reflexive pronoun is inflected in a verb form, not on a noun. This indicates that the reflexive pronoun is inflected in a verb form, not on a noun. This indicates that the teflexive pronoun does not associate with its ancedent noun but a with verbal predicate.

The fact regarding the reflexive pronoun in Thai within lexicase dependency grammar which can be explained by the relationship of an antecedent noun and the reflexive pronoun tuo? sent cannot be stated in purely grammatical terms. Whether the two nouns are related or not has to be accounted for by a semantic explanation (Starosta 1996: p.c.).

4. Negated quantifier noun phrase

A negated quantifier noun phrase is a noun phrase consisting of a noun with a negated quantifier máy thuk 'not every' and a classifier (Savetamalya 1989). Ordinarily, the sentence consisting of bare noun phrases in Thai is ambiguous, as shown in (37):

thanuu thuùk páw arrow hit a target 'An arrow hit all the targets' 'An arrow hit all the targets' 'All the arrows hit a target.'

.TE

'All the arrows hit all the targets.'

In Thai, a noun appearing in a bare noun phrase is ambiguous. That is, a bare noun can refer to one individual or more than one. The words thanuu 'arrow' and paiw 'target' in (37) can each be interpreted as having two meanings. There are four dichotomies for the overall meaning of sentence (37), as shown in the English gloss above. However, the grammar has provided some tools which can reduce some of the ambiguity of a bare noun phrase. One of the tools, which is introduced here, is to use the quantifier thuk 'every' and a classifier to modify a bare noun. This type of classifier construction would limit the meaning of the noun it modifies to refer only to more than one individual and at the same time it would eliminate the meaning of one individual. If the classifier construction modifies the noun thanuu 'arrow', the possible interpretation will be reduced to two, as indicated in (38). And if the classifier construction modifies will be reduced to two, as indicated in (38). And if the classifier construction modifies

the noun paw 'target', the interpretation will be reduced to two, as seen in (39):

thanus thuk luuk thuuk paw arrow every claf hit the target, 'All the arrows hit all the targets,' All the arrows hit all the targets.'

39. thanuu thuùk páw thúk páw arrow hit target every claf

An arrow hit all the targets.'

'All the arrows hit all the targets.'

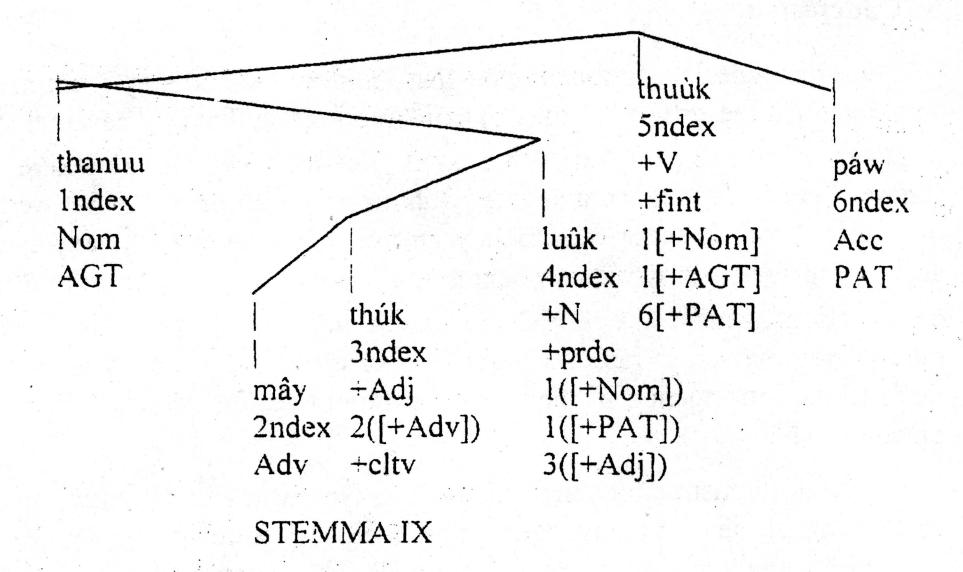
Notice that nouns which are not modified by the quantifier this 'every' and a classifier remain ambiguous, as indicated in the translation of the bare noun pów 'target' in (38) and the bare noun thanus 'arrow' in (39). It is concluded here that the construction consisting of this 'very' and a classifier is able to disambiguate the meaning of a bare noun in Thai. However, if this type of construction is negated by máy 'not', this would result in an ambiguous interpretation of the noun it modifies. Consider the

following sentence:

arrow not every claf hit target (all missed).'
'Not a single arrow hit the target (some did, some did not).'

Analyzing sentence (40) using lexicase dependency grammar, the tree stemma

would look like the following:



The internal structure of the noun phrase thanuu mây thúk luûk in (40) demonstrates that mây 'not', as an adverb, is the dependent sister of the adjective thuk 'every' and in turn thúk is the dependent sister of the classifier luûk. Since mây is the dependent sister of thúk, it means that semantically mây directly negates thik. As a result, there can be only one semantic interpretation for this noun phrase, which is 'not a single arrow'. The question arises as to how the grammar could predict the other possible meaning of the noun phrase thanuu mây thúk luûk 'not every arrow'. The semantic ambiguity of a negated quantifier noun phrase can be accomodated within lexicase dependency grammar by setting up a semantic default feature marked on the adjective thúk 'every'.

The feature $[\pm \text{cltv}]$ (collective) is a semantic default feature which will be introduced into lexicase dependency grammar in this paper for the first time. The $[\pm \text{cltv}]$ implies a default interpretation. That is, the feature [+cltv] marks a collective meaning. whereas [-cltv] marks an individual meaning. If the negative adverb $m\hat{a}y$ 'not' negates the feature [+cltv], we would get the interpretation of 'not a single one'. If the negative adverb $m\hat{a}y$ 'not' negates the feature [-cltv], we would get the interpretation of 'not every one'. For sentence (40), the default interpretation is individual, thus the interpretation of 'Not a single arrow hit the target'. This interpretation matches native speaker intuition.

Thus, introducing a semantic default feature into lexicase dependency grammar would assist in explaining how the two-way interpretation dealing with individual and collective meanings has arisen in the negated quantifier noun phrase in Thai.

5. Conclusion

This paper has demonstrated that lexicase dependency grammar can successfully account for three different kinds of constructions in Thai. They include the conditional negative $m\hat{a}y$ -- $m\hat{a}y$ '(if) not, (then) not' construction, the reflexive pronoun $tu\partial ee\eta$ 'oneself' construction, and a negated quantifier noun phrase. What we have learned from the paper is that lexicase dependency grammar has revealed its explanatory capability in accounting for such syntactic phenomena. However, it could be pointed out that some constructions, such as the reflexive pronoun $tu\partial ee\eta$ 'oneself' cannot be accounted for in purely grammatical terms, but must be explained in terms of semantics instead. This leads to the introduction of the semantic default feature which is marked on a quantifier phrase in Thai.

Major constructions in Thai, such as Noun-headed constructions and Verb-headed constructions, have already been sucesssfully accounted for by lexicase dependency theory. By analyzing minor constructions in Thai, such as the conditional negative $m\hat{a}y$ - $m\hat{a}y$ '(if) not, (then) not', the reflexive pronoun $tu\partial e\eta$ 'oneself', and a negated quantifier noun phrase, which have limited occurrence, this paper has shown that the theory can be further refined through the introduction of new concepts. Other mysteries of syntax linger on to challenge those who are fascinated with the exploration of the world of syntax.

References

- Hooper, Paul and Sandra Thompson. 1980. Transitivity in grammar and discourse. Language. 56.2:251-99.
- Khamisi, Abdul M. 1985. Syntactic derivation of Swahili verbs. University of Hawaii, Ph.D. dissertation.
- Kullavanijaya, Pranee. 1974. Transitive verbs in Thai. University of Hawaii, Ph.D. dissertation.
- Indrambarya, Kitima. 1993. On the syntactic characterization of hay in Thai. Pan-Asiatic Linguistics: Proceeding of the Third International Symposium on Language and Linguistics, Vol.3. Bangkok: Chulalongkom University. 1164-77.
- _____. ms. The status of auxiliary verbs in Thai. Paper presented at the fourth Annual Meeting, Southeast Asian Linguistic Society, Honolulu, 7-9 May 1993. To appear in SEALS IV proceedings.
- _____. 1994. Subcategorization of verbs in Thai: A lexicase dependency approach. University of Hawaii, Ph.D. dissertation.
- Pagotto, Louise. 1985. On impersonal verbs in English. University of Hawaii Working Papers in Linguistics. 17.2:1-69.
- Pollard, Carl and Sag, Ivan. 1992. Anaphors in English and the scope of Binding theory. Linguistic Inquiry. 23.2:261-304.

Ng, Siew-Ai. 1992. Verbal subcategorization and derivation in Singapore Mandarin: A dependency grammar analysis. University of Hawaii, Ph.D. dissertation. Savetamalya, Saranya. 1988. A reanalysis of auxiliaries in Thai. University of Hawaii Working Papers in Linguistics. 19:1-44. 1989. Thai nouns and noun phrases. University of Hawaii. Ph.D. dissertation. 1996. Verbal predicates as adnominal modifiers in Thai. Paper presented at the Fourth International Symposium on Languages and Linguistics. Mahidol University at Salaya. Bangkok: Sahadhammamikka Publishing Company. 2000. Multiple lexical entries of $k \supset \infty$ in Thai: A dependency grammar analysis. In Starosta's Festschrift. Honolulu: University of Hawaii Press. (To Appear). Multiple lexical entries of thuuk in Thai: A lexicase analysis. Paper presented at the Fifth International Conference on Thai Studies, Center of South East Asian Studies, School of Oriental and African Studies, University of London. Sindhvananda, Kanchana. 1970. The verbs in modern Thai. Georgetown University.

- Ph.D. dissertation.
- Starosta, Stanley. 1988. A case for lexicase: An outline of lexicase grammatical theory. London: Pinter Publishers.
- . 1992. Lexicase revisited. Draft (August 18, 1992), a revision and extension of 'lexicase' an article submitted to the Encyclopedia of Language and Linguistics. Pergamon Press, Edinburgh.
- Wilawan, Supriya. 1993. A reanalysis of so-called serial verb constructions in Thai. Khmer, Mandarin Chinese, and Yoruba. University of Hawaii, Ph.D. dissertation.