

THE UNIVERSITY OF CALGARY

Functional Categories and Thai

BY

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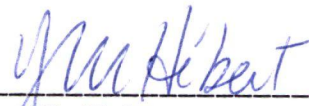
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THE UNIVERSITY OF CALGARY  
FACULTY OF GRADUATE STUDIES

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## ABSTRACT

Fukui (1986) and Fukui and Speas (1986) claim that there are languages which lack some or all Functional Categories (Determiner, Complementizer and Inflection). A further claim is that many of the typological differences between Japanese and English are due to the fact that English has all three Functional Categories whereas Japanese has none.

In this thesis, Thai is examined to see which, if any, Functional Categories it has. Fukui's modified theory based on the Government and Binding framework has been used. The conclusion is that Thai has one Functional Category (Comp or C) but lacks the other two. The consequences of this are then discussed comparing several syntactic differences among the three languages: English, Thai and Japanese.

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## ABBREVIATIONS

A.....	adjective	Masc.....	masculine
ADJ.....	adjective	NOM.....	nominative
ADV.....	adverb	NP.....	noun phrase
AG.....	agent	N.....	noun
AGR.....	agreement	OBJ.....	objective
ARCH.....	archaic	P.....	preposition
AUX.....	auxiliary	Pl.....	plural
CL.....	classifier	PP.....	preposition phrase
COMP (C).....	complementizer	PRT.....	particle
CP.....	complementizer phrase	Q.....	question
DET (D).....	determiner	ROY.....	royal form
DP.....	determiner phrase	S.....	sentence
Fem .....	feminine	SPEC.....	specifier
F-features .....	function features	SVO.....	subject, verb, object
GEN.....	genitive	Sg.....	singular
HON.....	honourific	TH.....	theme
INFL (I).....	inflection	TNS.....	tense
IMP.....	imperative		

## Chapter 1

### GB Theory

#### 1.0 Introduction

For the past several decades the search for universal properties of language has been a primary concern of linguistics. More recently, however, there has been a growing emphasis on so-called parametric variation-ways in which languages can vary from each other with respect to specific phenomena. For example, one way in which languages can differ is in the order of verb, subject and object (see Travis 1987). Another parameter for variation involves the categories of words which languages have or do not have.

Fukui (1986a) claims that there are languages which lack some or all of what he calls Functional Categories. These include determiners (e.g. English *the* and *a*), INFL (auxiliaries and inflectional suffixes that mark tense and subject-verb agreement), and Complementizers (e.g. English *that*, *if*, *whether*). Fukui suggested in his dissertation that Japanese lacks the Functional Categories DET (D) and COMP (C) and has a 'defective' INFL (I) which does not allow a specifier. In more recent work with Speas (1986) he says that Japanese lacks all three categories. Differences between English and Japanese syntax which previously seemed unrelated are considered to be consequences of variation on this one parameter. These differences will be examined in section 2.4.

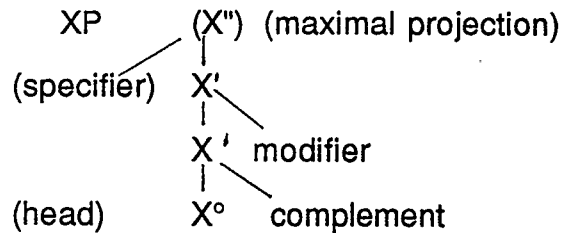
Another language which may lack some or all Functional Categories is Thai. In this thesis I will explore this possibility, using the

theoretical framework outlined by Fukui (1986a). In Chapter 1, I will give the basic concepts of the X-bar (X') theory of phrase structure and other modules of Government and Binding theory outlined by Chomsky (1970, 1981). In Chapter 2, I will outline Fukui's innovations to that theory and in Chapter 3 I will give a brief description of Thai. The remaining chapters will show how Fukui's phrase structure system applies to Thai.

### 1.1 The X' schema

Government and Binding (GB) Theory was developed in the 1970s and 1980s by Noam Chomsky and several dozen other linguists. It is based on the search for general grammatical principles rather than structure-specific rules. The grammar is thought to consist of several modules which interact with each other to give the specific sentence structures found in each language. For example, rather than having multiple transformational rules which vary from language to language (as in earlier work on syntax), GB has one rule, move alpha, for all languages. In order to account for language variation, each language has specific constraints which apply to this rule (e.g. a rule stipulating what alpha can be, how far it can move, and so on).

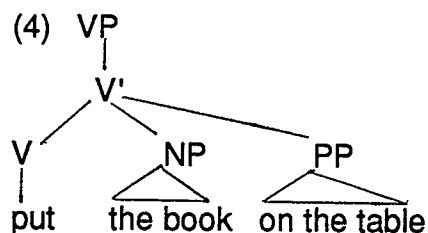
In GB theory, phrase structure must comply with the following template, called the X' schema:



The head is the lexical category (noun, verb, etc.) which must be present and around which the phrase is built. For example, the head of an NP or noun phrase is a noun and the head of a VP is a verb. Any phrase is said to be a projection of its head while the highest phrasal level is called the maximal projection ( $X''$  or XP). A complement is a constituent whose admissibility is determined by properties of the head of that phrase. For example, the verb *hit* (a head) requires a complement (see example 1) but the verb *waited* does not permit a complement (see example 2). The verb *put* requires two complements as in (3). In the following examples, complements are underlined and an asterisk indicates that a sentence is ungrammatical:

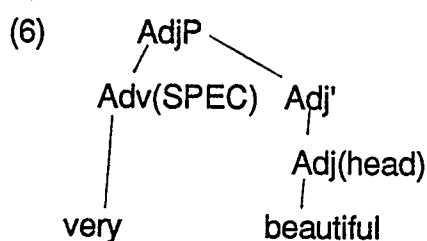
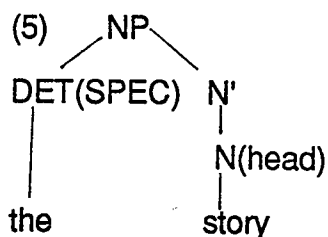
- (1) a. John hit the ball.  
 b. \*John hit.
- (2) a. I waited.  
 b. \*I waited the letter.
- (3) a. Harry put the book on the table.  
 b. \*Harry put the book.  
 c. \*Harry put on the table

A phrase structure diagram of the VP of sentence (3a) is shown in (4) below.



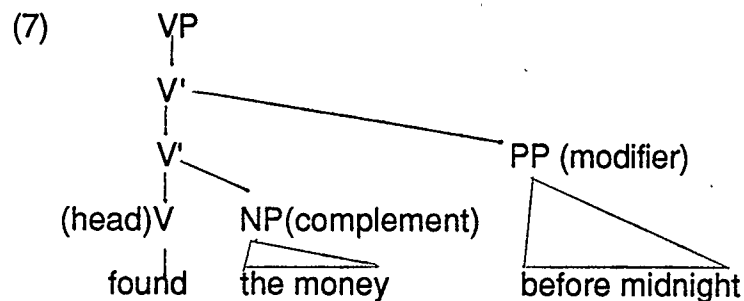
The junctures where category labels appear are called nodes. Node X is said to dominate node Y if it is higher in the tree diagram and if there is a downward path connecting X and Y. If there are no intervening nodes between the two, the upper node is said to immediately dominate the lower node. In the structure above, V' immediately dominates the V, the NP and the PP. If two nodes are immediately dominated by the same node they are said to be sisters. In (4) *the book* and *on the table* are both sisters of the head (V) *put* as they are immediately dominated by the V'. This is consistent with the requirement, represented in the X' schema, that complements be sisters of the head.

Examples of specifiers in standard GB theory include determiners (e.g. *the*, *a*) and words like *very* as shown in the phrase structures below:



As stipulated by the X' schema, specifiers (SPEC) and modifiers are sisters of an X'. For example, the specifier (DET) is a sister of the N' *story*, as both are dominated by the same node (NP).

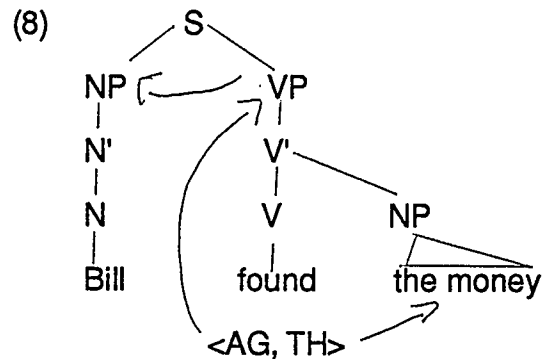
An example of a modifier is the temporal PP *before midnight* in example (7). Consistent with the X' schema it is a sister of the V' *found the money*.



## 1.2 Theta (θ) Roles

A theta role provides information about the part played by a particular entity in an event. The meaning of the verb *found*, for example, implies someone who does the finding (an actor or the agent role) and something which is found (an undergoer or the theme or patient role). Other verbs may require other theta roles such as instrument, benefactive, locative, goal etc.

Theta roles are assigned to NPs by sister categories. In example (8), the VP *found the money* assigns the agent role to *Bill* and the verb *found* assigns the theme role to *the money*.



An argument is an NP which is assigned a theta role. An argument outside the projection of the head which determines its theta role is known as an external argument and the argument within the projection of the head is an internal argument. *Bill* in example (8) is outside the VP which determines its theta role and is therefore the external argument. In contrast, *the money* is the internal argument as it is within the projection of the verb *found* which determines its theta role.

The Theta Criterion constrains the assignment of theta roles as follows:

(1) The Theta Criterion

Every NP receives one and only one theta role.

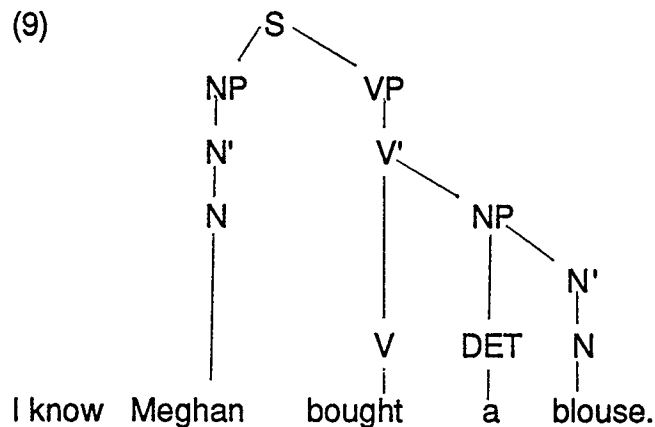
Every theta role is assigned to one and only one NP.<sup>1</sup>

### 1.3 D-Structure and S-structure

Deep or D-structure is the name given to the structure in which all elements appear in a position to receive the appropriate theta roles. In (9), for example, *Meghan* is in the right position to receive the agent



role from its sister VP, and *a blouse* is correctly positioned to receive the theme role from the sister V.



In (10) below, the interrogative pronoun *what* has been substituted for the phrase *a blouse*. *What* has to be a sister of V in D-structure in order to be assigned the theme role just as *a blouse* was in (9).

(10) I know Meghan bought *what*.

In English we would not say the sentence in this Deep structure form. Instead, for reasons that do not concern us here, *what* is moved to give the form in (11), known as surface structure or S-structure.

(11) I know  $what_i$  Meghan bought  $t_i$

S-structure is derived from D-structure by applying the rule move alpha, where alpha simply represents some category. Sentence (11) provides an example of WH-movement, where the WH-word *what* is alpha. The WH-word which has been moved is co-indexed (marked with the same subscript to show relationship between the two) with the trace (t) or empty category it has left behind. In English sentences such as (9), nothing

moves so the S-structure is the same as the D-structure. Although English has WH-movement, some languages do not and the WH-word remains in the D-structure position as in the Thai example below.

- (12) Mali *sii* aray?  
 Mali bought what  
 'What did Mali buy?'

#### 1.4 Case Theory

Case is a type of category which gives information about the position or distribution of an argument. Case in English is abstract (i.e. phonetically null) except for pronouns, which do have different forms (e.g. Nominative *he* for subjects, Objective *him* for objects, and Genitive *his* for N specifiers). In many languages (e.g. Turkish, Latin, Japanese), Case marking on both nouns and pronouns is phonetically overt.

A special device called the Case Filter ensures that each argument receives Case:

(2) The Case Filter

Any sentence containing an argument is  
 ill-formed if the argument is not Case marked

Case is assigned in S-structure by some lexical categories (verbs, prepositions, nouns) and tensed INFL (inflection). (INFL can contain tense and subject-verb agreement as well as auxiliary verbs such as *can* or *will*.)

Case is assigned as follows:

- a. Tensed INFL assigns Nominative Case to the argument which it governs.
- b. A transitive verb assigns Objective Case to the argument it governs.
- c. A preposition assigns Objective Case to the argument it governs.
- d. A noun assigns Genitive Case to the possessor argument that it governs.

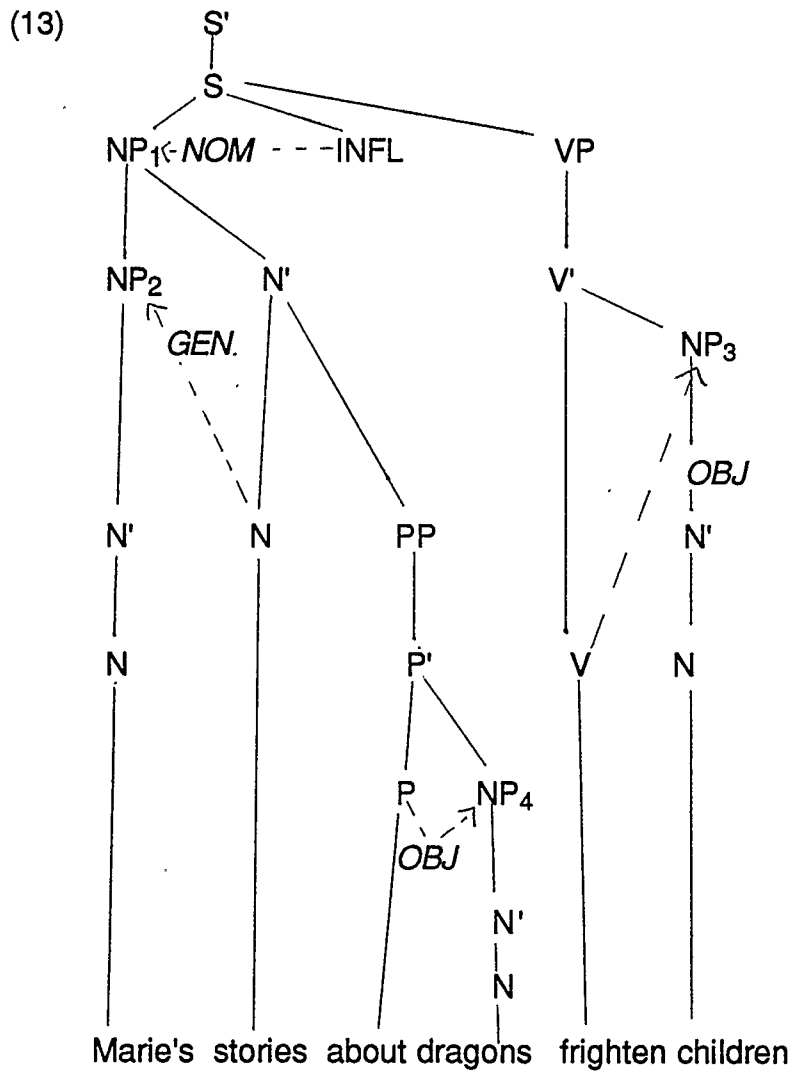
Government is defined as follows:

(3) Government

$\alpha$  governs  $\beta$  iff they c-command each other.

(4) C-Command

C-command: A c-commands B iff the first maximal projection dominating A also dominates B.<sup>2</sup>



In (13) the first maximal projection (NP<sub>1</sub>) dominating the N *stories* also dominates NP<sub>2</sub> (*Marie*): therefore *stories* c-commands that NP. Moreover, NP<sub>2</sub> also c-commands *stories*. Therefore *stories* governs *Marie* and can assign it Genitive case (realized as *'s*). Similarly, the preposition *about* is a head and c-commands *dragons* (NP<sub>4</sub>). Since NP<sub>4</sub> and *about* c-command each other, *about* governs *dragons* and can

assign it objective case ( which in English is phonetically null). INFL governs and assigns nominative case to NP<sub>1</sub> (*Marie's stories about dragons*) while the transitive verb *frighten* governs and assigns objective case to NP<sub>3</sub> (*children*).

In this chapter some of the basic notions of standard GB theory have been given: the X' schema, theta roles, case assignment. In the next chapter I will examine more recent developments, particularly the additions made by Fukui (1986) to the X' theory.

## Notes

## Chapter 1

<sup>1</sup>Actually every NP chain receives a theta role. A chain is an NP and any traces left by it after it has moved to a new position.

<sup>2</sup>This is also known as m-command.

## Chapter 2

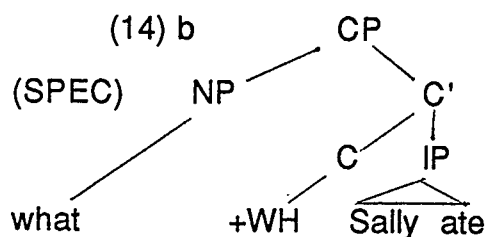
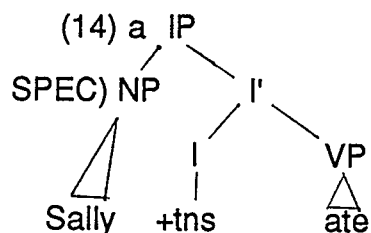
### Fukui's Modified theory

#### 2.0 Variation in functional categories

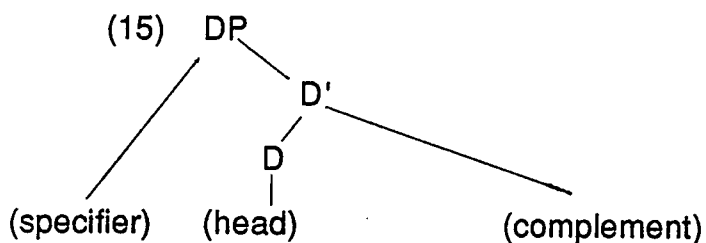
Fukui's claim is that languages exhibit parametric variation involving Functional Categories. Some languages may have all three Functional Categories (for example, English) whereas others may have only two, one or even none (for example, Japanese). Some of the differences in the syntax of these languages follow from the variation of this particular parameter. In this thesis I will look at Thai to see which, if any, Functional Categories this language has. First, in order to understand the theory better, I will give an overview of Fukui's theory in which he showed that Japanese lacks all three Functional Categories.

#### 2.1 Functional categories vs. lexical categories

In recent work, Chomsky (1986) has proposed that the X' theory be extended to include INFL or I (inflection) (see example 14a) and COMP or C (complementizer) (example 14b) as heads of phrases. I is now considered to be the head of an Inflectional Phrase (IP), which replaces what previously was S in GB theory. The subject of the sentence is in the specifier of IP position as it is a sister of I'. Both IP and CP now have the same pattern as other phrases (VP and NP discussed in section 1.1) and comply with the X' schema.



More controversial is Fukui's acceptance of Abney's (1987) proposal that DET or D (determiner) is a head rather than a specifier. (Similar proposals have been made by Brame (1981, 1982), Hale (1980), Vennemen (1977) and several others.) Below is the structure of a phrase with D as the head.



Abney uses several arguments for Determiners having the status of heads. Firstly, he points out the semantic similarity between determiners and inflection. Inflection picks out a particular time of the verb



(e.g. *did* run) and determiners pick out a particular member of a noun group (e.g. *the* man).

Abney claims that determiners act like other heads in that some select complements and some do not. There are determiners which cannot stand alone (*the* and *a*), that is, they obligatorily select an N' complement.

(17) a. \*The went to the store.

b. The man went to the store.

This is similar to COMP *if* which obligatorily selects an IP complement.

(18) [CPif [[IP you like]]

On the other hand, some determiners can stand alone, for example *that*:

(19) That was silly.

In other words, it is the Determiner which acts like a head in that it either selects a complement or not.

In some languages (for example, German and French) the Determiner is the site of grammatical features instead of merely agreeing with the noun. That is, it is the determiner that shows the most distinction in inflection in that it can be marked for number and gender, whereas nouns are usually only marked for number. (Examples are spoken French in phonetic transcription).

(20)a. la pɔm

the (fem. sg.) apple

b. le pɔm

the (pl.) apples

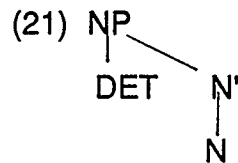
c. lə fis

the (masc. sg.) son

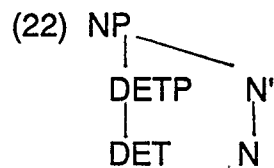
d. le fis

the (pl.) sons

Finally, Abney says there is theory internal evidence that DET (D) should be treated as a head. In standard GB theory all non-head nodes are maximal projections. But in the standard analysis of an NP shown below, DET is a non-head which is not a maximal projection.



To comply with GB theory the structure would have to be:

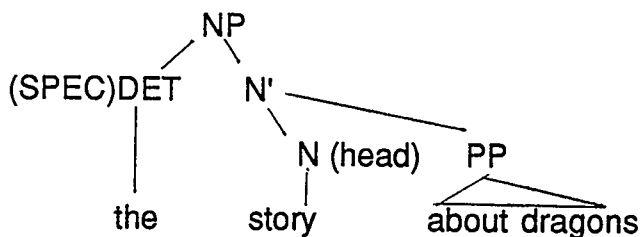


But DETP never contains any element except DET in the standard analysis, making it redundant. Of course, this problem can be avoided if D is in fact a head.

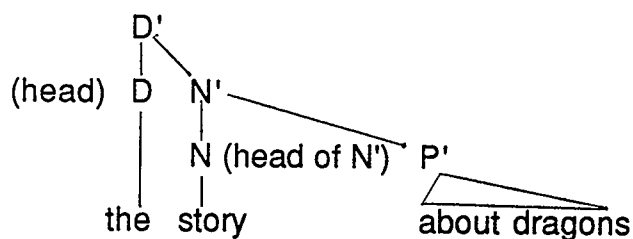
Because of these arguments, I will accept Abney's and Fukui's view that DET is a head rather than a specifier and that phrases such as *the man* and *a book* are DPs rather than NPs. The status of DET as the head of its phrase, now called DP (or D"), is consistent with the fact that English is head initial within lexical category projections (*the story* vs.

\**story the*) - an idea which was not captured in GB theory before (see example 23 and 24).

(23) traditional view



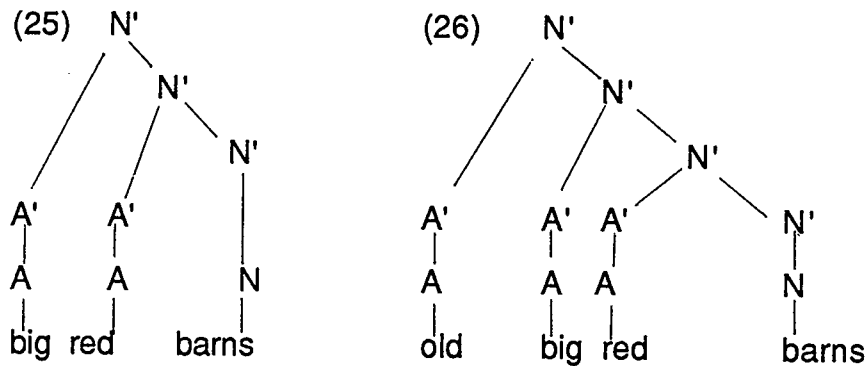
(24) Fukui's view



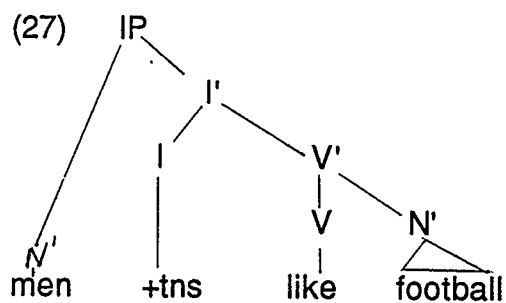
Note that nouns are still heads of N' as in (24). The traditional labels INFL, COMP and DET are now I, C, and D, respectively.

## 2.2 Specifiers in Fukui's theory

In Fukui's theory (1986), Lexical Categories can project up to the single bar level (X'), and allow iteration or recursion at that level (see 25 and 26). In other words, the projection is not closed off and other elements can be added.

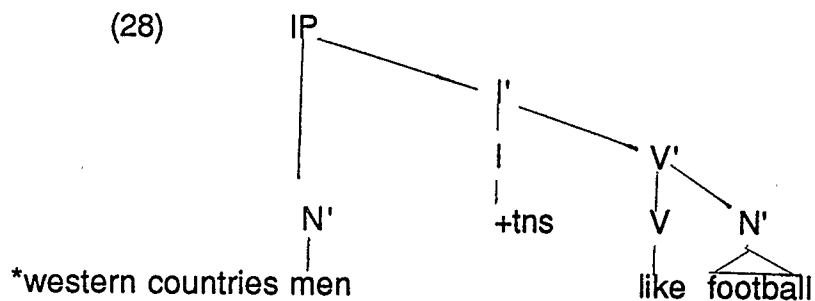


Functional Categories, however, can project up to the double bar level ( $X'$  or  $XP$ ) where their projection is closed off by a single specifier not allowing iteration (see 27). Therefore, only Functional Categories have specifier positions.



In sentence (27) the Functional Category  $I$  projects up to the double bar level ( $IP$ ) and is closed off by the single specifier, the subject *men*.

If the projection were not closed off, it would be possible to add another subject. But in the example below, there is nowhere to attach the extra noun phrase *western countries* as the projection has been closed off by  $IP$  and nothing can be added to the left of it.



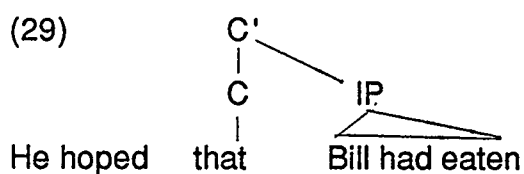
### 2.3 Kase

Fukui (1986a) proposes that Functional Categories have some members which have Function Features (F-features) to assign and some members which do not. The F-features used by Fukui are +WH, which must be assigned to a WH-word in COMP; Nominative Case, assigned by TNS/AGR to a subject; and Genitive Case, assigned by 's to a possessor. Fukui introduces the term Kase to include both Case (e.g. Objective Case assigned by the verb) and F-features. A summary of F-features for English functional categories appears below:

Table 1 Functional Categories

	F-Features		
Functional Categories	C	I	DET
Kase assigner	$\emptyset$	TNS/AGR.	's
F-feature assigned	+WH	+Nominative	+Genitive
<hr/>			
non-Kase assigners	that, if, whether, $\emptyset$	to	the, a, that, this

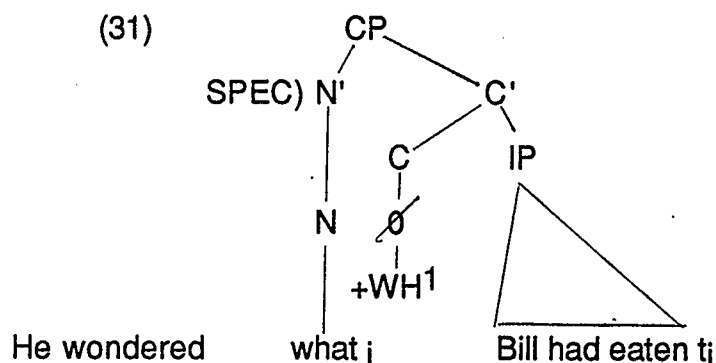
An element in the specifier (SPEC) position is licensed by the F-features of the head. That is, a specifier position exists only when one of the Kase assigners occurs as head. If there is no Kase assigner in the head position, the projection of the Functional category stops at the X' (single bar) level. In example (29) nothing licenses a specifier position because *that* is a non-Kase assigner. The phrase therefore does not project to CP, but only to the C' level.



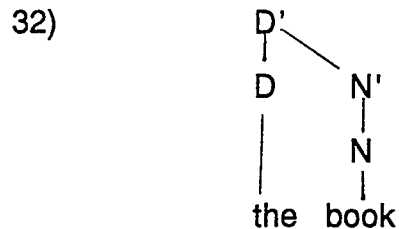
As expected, WH movement is impossible in this pattern since there is no specifier position to receive the WH phrase.

(30) \*He hoped [what that Bill had eaten].

Compare (30) with (31), in which the verb *wondered* can take as its complement a phrase that begins with a WH-word. The null complementizer has the F-feature +WH, and a WH-word must move to fill the specifier position:



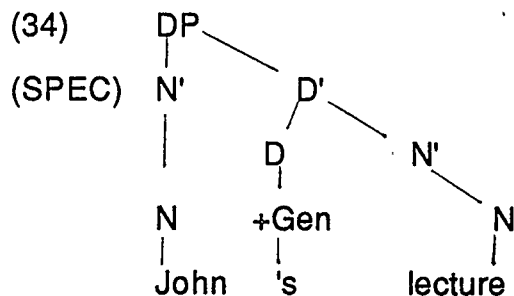
Now consider the internal structure of phrases with a determiner head.<sup>2</sup>



The D *the* does not assign Kase, so it does not project to DP and does not allow a specifier, as shown in (33).

(33) \*John the book

In contrast, the genitive 's is a Kase assigner so an N' such as *John* is required in the specifier position.



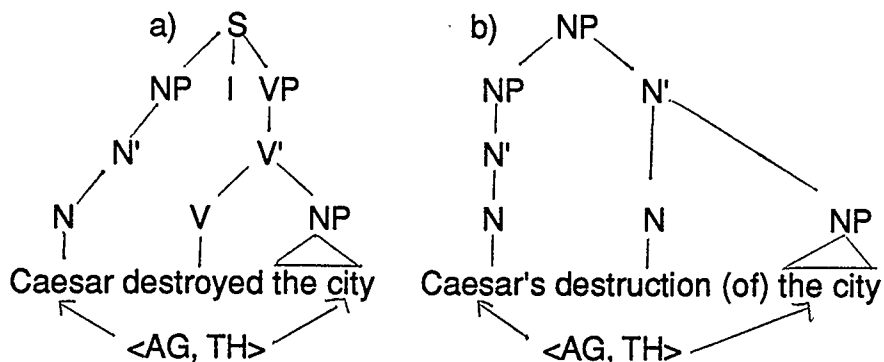
Since only one specifier is allowed, (34) is grammatical but (35) is not.

(35) \*yesterday's John's lecture

#### 2.4 Deep and surface structures

In traditional GB theory NP and VP phrase structures differed in an important way (see 36a and 36b):

## (36) Traditional structures



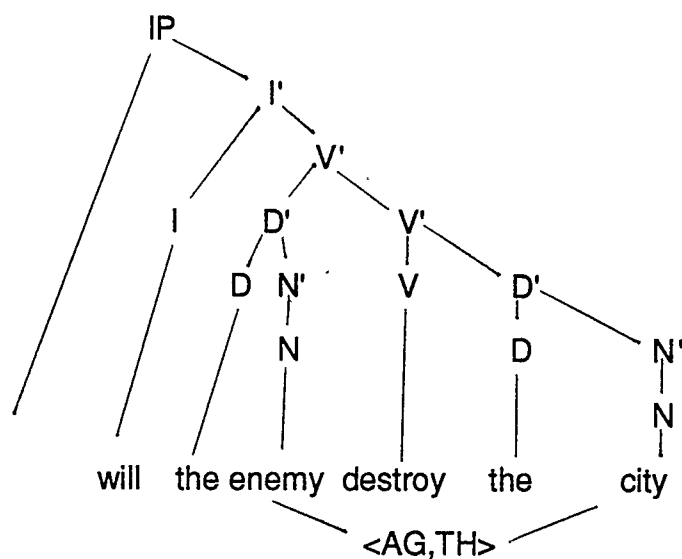
In (36a) the agent role is assigned to an external argument, *Caesar*. In (36b), however, *Caesar* is still the agent, but it is an internal argument since it is inside the projection of the N that assigns the theta role to it.

In order to have parallel structures for nominal and verbal phrases, Fukui proposes that all theta roles are always assigned within the lexical projection. This dispenses with external arguments in D-structure as all arguments are within the lexical projection of the head assigning their theta-role.

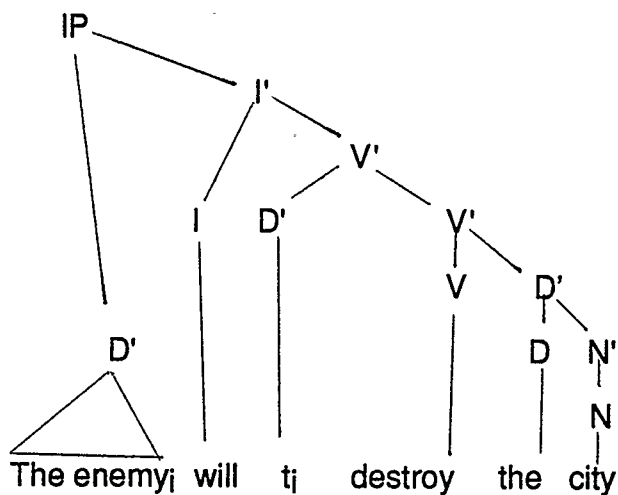
Since, in Fukui's system, theta roles are assigned within lexical projections, movement must occur even in ordinary tensed sentences (see 37 and 38) in order for Kase to be assigned.



(37) Deep structure for 'The enemy will destroy the city.'



(38) Surface structure for 'The enemy will destroy the city.'



In D-structure *the enemy* is within the lexical projection  $V'$  and is assigned the agent role by its sister, the  $V'$  *destroy the city*. Then it moves to the specifier position, as shown above, in order to be assigned Nominative Case by the TNS/AGR Kase assigner of I. As in other types of movement, a co-indexed trace is left behind in S-structure.

Associated with the idea of theta theory and Kase is the Saturation Principle, which states:

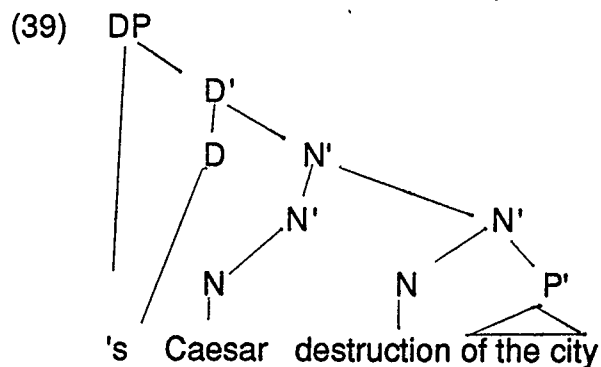
(4) The Saturation Principle

All theta and Kase grids must be saturated

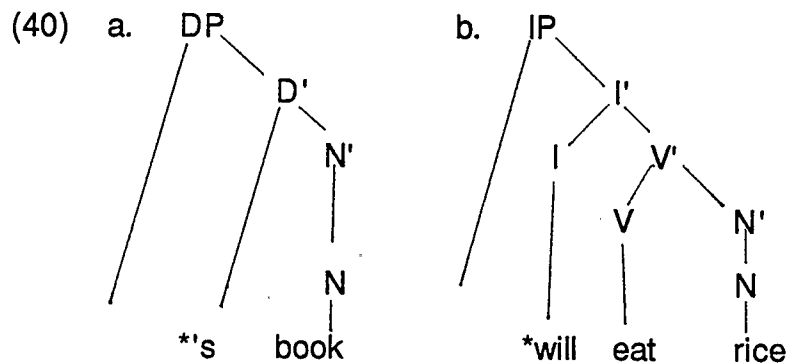
(satisfied or discharged). (Fukui 1986:57)

If no movement takes place in (38), *the enemy* will not be in a position to receive Nominative Case, INFL will not have discharged its Kase and the Saturation Principle will not be satisfied. Note that in Fukui's theory, it is the DP or D' that gets case (and N' if there is no Determiner present as in [N'John] likes [N'mangoes]). This is consistent with the idea that any argument (DP, D' or N') must be assigned Case (see Chapter 1.4).

Similarly in the DP of (39), *Caesar* receives its theta role within the nominal projection in deep structure and movement must take place in order for it to be assigned Genitive Case by the Kase assigner '-s'.



The Saturation Principle prevents ungrammatical constructions such as those in (40), because there is nothing in the specifier position to which Kase can be assigned.



## 2.5 Parametric variation in languages

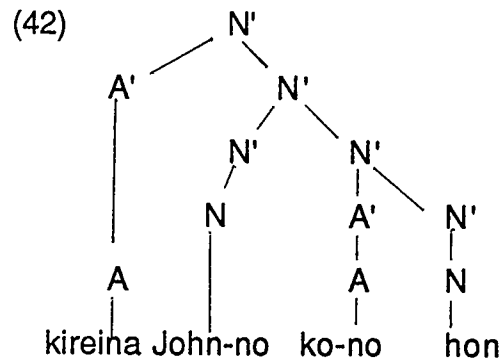
Fukui claims that some languages may lack one or more Functional Categories; a language may have only one, others may have two or three Functional Categories. Another variation is that Functional Categories may either have or lack F-features. For example, there may be a language with a non-Kase assigning COMP (like English *that*) but without the type of Kase-assigning COMP that permits WH movement.

Fukui provides evidence that Japanese lacks all three Functional Categories (Fukui 1986a). He notes, for instance, that it is possible to add modifiers to a Japanese phrase such as *ko-no hon* 'this book':

- (41) a. *ko-no hon*  
'this book'
- b. *John-no ko-no hon*  
'John's this book'

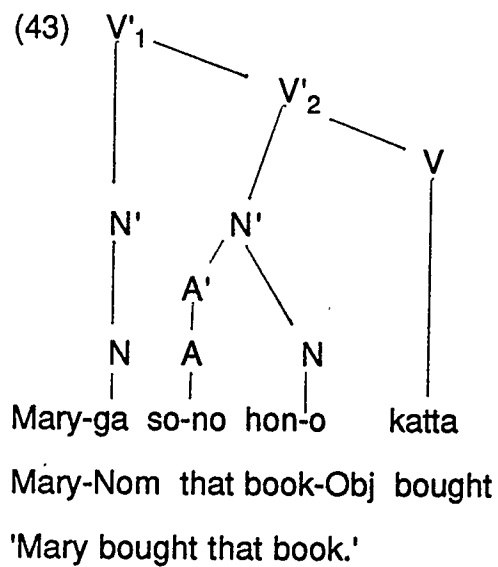
c. *kireina John-no ko-no hon*

'beautiful John's this book'



The fact that words such as *kireina* 'beautiful' and *John* can appear outside *ko-no* 'this' suggests that this element does not close the projection like its counterpart in English.

Because elements such as *this* in (42) do not close off the projection, there is no XP. Moreover, without the category I, the head of a clause must be V, as in the tree structure of (43).



As there is no I to assign Nominative Case, it must be assigned 'contextually' to any N' which is a sister of V' (Fukui 1986:212). In (43) the V *katta* governs and assigns Objective Case to *sono hon-o* and the remaining N' *Mary* is assigned Nominative Case (marked with the Nominative Case Marker *-ga*) because it is a sister of V'<sub>2</sub>.

There are several typological differences between Japanese syntax and English syntax which were traditionally thought to be unrelated. From Fukui's work, however, it can now be seen that these differences all follow from the fact that English, but not Japanese, has Functional Categories. The following examples are from Fukui (1986b) except where otherwise noted.

1) Japanese does not have syntactic WH-movement as English does.

- a. I don't know [what<sub>i</sub> John bought t<sub>i</sub>]
- b. Boku-ga [John-ga nani-o katta ka] siranai koto

I-Nom John-Nom what-Acc bought Q do not know fact

'I don't know what John bought'

In Fukui's theory, this follows from the fact that Japanese has no empty specifier position at the CP level into which a WH-word can move.

- 2) Japanese has no overt expletives as English does.
  - a. It seems that John is competent.
  - b. No equivalent in Japanese (Fukui 1986)

In Fukui's theory, this follows from the fact that there is no specifier position at the IP level which must be filled. English has a Case assigning I category that requires this position to be filled, making an expletive necessary.

3) Japanese can have multiple nominative and genitive constructions, but English cannot.

a) English

i) \*civilized countries, male, the average lifespan is short.

ii) \*MIT's last week's Chomsky's that lecture

b) Japanese

i) Multiple nominative phrase

bunmeikoku-ga dansei-ga heikinzyumyoo-ga miaikai  
civilized-Nom male-Nom average lifespan-Nom is short  
countries

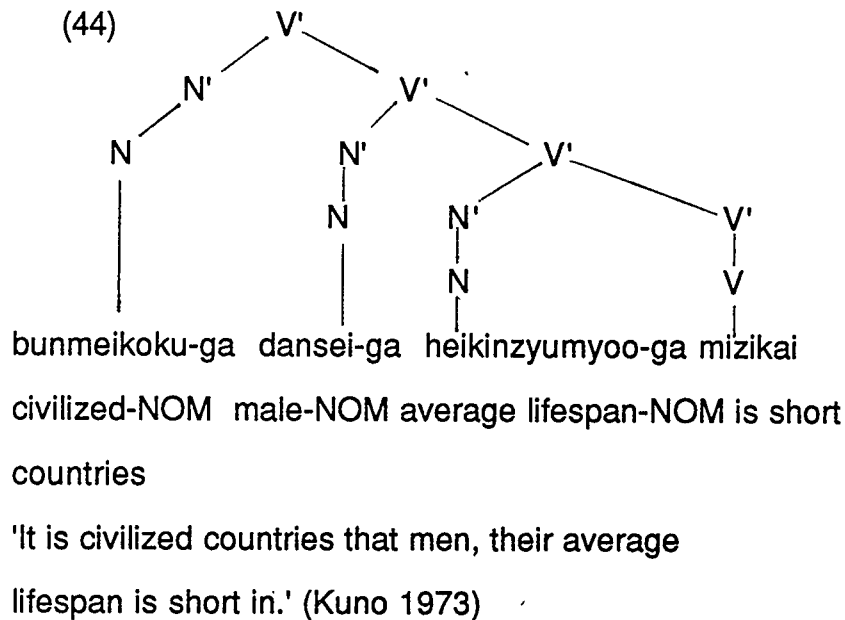
'It is civilized countries that men, their average lifespan is short in' (Kuno, 1973)

ii) Multiple genitive phrase

MIT-(de)-no sensyuu-no Chomsky-no sono koogi at-Gen last  
week-Gen Chomsky -Gen that lecture 'MIT's last week's  
Chomsky's that lecture'

In English, the projection is closed off by the specifier of the functional Category and no additional elements can be added. As there are no Functional categories in Japanese, additional N's can be added as in (bi). Since Nominative

Case is assigned contextually to any N' which is a sister of V', multiple nominative constructions are possible, in example (44).



Similarly, in English multiple genitive phrases do not occur as the specifier of DP closes off the projection so that another element cannot be added. In Japanese the projection is not closed off and multiple genitives (marked with *-no*) can occur.

These differences between Japanese and English, which were previously thought to be unrelated, can now be seen as consequences of the fact that Japanese does not have Functional Categories and English does.

Having examined Fukui's claims for Japanese, I will now give an introduction to the Thai language. I will begin with some general properties and then in the remaining chapters look specifically at possibilities of Functional Categories in Thai

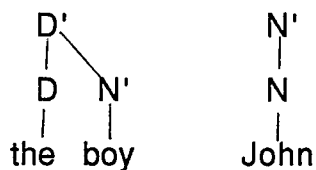


## Notes

## Chapter 2

<sup>1</sup>The +WH feature is associated with a null complementizer. In example (31) there is no overt item under the C but the +WH feature licences the WH word *what*.

<sup>2</sup>In cases where a determiner is not used, for example with a proper noun *John* or a mass noun like *water*, the phrase is a N' and not a D'. As Case and Theta roles are assigned to arguments, this includes D', DP and N'. Compare the following structures:



As a matter of interest, there are languages in which Determiners occur with proper nouns (e.g. Tzotzil, a language of Mexico; see Perlmutter and Postal 1983:25).

## Chapter 3

### The Thai Language

#### 3.0 Classification

Thai is one of the languages of the Kam-Tai branch of the Austro-Tai family and is spoken by over 30 million inhabitants of the southeast Asian country of Thailand. Different dialects are spoken in the North, Northeast and Southern regions of Thailand but Central Thai, spoken in Bangkok and the Central plateau, is considered the standard dialect. In this thesis examples are taken from the Central dialect.

#### 3.1 General features

Thai is a tonal language with five contrasting tones in the Central dialect as illustrated below:

Mid	<u>naa</u>	'field'
High	naa	'aunt'
Low	<u>naa</u>	'a nickname'
Rising	naa	'thick'
Falling	naa	'face'

For the sake of simplicity I will not indicate tones on the examples used in this thesis. Transcription will follow that of Haas (1964) except for the following changes:

y (Haas 1964) = i (high, unrounded, central vowel)

j (Haas 1964) = y (glide)

Morphology is restricted to derivation (adding an affix which changes the category and/or meaning of the stem) and compounding (combining two words to get a new word). There are no inflectional affixes (such as plural or tense affixes). Examples of derivation (45a) and compound words (45b) are shown below:

(45) a. khwaam + Verb --->Noun

khwaam + rak(V) ---> khwaamrak(N)

to love ---> love

b. khaw + Noun ---->Verb

khaw (V) + cay (N) ----> khawcay (V)

to enter + heart ---> understand

### 3.2 Syntactic features

Thai has the word classes noun (N), verb (V), pronoun, classifier (CL), preposition (P), conjunction, particle (PRT), honorific (HON) and auxiliary (AUX).

Particles are used to indicate politeness (e.g. *kha* used by women and *khrap* used by men), mood (e.g. imperative) and speaker attitude (e.g. *na* used as a question similar to English 'okay?') as well as in other situations.

The third person pronoun (*khaw*) is not marked for gender or number (*khaw* = 'she/he/they'). First person pronouns, however, are specified for gender and number, for example, *phom* = 'I'(Masculine)

and *chan* ='I' (Feminine). As well, different pronouns are used depending on the social scale of the addressor and the addressee.

Some words can be used as verbs, adverbs or adjectives. For example, *dii* 'to be good' is a verb (illustrated in 46a). It can also be used as an adjective 'good' (46b), and an adverb 'well' (46c).

- (46) a. used as a verb  
 wannii aakaat dii  
 today weather good  
 'The weather is nice today.'
- b. modifier of a noun  
 khaw pen khon dii  
 s/he is person good  
 'S/he is a good person.'
- c. modifier of a verb  
 khaw phuut phaasaathay day dii  
 s/he speak Thai able good  
 'S/he speaks Thai well.'

Thai has an SVO word order and is more strictly head initial than English in that the head always precedes the modifier:

- (47) a. khaw khap rot kaw  
 he/she drives car old  
 He/she drives an old car.
- b. khaw khap rew maak.  
 he/she drives fast very  
 He/she drives very fast.

Thai verbs do not have different forms marking tense and there is no agreement for number, person or gender. The default tense is past unless the context indicates otherwise. 'Auxiliaries' (such as *day*) or aspect markers (such as *lɛɛw*) specify tense or mood, as illustrated by the examples below (auxiliaries will be discussed in more detail in chapter 6).

(48) a. Past tense (unspecified)

Boon thaan khaaw.

Boon eat rice

'Boon ate rice.'

b. Past tense (specified ,literary or formal)

Boon day thaan khaaw.

Boon PST eat rice

'Boon ate rice.'

c. Past tense (specified, informal)

Boon thaan khaaw lɛɛw.

Boon eat rice already

'Boon ate rice.'

d. Present progressive

Boon kamlɔŋ thaan khaaw.

Boon Prog. eat rice

'Boon is eating rice.'

## e. Future tense

Boon ca thaan khaaw

Boon FUT. eat rice

'Boon will eat rice.'

Serial verb constructions are common in Thai (verbs are in italics):

(49) a. khaw *noon puay pen* khay

he/she lies to be sick is fever

He/she is lying down sick with a fever.

b. Khin *phat nia khaay*

Khin fry meat sell

'Khin fried meat and sold it.'

We will see in Chapters 5 and 6, that the serial verb construction is widely used in Thai and is relevant to some of the issues discussed in this thesis.

As mentioned in Chapter 1, Thai does not have WH movement. Example (50) illustrates the fact that the WH word (*aray* 'what') remains in its deep structure position.

(50) Mali *sii aray*

Mali bought what

What did Mali buy'

Moreover, there are no overt expletives in Thai:

(51) duu mian fon ca tok

look same rain will fall

'(It) looks like it will rain.'

In Chapter 2 it was mentioned that Japanese does not have WH movement or overt expletives. It seems that in these two aspects at least, Thai and Japanese are alike.

Other details of Thai which are relevant to this thesis will be discussed in the chapter pertaining to that topic.

## Chapter 4

### Determiners

#### 4.0 Consideration of determiners

In this section I will demonstrate that Thai does not have the Functional Category Determiner. To do this, I will first examine Thai words which might conceivably be analyzed as determiners. They can then be tested to see if they act as determiners as defined in Fukui's theory.

We have seen that in English there are several elements that Fukui classifies as determiners: articles (*the, a*), demonstratives (*that, this*), and the possessive marker (*'s*). Do these elements also exist in Thai? We will look at these possible candidates first and then at a further element which exists in Thai, the classifier, which could plausibly be a determiner head.

#### 4.1 Articles

In English, singular count nouns require a preceding determiner such as the article *the* or *a* (as in 52). Without articles, the English sentences are ungrammatical (as in 53).

- (52) a. The/a girl bought the/a book at the/a store  
b. The book is expensive.
- (53) a. \*Girl bought book at store.  
b. \*Book is expensive.



As (54) shows, however, there is no such restriction in Thai.

(54) dek sǐi naŋsǐi thii raan.

child buy book at store

'The child/children bought a/the book at a/the store.'

or even 'Children buy books at stores.'

Because there is no word in Thai corresponding to English articles, several translations of the above sentence are possible, as indicated in (54). If one wants to make the meaning explicit, a quantifier such as *laay* 'several' or a numeral is used, as shown in (55). (Classifiers (CL) will be discussed in section 4.4.)

(55) a. dek khon nǐj sǐi naŋsǐi laay lem

child.CL one buy book several CL

'A child bought several books'

b. dek saam khon sǐi naŋsǐi saam lem

child three CL buy book three CL.

'Three children bought three books.'

These facts suggest that Thai does not have words which correspond directly to the English articles *the* and *a*.

#### 4.2 Demonstrative adjectives

Although Thai apparently lacks definite and indefinite articles, it does have words which can be translated into English as *this*, *that*, *these*, and *those*.

*nii* - this, these, here (close by)

*nan* - that, those, there (farther away than *nii*)

*noon* - that, those, there (farther away than *nan*)

In the examples that follow I will focus on *nii* since the other two words (*nan* and *noon*) act identically.

As mentioned in chapter 3, Thai is a head initial language (except for subjects). In accordance with this, modifiers follow nouns (the modifier is italicized):

(56) chan yuu thii baan *lek*.

I live at house small

'I live in a small house.'

If *nii* is a determiner head that takes a nominal complement (parallel to English *that*, *this*, etc.), then it should precede the noun, but it does not:

(57) chan choop (sii *nii*) /\*chan choop (*nii* sii).

I like colour this.

'I like this colour.'

Therefore *nii* cannot be a head. Moreover, since there is no word which is a determiner head in sentences like (57), there cannot be a specifier in the technical sense. Recall that in Fukui's theory only Functional Heads have specifier positions as only Functional Categories project up to XP level. Because there is no specifier position, *nii* cannot be a specifier either.

We are left, then, with the conclusion that *nii* must be a modifier. An apparent problem for this conclusion is that when used with

adjectives and/or classifiers, *nii* must always appear in the final position of the noun phrase:

(58) [dek naarak khon nii] yuu kap chan.

child cute CL. this live with

'This cute child lives with me.'

(59) \*[dek nii khon naarak] yuu kap chan

child this CL. cute live with I

(60) \*[dek khon nii naarak] yuu kap chan

child CL this cute live with I

It is generally thought that adjectives do not have to occur in any particular order. Does the fact that *nii* occupies a fixed position mean that it cannot be an adjective type modifier? Dixon (1982) has shown that there is in fact a preferred order for adjectives and pre-adjectival modifiers.<sup>1</sup> Following is his list of preferred order for modifiers.

A. Pre/post-adjectival modifiers

- i) logical qualifiers (all, some)
- ii) determiners (the, this)
- iii) possessives (my, John's)
- iv) superlatives (best, cleverest)
- v) ordinal numbers (fourth)
- vi) cardinal numbers (four).

## B. Adjectives

- i) value (good, bad)
- ii) dimension (tall, big)
- iii) physical property (hard, soft)
- iv) speed (slow, fast)
- v) human propensity (kind, mean)
- vi) age (old, new)
- vii) colour (red, greenish)

Thus, using Dixon's preferred order, example (61a) is grammatical and (61b) is grammatical but not preferred and therefore unusual:

(61) a. some big, white houses

Ai      Bii      Bvii

b. some white, big houses

Ai    Bvii Bii

The example in (62), however, is clearly ungrammatical

(62) \*white, big, some houses

Bvii Bii      Ai

It appears that in this English phrase a modifier like *some* which no one would claim is a determiner, has to occur before all other modifiers.<sup>2</sup>

Therefore, the fact that in Thai *nii* has to appear after other adjectives and the classifier is consistent with the fact that members of Dixon's group A, which include modifiers like *some*, occur at the margin of the phrase. That is, these modifiers appear at the left hand margin in English and are pre-adjectival whereas they appear at the right hand

margin in Thai making them post-adjectival. Therefore the words *nii*, *nan*, and *noon* can conceivably be modifiers.

We have seen that there are no Thai words corresponding to English *the* and *a* and that the demonstratives *nii*, *nan* and *noon* are apparently modifiers. We can now look at the possessive marker, which Fukui claimed was a determiner head in English, to see if it is a determiner head in Thai.

#### 4.3 Possession

In Fukui's theory, the possessive 's in English is a determiner head. We will examine the ways that possession is shown in Thai to see if possession involves determiners.

There are two ways of expressing possession in Thai.

(63) Possession + possessor

naŋsǐi chan

book I

'my book'

(64) Possession + *khooŋ* + possessor

naŋsǐi khooŋ chan

book ?of I

'book of mine'

*Khooŋ* used in this sense, is considered to be a preposition by Haas (1964). I will assess this theory by using two tests: the test of negation and the test of theta role assignment.

### A. Negation test

Chomsky (1970, 1972) uses syntactic features to classify lexical items into four categories:

noun: +N -V

verb: -N +V

adjective: +N +V

preposition : -N -V

One test which can be used to distinguish +V elements from -V elements in Thai is negation. Verbs (-V +N) and Adjectives (+V +N) are negated with *may* (examples 65a and 65b) whereas nouns (-V +N) are negated with *may* plus the verb *chay* (example 66).<sup>3</sup>

(65) a Negative with verb (negative= *may*)

Mali may pay Yala./\*Mali may chay pay Yala

Mali not go Yala

'Mali is not going to Yala.'

(65) b Negative with adjective (negative= *may*)

Khaw may suay læy/\*khaw may chay suay læy

She not pretty at all

'She isn't at all pretty.'

(66) Negative with noun (negative = *may chay*)

khaw may chay saamii chan/\*khaw may saamii chan

he not is husband I

'He isn't my husband.'

If *khɔɔŋ* is negated with *may* it is ungrammatical as illustrated by (67):

(67) *khɔɔŋ* negated with *may*

\*rot nii khɔɔŋ acaan may khɔɔŋ chan  
car this ?of professor not ?of I

(68) *khɔɔŋ* negated with *may chay* is grammatical

rot nii khɔɔŋ acaan may chay khɔɔŋ chan  
car this ?of professor not be ?of

'This car is the professor's not mine.'

This rules out the possibility that *khɔɔŋ* could be a verb (+V-N) or an adjective (+V+N). Therefore *khɔɔŋ* could be either a noun (-V +N) or a preposition (-V -N).

We now have to test whether *khɔɔŋ* has the feature +N, in which case it would be a noun (+N -V), or -N, in which case it would be a preposition (-N -V). We will do this by employing a test involving theta role assignment.

#### B. Theta role assignment test

As only arguments (D', DP and N') are assigned theta roles, we can see whether *khɔɔŋ* when it is used to express possession, is assigned a theta role or not.

*Khɔɔŋ* can also be used as a noun meaning things or possessions (see 69):

- (69) raan nii khaay khooŋ maak.  
 shop this sell thing many  
 'This shop sells many things.'

In (69) *khooŋ* is assigned a theme role by the verb *khaay* 'sell'. However when *khooŋ* is used to show possession, as in (70), it is not assigned a theta role.

- (70) rot khooŋ chan sia læw  
 car ?of I spoiled already  
 'My car isn't working.'

In (70) there is nothing which can assign a theta role to *khooŋ*<sup>4</sup> Since a D' or N' without a theta role is unacceptable, I conclude that *khooŋ* used to show possession is -N. We have also seen that it is -V so, as Haas (1964) claimed, *khooŋ* is a preposition (-V -N).

#### 4.4 Classifiers

In Thai there are additional elements, called classifiers (CL), that could possibly be determiners.<sup>5</sup> Classifiers, which are sometimes referred to as measure words, are relatively rare in English. However possible examples include the italicized words in the following phrases:

- (71) three *lumps* of sugar

- (72) a *sheet* of paper

- (73) a *drop* of water

Thai uses classifiers much more frequently than English. Several examples are shown below:



- (74) *tua* 'body', CL for animals, chairs, tables  
shirts, trousers, dresses.  
khun lian̄ maa kii tua  
you raise dog how many CL  
'How many dogs do you have?'
- (75) *khon* 'person' CL for people  
khaw mii luuk saam khon  
s/he have child three CL  
'She has three children.'
- (76) *lem* CL for sharp pointed objects and for books  
khoō s̄ī naŋs̄ī lem nii  
request buy book CL this  
'May I buy this book?'

Use of a classifier is obligatory when a quantifier or numeral is used. The order is illustrated in (77) and (78).

- (77) Noun + numeral + CL  
luuk saam khon/\*luuk saam  
children three CL  
'three children'
- (78) Noun + quantifier + CL  
maa laay tua/\*maa laay  
dogs many  
'many dogs'

As seen in (79), when an ordinal number is required, the order is:

(79) noun + CL + *thii* + number

luuk khon thii saam

child CL nth three

'the third child'

In formal or careful speech, a classifier is usually used with modifiers such as *nii* 'this' as well as with other adjectives. The order is:

(80) noun + classifier + modifier

luuk khon lek

child CL small

'The small child'

(81) baan laŋ nii

house CL this

'This house'

However, in informal speech, when a numeral is not used, it is possible to omit the classifier in the above constructions, as in the following:

(82) luuk lek

child small

'small child'

(83) baan nii

house this

'this house'

The classifier can appear more than once when a combination of quantifiers and adjectives or several adjectives are used as in example (84) and (85):

- (84) maa tua lek tua nan  
 dog CL small CL that  
 'that small dog'
- (85) naŋsɿi lem lek laay lem  
 books CL small many CL  
 'many small books'

Like *nii*, classifiers are at the wrong end of the phrase to be a head in a head-initial language like Thai. However, unlike *nii*, the classifier does not close off the phrase as other elements, such as adjectives, may be added. In (86) as adjective *yay* 'big' can occur after the classifier illustrating that a classifier does not close off the phrase.

- (86) Khun Mali chɔɔp lem yay nii  
 HON Mali like book CL big this  
 'Mali likes this big book.'

#### 4.5 Discussion

The above evidence points to the conclusion that the elements which are determiner heads in English are not determiner heads in Thai.

To summarize:

- a) Thai does not have words which correspond to English articles
- b) The words *nii* 'this' *nan* 'that' and *noon* 'that' are modifiers and not determiner heads.

c) Possession is expressed by use of the preposition *khooŋ* (which may be omitted)<sup>6</sup> and there is no equivalent to a genitive marker such as the English *'s* or Japanese *-no*.

d) Classifiers are at the wrong end of the phrase to be heads.

Therefore, as there are no other plausible candidates for determiner heads in Thai, we conclude that Thai, like Japanese, lacks the Functional Category, Determiner.

However, unlike Japanese, Thai does not permit multiple genitive phrases.

(87) Thai

\*khambanyaay khooŋ aathit thii læew khooŋ Chomsky  
 lecture of week last of Chomsky  
 khooŋ MIT nan  
 of MIT that.

Fukui suggests that in Japanese, the possibility of multiple genitive phrases follows from the fact that there is no Functional Category, Determiner. Why, then, does Thai not permit multiple genitive phrases such as the equivalent of the Japanese example? (The example from section 2.5 is repeated here for clarity):

(88) Japanese

MIT-(de)-no sensyuu-no Chomsky-no so-no koogi  
 MIT (at)-Gen last week-Gen Chomsky-Gen that lecture.  
 'MIT's last week's Chomsky's that lecture.'

There are several possible reasons for the lack of multiple genitives in Thai:

a) Since *khooŋ* is a preposition, it assigns objective case and not genitive case. There are no other elements in Thai which could assign genitive case, so it follows that there cannot be 'multiple genitives' in Thai either.

b) Multiple *of* - phrases are ungrammatical in English as well when both *of* phrases are either arguments or modifiers of the same noun. (The relevant noun is italicized in the examples below.)

- (89) a. our *discussion* of French (argument of N)  
 b. our *discussion* of yesterday (modifier of N)  
 c. \*our *discussion* of French of yesterday  
 (argument + modifier)  
 d. \*our *discussion* of yesterday of French  
 (modifier + argument)
- (90) a. our *discussion* of interest (modifier of N)  
 b. our *discussion* of yesterday (modifier of N)  
 c. \*our *discussion* of interest of yesterday  
 (modifier + modifier)  
 d. \*our *discussion* of yesterday of interest  
 (modifier + modifier)
- (91) a. the *lecture* of Prof. Brown (argument of N)  
 b. the *lecture* of history (argument of N)

- c. \*the *lecture* of history of Prof. Brown  
(argument + argument)
- d. \*the *lecture* of Prof. Brown of history  
(argument + argument)

Although the above examples that have only one modifier or argument are all grammatical, when two *of*- phrases occur together in any combination, the result is ungrammatical. This suggests that multiple *of*- phrases may not be allowed in particular languages, or even universally. If this is so, it would explain why multiple *khɔɔŋ* phrases in Thai are ungrammatical. Compare (92) with the ungrammatical example (87). In (92) the second preposition is *thii* 'at' rather than *khɔɔŋ*:

- (92) khambanyaay khɔɔŋ Chomsky thii MIT aathit thii læɛw.  
 lecture of Chomsky at MIT week last

The fact that Thai does not allow multiple 'genitive phrases' like Japanese is therefore not counter-evidence to the claim that Thai does not have the Functional Category, Determiner.

## Notes

## Chapter 4

<sup>1</sup> Dixon (1982) uses English examples but claims that a preferred order is universal, although all languages have all adjective types. Since he disregards headedness, he refers to only pre-adjectival modifiers rather than either post or pre-adjectival modifiers.

<sup>2</sup> Fukui used the Japanese example below (Fukui 1986:205) to show that words like *ko-no* 'this' do not close off a phrase:

akai John-no ko-no hon

red John-Gen this book

'red John's this book'

This example seems to suggest that Dixon's prediction of a preferred adjective order does not apply in Japanese. Fukui does admit that the above example is slightly odd due to the ordering of the pronominal elements but that they are 'significantly better than corresponding English equivalents which are clearly ungrammatical.' (Fukui 1986:206).

<sup>3</sup>*Chay* is a verb which fulfills a function similar to the English support auxiliary *do*, which is also required for negation.

I do not need a ticket./\*I not need a ticket.

However, unlike *do*, *chay* is only used with nouns and not with other verbs.

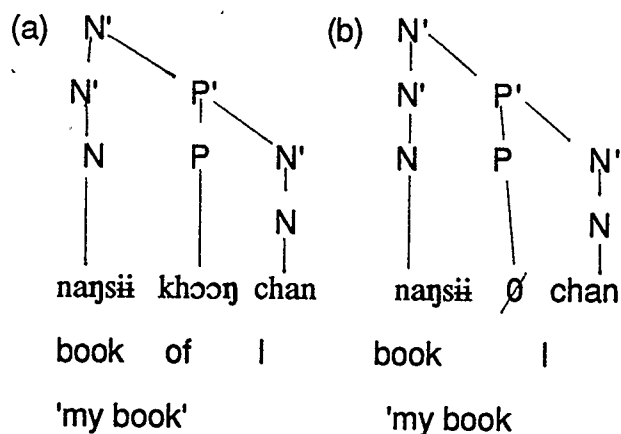
<sup>4</sup> Some nouns do assign theta roles, such as *destruction* in the examples below:

- a. the enemy's destruction (assigns agent role to *enemy*)
- b. the city's destruction (assigns theme role to *city*).

However it is generally agreed that a noun such as *car*, in the example given, does not assign a theta role.

<sup>5</sup> Although classifiers do exist in Japanese, Fukui did not give any evidence for or against classifiers being determiner heads.

<sup>6</sup> By use of the constituent test of coordination, it can be demonstrated that the P is null in (b).



As only phrases of the same type can be coordinated, the following example shows that both phrases are prepositional phrases:

$\text{nanjsii}[\emptyset \text{chan}] \text{ lə } [\text{khooŋ} \text{khaw}] \text{ duay}$   
 book I and of he too  
 'My book and his, too.'



## Chapter 5

## INFL

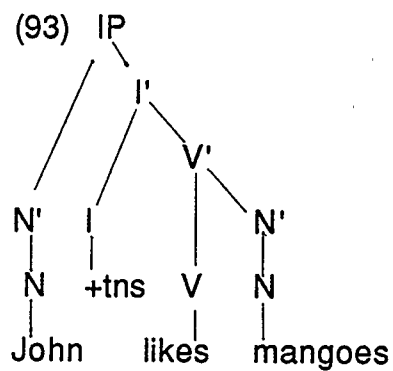
## 5.0 Consideration of I

In this chapter I will investigate the possibility that Thai has the Functional Category I (Inflection). Recall that the F-features for the category I in English are as follows:

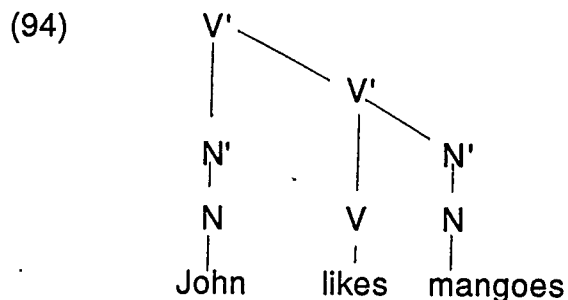
Table 2

	I	F-Features
Kase assigner	TENSE/AGREEMENT	+Nominative
non-Kase assigner	to + verb	none

A tree structure with I as the head of the sentence is shown in (93):



In a language without I, a sentence such as this would have the following structure:



Notice that in this structure, V is the head rather than I.

I will look at Thai data to see whether there is evidence for or against the existence of category I in that language and which of these two structures is compatible with Thai.

### 5.1 Evidence from agreement

Within the GB theory, agreement between a subject and its verb is considered to be 'specifier-head' agreement, i.e. concord between the head I (containing Tense/Agreement features) and its specifier. This occurs in English and is illustrated in (95):

- (95) a. He walks to the market  
 b. They walk to the market

The form of the verb is changed (*walks/walk*) to agree with a singular or plural subject. The I (here -s) later attaches to the verb as a suffix..

In Thai, however, there is no similar phenomenon, as can be seen in the following examples where the verb form is the same (*chɔɔp*) for both singular and plural subjects.

- (96) a. raw chɔɔp mamuaŋ  
 we like mango  
 'We like mangoes.'
- b. Mali chɔɔp mamuaŋ  
 Mali like mango  
 'Mali likes mangoes.'

The fact that there is no subject-verb agreement in Thai suggests that there is no Functional Category I.

## 5.2 Evidence from lack of expletives

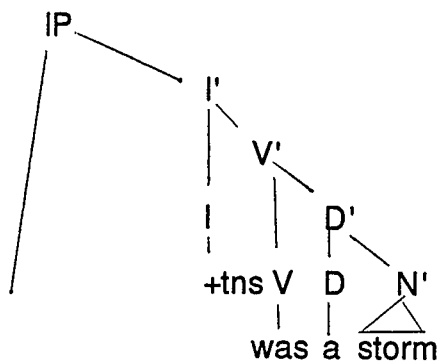
Fukui (1986:264) claims that English requires 'dummy subjects' or expletives in order to fill an otherwise empty specifier of IP position. If this specifier position were left empty (i.e. if there were no subject of the verb), the Saturation Principle, repeated here would be violated.

All theta and Kase grids must be saturated

(satisfied or discharged).

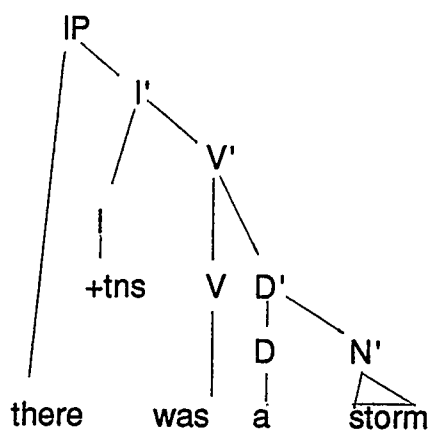
Example (97) illustrates why English requires an expletive such as *it* or *there*.

- (97) a. without expletive (IP specifier position empty and Kase,  
 +Nom, cannot be discharged)  
 \*Was a storm.



b. with expletive

'There was a storm.'



In Thai however the equivalent of (97a), without an expletive, is grammatical.

(98) mii phayu? yay

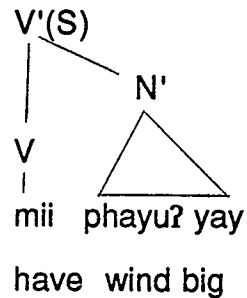
have wind big

'There was a storm.'

If there were an I category in Thai, the specifier position under IP would have to be filled in order for I to discharge its Kase (Nominative Case). The fact that there does not have to be a subject in (98) is evidence that

Thai does not have an I category and therefore the Saturation Principle is not violated. That is, there is no I category present in Thai which needs to discharge its Kase as seen in (99).

(99) tree structure



### 5.3 Auxiliaries

In English, modals and auxiliaries such as *will* and *do* also come under the category I. Since Thai also has morphemes that mark modality and tense, I will look at these to see if they are instances of an I category in that language.

A number of the Thai tense and modality markers (but not all) can also be used as true verbs.<sup>1</sup> Below are some of the tense/modality markers, along with the meaning of the corresponding verb (if there is one). The label arch marks those which have a restricted or archaic use as verbs. A hyphen indicates whether the marker appears before or after other verbs. (For a more complete list see Ekniyom 1979):

	<u>Tense/Modality</u>	<u>Meaning when used as a verb</u>
-yuu	present (progressive)	'live', 'exist'
-pay	past	'go'
-maa	past	'come'
day-	past	'able'
mak-	probability	(arch) 'desire'
khon-	probability	(arch) 'sustain'
kiap	probability	(arch) 'to near'
yan-	progressive	(arch) 'sustain'
ca-	future	not used as verb
phin-	recent past	not used as verb
kamlan-	present (progressive)	not used as verb
aat-	probability	not used as verb

Examples of the use of these markers are given below:

(100) a. *-yuu* used as a tense marker

khun phoo than khaaw yuu

HON father eat rice (present progressive)

'Father is eating rice now.'

b. *-yuu* used as a verb

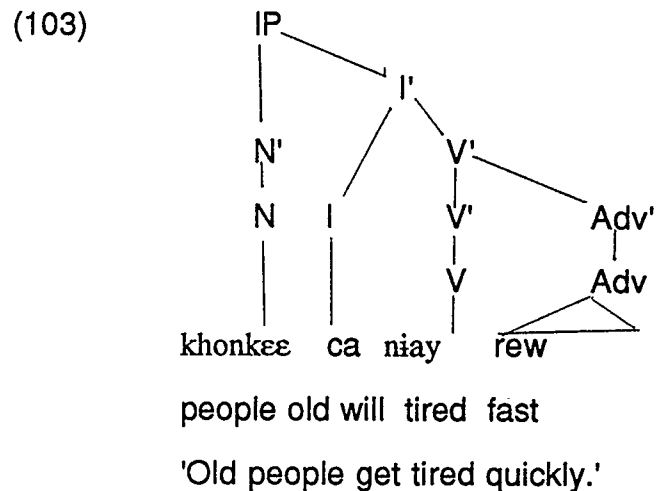
chan yuu kap khun mee

I live with HON. mother

'I live with (my) mother

- (101) a. *mak-* used as a modality mark  
 thaa wiŋ rew mak ca niay  
 if run fast likely will tired  
 'If you run fast you are likely to be tired.'
- b. *mak-* used as a verb (archaic use-religious context)  
 yaa mak sap  
 do not desire wealth  
 'Do not desire wealth.'
- (102) *phiŋ-* used as a tense marker (no verb equivalent)  
 chan phiŋ klap baan  
 I just returned home  
 'I just got home.'

If I is a head, V' would be selected as the complement (see example 94). Since Thai is considered to be a head-initial language (see Chapter 3 and 4), I would have to precede the V' that is its complement. The following tree structure shows a tense marker and its relation to the V' if the tense marker were I.



As I must precede the V', only those markers which appear pre-verbally could be I, unless these markers are bound morphemes. In English, tense/agreement is realized on the verb as can be seen in the *walk/walks* contrast. The *-s*, however, appears post-verbally in a head-initial language like English only because it is a bound morpheme (it is 'bound' or attached to the verb itself). Post-verbal tense/modality markers in Thai, however, can be shown to be not bound to the verb as other elements can separate the marker from the verb as in (100a) repeated here. In this example the direct object, *khaaw* 'rice', occurs between the verb *thaan* 'eat' and the tense/modality marker *-yuu*.

- (100) a. khun phoo than khaaw yuu  
 HON father eat rice present (progressive)  
 'Father is eating rice now.'

This shows that postverbal tense and modality markers are not instances of I in Thai.

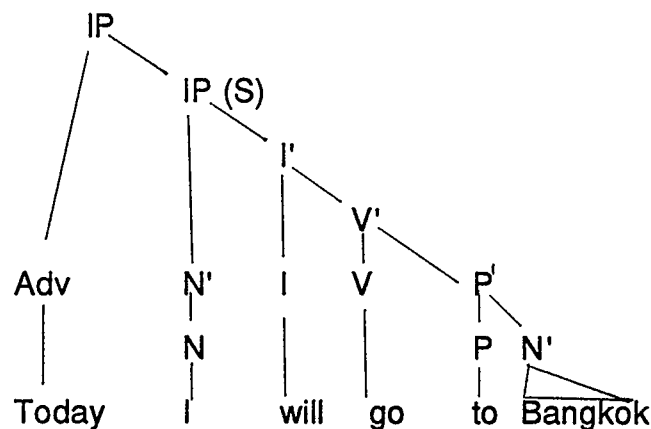


In the following sections Thai data will be examined to see if there is evidence that preverbal tense/modality markers are instances of I.

### 5.3.1 Evidence from verb deletion and movement

In English the V' can be deleted in certain contexts. Under such circumstances, a modal is not deleted since it is under I and hence outside of V'. This is shown in (104), where *will* remains in the second S:

(104) Today [S I will go to Bangkok] and tomorrow [S Kim will 0.]<sup>2</sup>



In the second clause of (104) *go to Bangkok* (the V') has been deleted and only *will* (the I) is left. If *will* were also under the V', it could not be left by itself in this way.

In Thai a tense/modality marker cannot be stranded (occur without the rest of the V'), as we see by the ungrammaticality of (105a) when *ca* 'will' or *khonj* 'may' are used.

(105) a. \*Wannii chan ca /khonj pay krunjtheep le

Today I will/may go to Bangkok and

phrunjii Phim ca /khonj

Phim will/may

'Today I will go to Bangkok and tomorrow Phim will.'

The result is also ungrammatical when *day* 'past' is stranded as in

(105b):

b. \*mjawaansiin chan day pay krunjtheep le

day before yesterday I PST go Bangkok and

miawaan Phim day

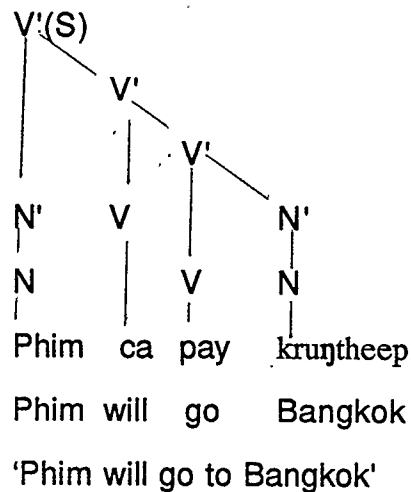
yesterday Phim PST

'The day before yesterday I went to Bangkok and

yesterday Phim did.'

The examples above (105a and b) provide evidence that markers such as *ca* 'will', *khonj* 'may' and *day* 'PST' are not under I' but are part of the V' and therefore cannot occur outside the V'. This is shown in the tree structure below:

(106)



If (106) is the right tree structure for Thai and there is no I, the ungrammaticality of (105a) and (105b) is accounted for by the A/A constraint which stipulates:

(5) A/A Constraint

If a phrase X of category A is embedded within a larger phrase also of category A, then no rule applying to category A (i.e. a category of the same type) can apply to phrase X. (Chomsky 1964, quoted in Ross 1967:13)

That is, the V' (or verb plus its complement) *pay kruntheep* 'go to Bangkok' cannot be deleted as it is under another V' (a category of the same type). The English example (104) is alright, however, as the deleted constituent (V') is not the same type as the larger containing constituent (I'). If Thai had the category I, the ungrammaticality of (105a and b) could not be accounted for so straightforwardly.

A similar test involves V' movement, which also obeys the A/A constraint. In English, the result is grammatical when the V' (the italicized verb and its complement) is fronted in the second S as in (107).

- (107) [SKim said she will go to Bangkok] and [S*go to Bangkok*  
she will t ]

In Thai, however, the result is again ungrammatical.

- (108) [\*Phim bɔ̀k waa khaw ca pay kruntheep] lɛ  
Phim tell that she will go Bangkok and  
[*pay kruntheep* khaw ca  
go Bangkok she will  
'Phim said that she will go to Bangkok and go  
to Bangkok she will.'

This also shows that *ca* 'will' cannot be stranded or separated from the verb *pay* 'go' as *will* and *go* can in the English example.

Of course if tense/modality markers (like *ca* 'will') were bound morphemes and therefore inseparable from the verb, stranding of *ca* would also give an ungrammatical result. However, the examples in (109) and (110) show that markers such as *day* 'PST' and *ca* 'will' are not bound morphemes as other elements can occur between them and the verb.

(109) *day* separated from verb by royal particle *soŋ*

naayluaŋ day soŋ prathan phraraachasap suan phraoŋ  
 king PST ROY give money part him (ROY)  
 'The King donated his money.'

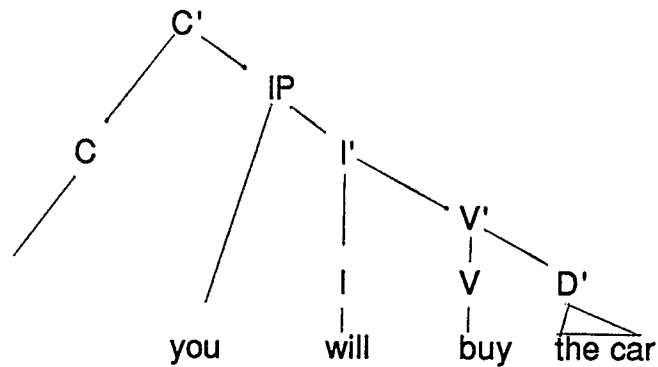
(110) *ca* separated from verb by *khooy* 'gradually'

chan ca khooy khooy tham  
 I will gradually gradually do  
 'I will gradually do it.'

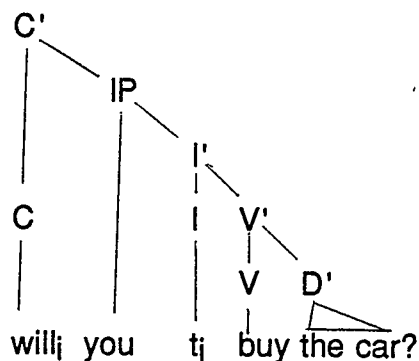
### 5.3.2 Evidence from lack of subject-aux inversion

In English, formation of 'yes-no' questions involves subject-aux inversion, as in the following example:

(111) Before subject-aux inversion (statement)<sup>3</sup>



(112) After subject-aux inversion (question)



As we can see by the tree structures, if subject-aux inversion is to take place, there has to be an I category and a C category. In Thai, however, subject-aux inversion does not take place and 'yes-no' questions are formed by adding the Q-marker (Question marker) *may* at the end of a statement.

(113) a. statement

khun ca sǐi rot

you will buy car

'You will buy a car.'

b. question

khun ca sǐi rot may

you will buy car Q

'Will you buy a car?'

c. question with inversion

\*ca khun sǐi rot may

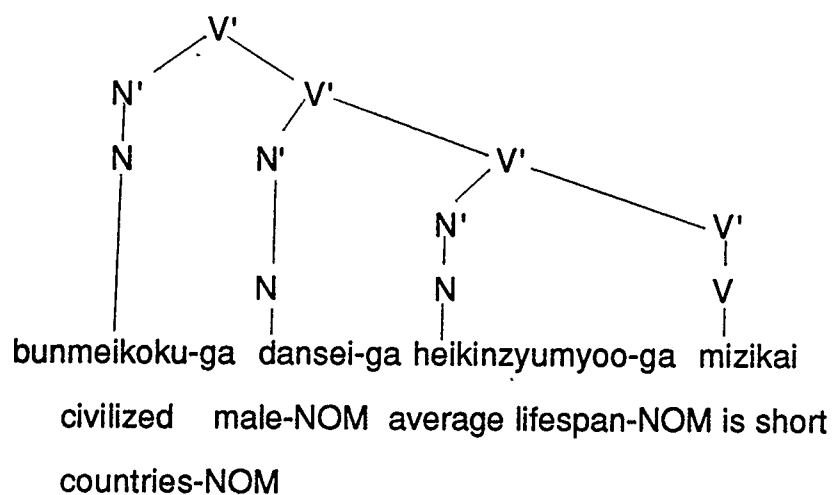
\*will you buy car Q

The lack of subject-aux inversion in Thai is consistent with the fact that there is no I category.

#### 5.4 Case marking in Thai

Fukui claims that as Japanese lacks I, Nominative Case is assigned contextually (Fukui refers to this as structural case). That is, *-ga* (the Nominative Case marker) is assigned to any noun phrase which is a sister of  $V'$ , making multiple nominatives possible (Fukui 1986:212). In contrast, Nominative Case is assigned by I in languages which have this category. Note that in such languages, there can only be one Nominative Case per clause. Below is an example of a Japanese multiple nominative in which *-ga* has been assigned to noun phrases which are sisters of  $V'$ .

(114) Japanese multiple nominative



'It is civilized countries that men, their average lifespan is short in.'

(Kuno 1973)

As I have concluded that Thai also lacks the category I, are multiple nominatives possible in Thai and, if so, how are they assigned Case?

From evidence such as example (115) below, one can conclude that multiple nominatives are possible in Thai.<sup>4</sup>

- (115) [N'phuuɣiŋ khon nan][ N'ruupraaŋ] phɔɔm nɔɔy na  
 women CL that figure thin little PRT  
 'That woman, her figure is a little thin isn't it?'

Now consider the following sentences in Thai in which the anaphor *tuaeŋ* 'self' is used:

- (116) \*ruupraaŋ θ phuuɣiŋ khon nan phɔɔm kwaa nɔɔŋ θ tuaeŋ  
 figure (of) woman CL that thin more sister (of) self  
 'The figure of that woman is thinner than self's sister.'
- (117) phuuɣiŋ khon nan ruupraaŋ θ phɔɔm kwaa nɔɔŋ θ tuaeŋ  
 woman CL that figure thin more sister self  
 'That woman, figure is thinner than self's sister.'

Why should the sentence in (116) be ungrammatical whereas the similar sentence in (117) is grammatical? Let us suppose that the tree structure for (116) is the one in (118) below.



(118):

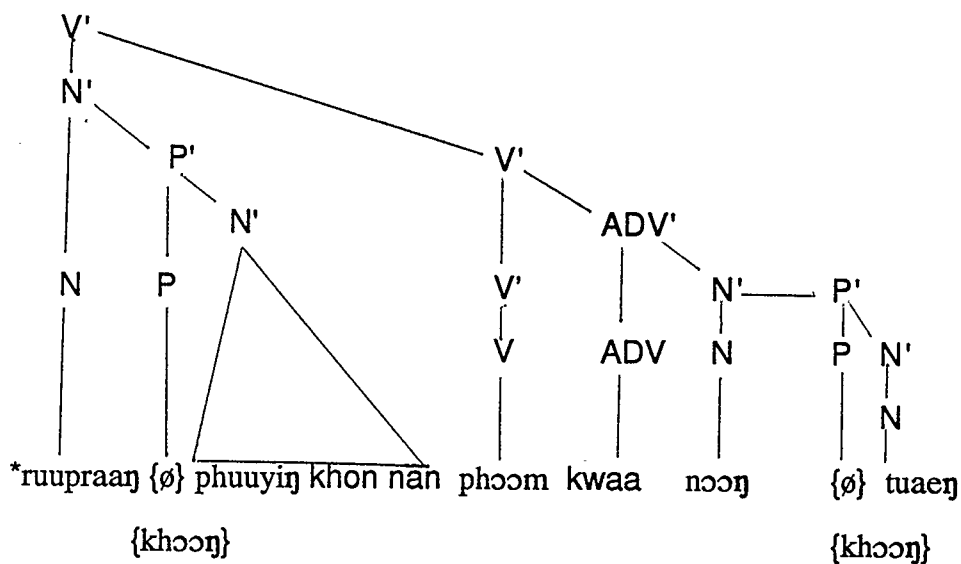


figure (of) woman CL that thin more sister (of) self

'The figure of that woman is thinner than self's sister.'

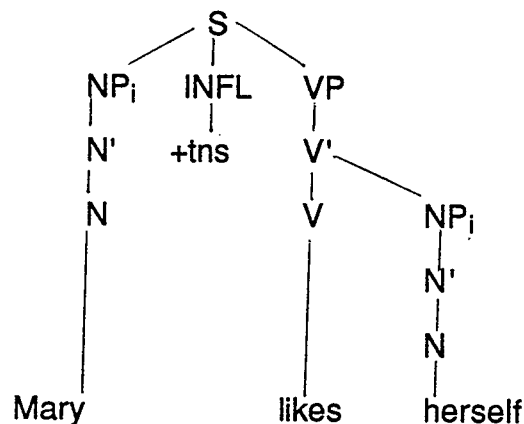
The Binding Theory restricts interpretive dependencies involving anaphors (e.g. reflexives such as *himself* and reciprocals such as *each other*) and pronominals (e.g. *he*) with antecedents (the NPs with which they are coreferential). If two elements are co-indexed it means they have the same referent. Although there are three principles involved in the Binding Theory, only Principle A is relevant to this thesis,

Principle A: an anaphor must be bound (co-indexed)

with a c-commanding NP in argument position.

The following example illustrates Principle A (traditional GB theory tree labels have been used):

(119)

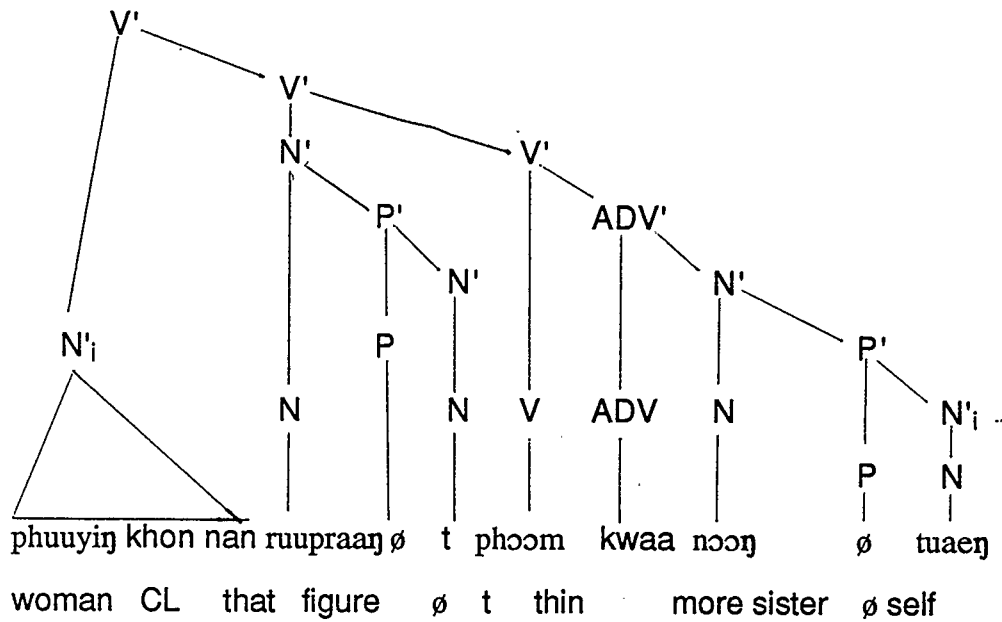


*Herself*, an anaphor, is co-indexed with *Mary* which c-commands it thus satisfying Principle A.

The Binding Theory, with its c-command restrictions, applies in Thai as well as English. To comply with Principle A of the Binding Theory anaphors must be co-indexed with a c-commanding N'. In the example (116), the N' *phuuyiŋ khon nan* 'that woman' does not c-command the anaphor *tuaeŋ* 'self' with which it is co-indexed. Therefore, the ungrammaticality of this sentence is accounted for by the Binding Theory.

However, when the word order is changed, as in (117), the sentence is grammatical. There are two possible tree structures for (117), Structure A in (120) and Structure B in (121).

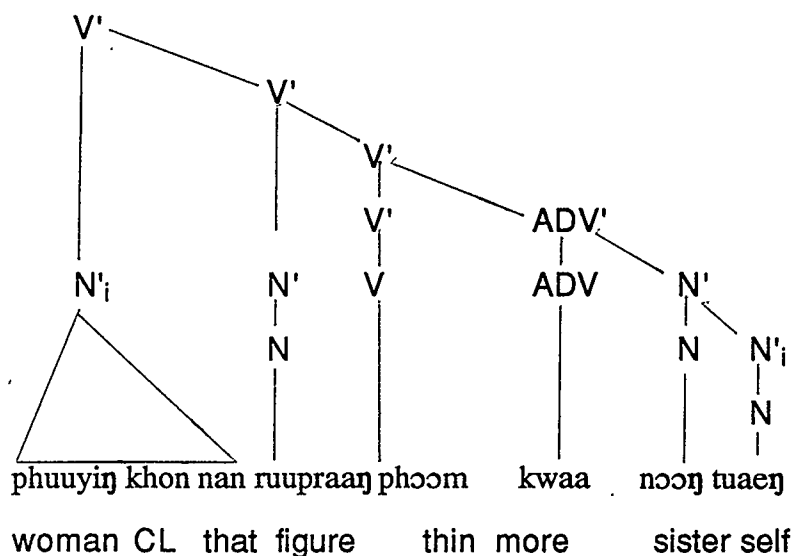
## 120) Structure A



'That woman, her figure is thinner than self's sister.'

By looking at the tree structure in (120) we can see that the N' *phuuuyiŋ khon nan* 'that woman' now c-commands the anaphor *tuaeŋ* 'self' and does not violate the Binding Theory. However, this construction presents a problem as the N' *phuuuyiŋ khon nan* 'that woman' would receive case twice; Objective Case from the preposition before movement and Nominative Case structurally after movement. Since this is a violation of the Case Filter, I reject Structure A as a possible structure. Now consider Structure B:

## 121) Structure B



'That woman, her figure is thinner than self's sister.'

The N' *phuuyiŋ khon nan* 'that woman' also c-commands the anaphor *tuaeŋ* 'self' in (120), making it a possible structure for this grammatical sentence. Structure B is 'base-generated' (i.e. the surface structure is the same as the deep structure) whereas Structure A is a result of movement. As others (Yoon 1987, Kuno 1973) have previously shown that similar sentences in Korean and Japanese are base-generated, I will assume the base-generated structure in (120) in the case of Thai multiple nominative sentences.<sup>5</sup>

It appears that Thai, like Japanese, does not have the Functional Category I and that V is the head of the clause. Multiple nominatives are allowed in Thai and Nominative Case is assigned to any N' which is a sister of V'. Although Japanese and Thai are similar in these respects, there is at least one difference between them in regard to multiple

nominative constructions. This difference will be discussed in section 5.5 below.

### 5.5 Constraints on Thai multiple nominatives

Compare the following Thai examples of multiple nominative constructions:

(122) *phuuyiŋ khon nan ruupraaŋ phoom nooy*

woman CL that figure thin little

'That woman's figure is a little thin.'

(123) \**phuuyiŋ khon nan phian ruay*

woman CL that friend rich

'That woman's friend is rich.'

(124) \**phuuyiŋ khon nan baan yuu klay*

woman CL that house exist far

'That woman's house is far away.'

Although the first example is grammatical, the other two are not. In contrast, the equivalent Japanese sentences are acceptable.

In each example *phuuyiŋ khon nan* 'that woman' is the initial N' in the multiple nominative construction. The second N' in each example is different. Only in example (121) is the second N' a body part of the woman (*ruupraaŋ* 'figure') and this is the only example which is grammatical. In the other examples *rot* 'car' and *phian* 'friend' are not a part of the woman or the 'possessor'. This is a phenomenon known as inalienable possession, i.e. the possessed object is inalienable

(inseparable) from the possessor. It seems that in Thai multiple nominatives can only occur if they are in an inalienable possessor-possession relationship. Other languages also have similar constraints (for example, multiple accusatives in Korean must be in an inalienable possession relationship, see Chun 1985). Japanese apparently does not have such a constraint (see example 114).

#### 5.6 Conclusion concerning I

From the above data I conclude that, like Japanese, Thai does not have the Functional Category I.

Multiple nominative constructions are also allowed in Thai and Nominative Case is assigned contextually, i.e. assigned to any N' which is a sister of V'. However, unlike Japanese, multiple nominative constructions are only allowed if the referent of the second N' is an inalienable possession of the referent of the first N'.

Notes  
Chapter 5

<sup>1</sup>This situation is not unique to Thai (Givon 1971 cited in Ekniyom 1979) Ekniyom (1979:61) claims that

'The synchronic inconsistency [of these tense markers] can be viewed as different stages of development in the emergence of auxiliaries as a grammatical category in the language from the source category verb.'

<sup>2</sup>I consider the temporal adverbs to be modifiers at IP level and joined by Chomsky adjunction.

<sup>3</sup>As outlined in chapter 2, Fukui claims that the subject must originate inside the lexical projection in order to receive a theta role and then move up to the specifier of IP position in order to receive Case. In order to simplify the tree structure in (112) the first position of the subject you has been omitted.

<sup>4</sup>If this were a result of scrambling rather than a multiple nominative construction, an N' in Object position would be able to be 'scrambled' to the front as well. However, in the example below we see that such a movement in Thai results in an ungrammatical sentence.

\*phuuyiŋ khon nan chan choop ruupraan

woman CL that I like figure

'That woman, I like her figure'.

<sup>5</sup> Yoon (1987:140) uses the Subjacency Condition to show that multiple nominative constructions in Korean are base-generated and not the result of movement.



## Chapter 6 Complementizer

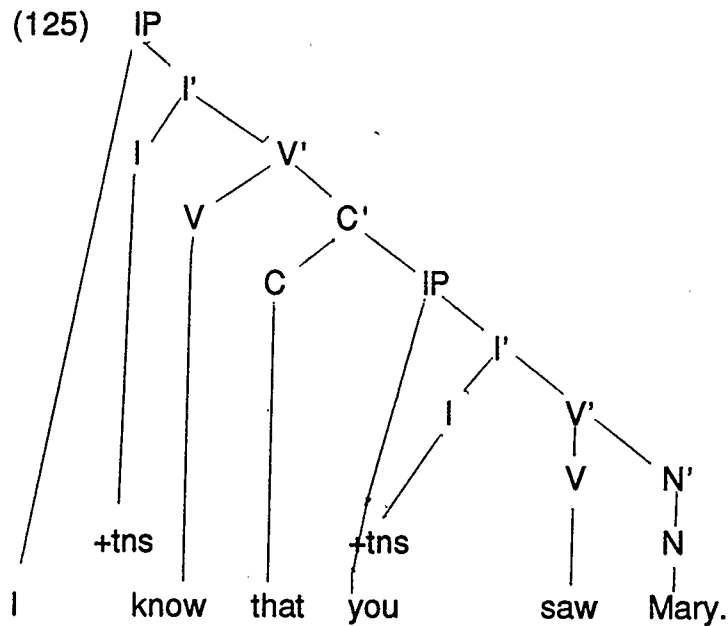
### 6.0 Consideration of C

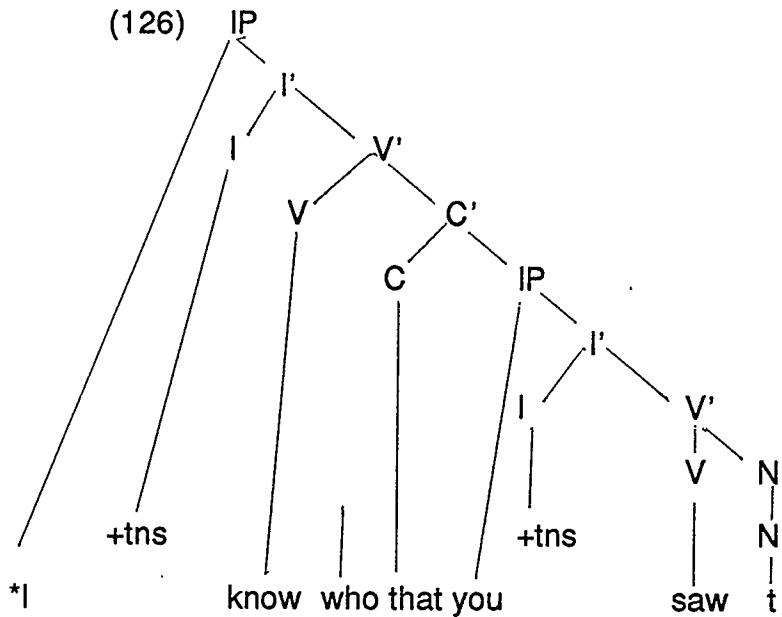
In English the Functional Category C is organized as follows (Fukui 1986:55):

Table 3

	F-features	C
Kase assigner	+WH	$\emptyset$
non-Kase assigner	none	that, if, whether, $\emptyset$

Recall that if one of the non-Kase assigners is in the C position, there is no specifier position and WH movement cannot take place. For example, (125) is grammatical but (126) is not, since *that* is a non-Kase assigner and there therefore is no specifier position or landing site for the WH word *who*.





In Thai there are two possible candidates for the Functional Category C: *waa* and *thii*, as seen in the examples below:

- (127) Mali phuut waa khaw ca pay talaat.  
 Mali say waa she will go market  
 Mali say waa she will go market  
 'Mali said she will go to the market.

- (128) Chan yindii thii khun maa haa  
 I glad thii you come look  
 I am glad you came to see (me).

In this chapter I will look at these two possible Cs in more detail.

### 6.1 Consideration of *waa*

There are several different ways in which *waa* is used.

(129) as a verb meaning 'to scold'

thaa nakrian may tham kaanbaan khruu ca waa  
 if student not do homework teacher will scold  
 'If the students don't do their homework the teacher will  
 scold (them).'

(130) as a verb meaning 'to say'

Mali waa thaa khaw niay ca may pay duu nangsi  
 Mali say if she tired will not go look movie  
 'Mali said if she's tired she won't go to the movie.'

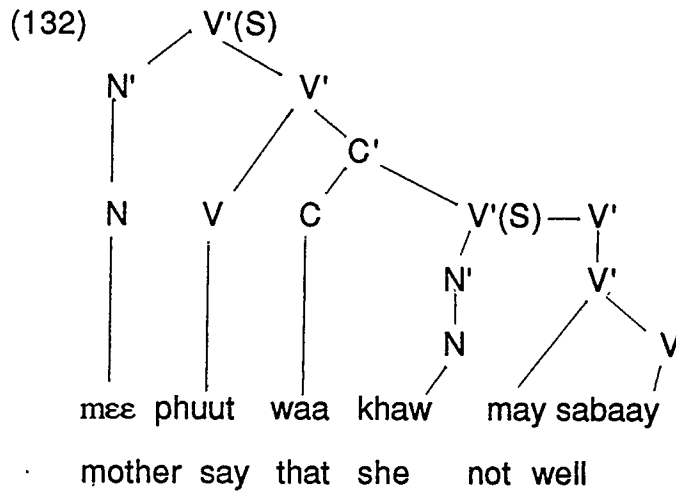
(131) with a verb of knowing, thinking, saying etc.

mæe phuut waa khaw may sabaay  
 mother say that she not well  
 'Mother said that she wasn't well.'

The status of *waa* in (129) and (130) as a verb is not controversial. It is the *waa* in (131) that must be examined more closely. There are three possible hypotheses concerning the *waa* in (131):

Hypothesis 1: *Waa* is the Functional Category C. The verbs *waa* 'to say' and 'to scold' are homophones with *waa* (C) 'that'.

The tree structure compatible with this hypothesis would be as in (132):



'Mother says that she is not well.'

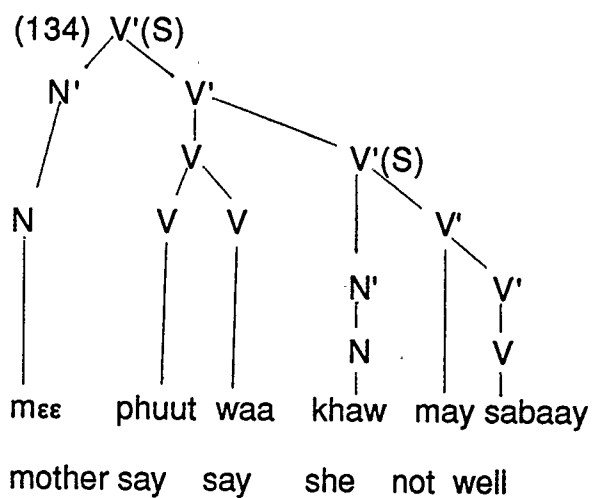
Hypothesis 2: *Waa* in (131) is the verb 'to say' used as a secondary verb in a serial verb construction (SVC) (Baker 1989) or V-V construction (Li 1990), a common construction in Thai. A V-V construction consists of two or more verbs in one clause such as in example (133).

(133) Phim phat nia khaay

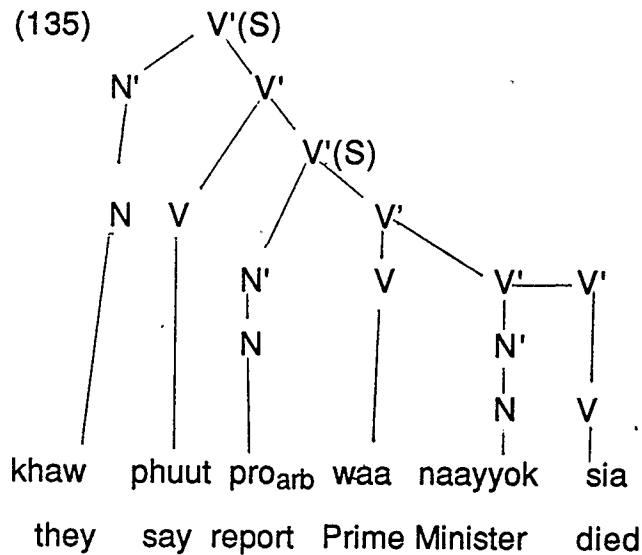
Phim fry meat sell

'Phim fried meat to sell.'

If this hypothesis is correct, either Thai does not have the Functional Category C or there is another element which is C. Hypothesis 2 would give the following tree structure for (131). (I adopt the analysis of Li 1990 that the verbs form a V-V compound).



Hypothesis 3: *Waa* is used as a verb with the meaning 'report' to introduce propositional complements. Hypothesis 3 differs from Hypothesis 2 in that *waa* takes as its subject so-called arbitrary pro (a non-overt argument which is not coindexed with another argument and thus has an interpretation similar to 'someone' or 'everyone').



'They say it was reported (by everyone/someone) the Prime Minister died.'

In the next sections I will look at Thai data to see which of these three hypotheses can be eliminated.

#### 6.1.1. Evidence from negation

Either of the verbs in a V-V can be negated as seen in the following examples:

##### (136) First verb negated

khaw may day naŋ thaan khaaw  
 s/he not PST sit eat rice  
 'S/he didn't sit down and eat rice.'

##### (137) Second verb negated

khaw naŋ chəəy may day thaan khaaw  
 s/he sat only not PST eat rice

khaw naŋ chəəy may day thaan khaaw

'She only sat down but didn't eat rice.'

However, when a verb + *waa* is used, *waa* cannot be directly negated, as (138) and (139) show. Instead, the verb *phuut* 'say' must be negated, as in (140).

(138) \*Mali phuut (chəəy) may day waa khaw ca pay kruŋtheep

Mali say (only) not PST waa she will go Bangkok

(139) \*Mali day phuut may waa khaw ca pay kruŋtheep

Mali PST say not waa she will go Bangkok

(140) Mali may day phuut waa khaw ca pay kruŋtheep

Mali not PST say waa she will go Bangkok

'Mali didn't say that she will go to Bangkok.'

(141) Mali phuut waa khaw ca may pay kruŋtheep

Mali say waa she will not go Bangkok

'Mali says that she will not go to Bangkok.'

This is not only evidence that *waa* is not a verb in an SVC, it is also evidence that the controversial *waa* is not a verb at all, as any verb can be negated with *may* (see chapter 4).

#### 6.1.2 Evidence from assignment of agent role

If *waa* is a verb meaning 'say' or 'report', it would assign an agent role. One way to determine whether a verb assigns an agent role is to see if it can be used with an adverb such as *deliberately* or *wholeheartedly*. These adverbs imply volition or willfulness, which only

agents can exhibit. For example, the adverb *wholeheartedly* cannot be used with a verb such as *rain*, which does not assign an agent role:

(142) \*It rained wholeheartedly.

But *wholeheartedly* can be used with a verb such as *study* (see 142) as *study* assigns an agent role to *she*:

(143) She wholeheartedly studied for her exam.

This test can be used to see if *waa* is a verb which assigns an agent role. The adverb *yaanmancay* 'wholeheartedly' can be used with the verb *phuut* 'say' as in (143) (note that in Thai adverbs follow the verb they modify):

(144) khaw phuut yaanmancay waa khaw choop yuu mianthay  
 s/he say wholeheartedly s/he like exist Thailand  
 'S/he said, wholeheartedly, that she liked living in  
 Thailand.'

The fact that the adverb *yaanmancay* can occur after the verb *phuut* 'say' means that this verb assigns an agent role (agent= *khaw* 's/he' in the example) as only agents can perform actions *yaanmancay* 'wholeheartedly'.

With the adverb following the controversial *waa* the result is ungrammatical:

(145) \*khaw phuut waa yaanmancay khaw choop yuu mianthay  
 s/he say waa wholeheartedly s/he like exist Thailand

The fact that the adverb *yaanmancay* cannot be used to modify *waa* in the example above shows that this *waa* does not assign an agent role.



However, when *waa* is clearly a verb (as in 146) it does assign an agent role (agent=*Phim*):

- (146) *Phim waa khaw choop kɔʔ hawaay*  
*Phim say she like island Hawaii*  
 'Phim said she likes the Hawaiian islands.'

Significantly, the adverb *yaanmancay* can be used in the same sentence:

- (147) *Phim waa yaanmancay khaw choop kɔʔ hawaay*  
*Phim say wholeheartedly she like island Hawaii*  
 'Phim said wholeheartedly that she likes Hawaii.'

When *waa* is clearly a verb, it can be modified by *yaanmancay* (as in 147) but the controversial *waa* (used with another verb as in 145) cannot be modified by *yaanmancay*. This is evidence that the controversial *waa* is not a verb.

### 6.1.3 Evidence from order of verbs

Baker (1989:540) says that a triadic verb (i.e. a verb which takes three arguments) cannot be the first verb in a serial verb construction.

If the verb *sii* 'buy' takes only two arguments, it can be the first verb in a V-V construction or SVC:

- (148) *chan sii khanom kin*  
 I buy sweet eat  
 'I bought a sweet to eat.'

In (148) *sii* 'buy' is a triadic verb as it has three arguments (*chan* 'I'=agent, *khanom* 'sweet'=theme, *caak Phim* 'from Phim'= source).

(149) \*chan sɿi caak Phim khanom kin

I buy from Phim sweet eat

'I bought a sweet from Phim to eat.'

When *sɿi* 'buy' takes three arguments, it cannot be the first verb in a V-V compound, as seen in (149).

Following this argument, if *waa* is the second part of a serial verb construction, (or V-V) the first verb should never be a triadic verb. But note example (150):

(150) Phim phuut kap Nit waa khaw ca may pay ŋaanliŋ.

Phim say with Nit waa he will not go party

Phim said to Nit waa he will not go to the party.'

The example above is grammatical even though *phuut* 'say' is a triadic verb, assigning three theta roles (agent to *Phim*, goal to *kap Nit* 'with Nit', theme to *khaw ca may pay ŋaanliŋ* 'he will not go party') in a construction where it precedes *waa*. Therefore *waa* cannot be a verb in a V-V or SVC.

#### 6.1.4. The 'that-trace effect'

In English the subject cannot be moved out of a clause leaving a trace immediately after the C *that* (see 151).<sup>1</sup> Movement of the object, however, does not leave a trace following *that* and is permitted (see 152). As subjects and objects do not behave in the same manner, we say that there is a 'subject-object asymmetry'.

(151) subject WH movement

\*Who do you think [that[ t saw John]]?

(152) object WH movement

Who do you think [that [Bill saw t]]?

Although Thai has no WH movement, it does allow topicalization, which also leaves a trace:

(153) a. without topicalization

Mali khit waa raw chɔɔp dek dek.

Mali think waa we like children.

'Mali thinks that we like children.'

b. topicalization of subject in embedded clause

\*raw, Mali khit waa t chɔɔp dekdek

us Mali think that t like children

'Us, Mali thinks that t like children.'

In contrast, topicalization of objects is allowed (as in 154).

(154) topicalization of object in embedded clause

dekdek Mali khit waa raw chɔɔp t

children Mali think that we like t

Children, Mali thinks that we like.'

This indicates that, like English, a 'that-trace' effect is seen in Thai.<sup>2</sup> The fact that there is a 'that-trace effect' (or more correctly a 'C-trace effect' in Thai is evidence that *waa* is the Functional Category C and not a verb.

### 6.1.5 Consideration of arbitrary pro

Hypthesis 3 depends on the idea that there is an arbitrary pro (a non-overt argument which is not co-indexed with another argument) which has the interpretation 'someone' or 'everyone'. Example (134) is repeated here:

- (134) *khaw* *phuut* *proarb* *waa* *naayyok* *sia*  
 they say report Prime Minister died  
 'They say it was reported the Prime Minister died.'

However, if *khaw* 'he, she, they' is replaced by a noun such as *mæɛ* 'mother' the *waa* cannot have the interpretation 'report'. For example:

- (155) *mæɛ* *phuut* *waa* *naayyok* *sia*  
 mother say *waa* Prime Minister died  
 'Mother said that the Prime Minister died.'

This could not be translated to mean:

'Mother said it was reported that the Prime Minister died.'

The fact that *waa* can have the interpretation 'was reported', as required in Hypthesis 3, only when *khaw* 'he, she, they' is the agent of the matrix verb, weakens the argument for this hypothesis.

### 6.2 Conclusion re *waa*

Recall the three possible hypotheses concerning *waa*:

- 1) *waa* is the functional category C
- 2) *waa* is a verb in a SVC with the meaning 'to say'
- 3) *waa* is a special verb meaning 'to report' that

introduces propositional complement.

A summary of the findings with respect to the controversial *waa* is as follows:

6.1.1 negation: evidence that *waa* is not a verb.

6.1.2 agent role assignment: evidence that *waa* is not a verb.

6.1.3 verb order: evidence that *waa* is not a verb in a V-V or SVC.

6.1.4 that-trace effect: evidence that *waa* is C

6.1.5 proarb : evidence against *waa* being the verb 'report'

In the table below an 'x' denotes that the hypothesis is refuted by that evidence and a '√' denotes that the hypothesis is supported by that evidence.

Hypothesis	1	2	3
6.1.1		x	x
6.1.2		x	x
6.1.3		x	
6.1.4	√		
6.1.5			x

Hypothesis 2 and 3 are refuted by some of the evidence and only hypothesis 1 is supported by any evidence. Therefore, I accept hypothesis 1 as the most likely; that is, *waa* represents the Functional Category C in Thai.

## 6.2 Consideration of *thii*

The second element in Thai that could be C is *thii*. Recall the example used in section 6.0 to illustrate *thii* as a possible C:

- (156) chan yindii thii khun maa haa  
 I glad thii you come look  
 'I'm glad you came to see (me).'

Unlike *waa*, *thii* has no verb counterpart although it does have two homophones with closely related meanings: a noun meaning 'place' and a locative preposition meaning 'at'.

- (157) *thii* as a noun  
 may mii thii yuu  
 not have place live  
 '(I) don't have a place to live.'

- (158) *thii* as a locative preposition  
 khaw yuu thii baan khaw  
 s/he is at house s/he  
 'S/he is at his/her house.'

The controversial *thii* in (156) could be a noun (like 157) or a preposition (158) or, like *waa*, it could be a C. In the next sections I will look at Thai data to see to which category the *thii* in (156) belongs.

### 6.2.1 *Thii* as head of relative clause

In relative clauses *thii* is used as the following example illustrates:

(159) *khon nii [thii say wæntaa] pen mɔɔ*  
 person this thii wear glasses is doctor

'This person that is wearing glasses is a doctor.'

Although *thii* introduces a relative clause, it does not have to be a relative pronoun. Note that the C *that* can be used in place of the relative pronoun *who* in the English equivalent of the sentence:

(160) The person that /who is wearing glasses is a doctor.

The fact that *thii* can introduce a relative clause therefore suggests that it could be a C like English *that*.

#### 6.2.2 A *thii* phrase modified by *nii*

At first glance the following example seems to be counterevidence to *thii* belonging to the category C:

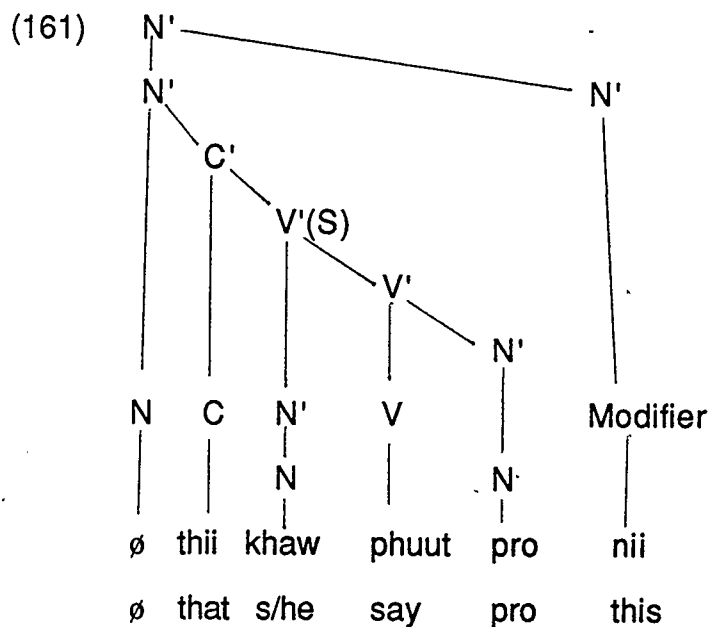
(161) [*thii khaw phuut nii*] *pen khwaamcing*  
 thii s/he say this is truth

'[This which s/he said] is the truth.'

Since the phrase *thii khaw phuut* is modified by *nii* 'this', this phrase appears to be an N'. Recall that only N' can be modified by *nii* 'this', *nan* 'that' and *noon* 'that' (see Chapter 3). If the phrase in question is an N,' then its head, presumably *thii*, must be a noun and it would not be C. However, on further investigation it appears that a noun can occur before *thii* in this type of pattern. Example (162) shows the noun *thamot* 'everything' preceding the *thii*:

- (162) thaŋmot thii khaw phuut nii pen khwaamcin  
 everything that s/he say this is truth  
 'Everything that s/he said is truth.'

This suggests that in (161) above (repeated below with a tree structure) there is what is known as a 'free relative clause'- a relative clause that modifies a nonovert noun.<sup>3</sup>



As expected, such structures can be used in the same positions as regular N's, as shown in (161) (subject of a verb), in (163) (object of a verb) and in (164) (object of a preposition).

(161) subject of V

- [∅ thii khaw phuut maa nii] pen khwaamcin  
 that s/he say this is truth  
 'That which s/he said is the truth.'



(163) object of V

coŋ taam [θ thii khaw phuut maa nii]

IMP follow that s/he say come this

'Do this what she has said (to do).'

(164) object of P

chan may ruu kiaw kap [θ thii khaw phuut maa nii]

I not know about that s/he say come this

'I don't know about this which s/he said.'

It appears then, that an example such as (161) is not counterevidence to *thii* being C. In such an example, *thii* is again C (equivalent to English 'that') in a relative clause without a noun to modify.

### 6.2.3 Selection of *thii* and *waa* headed complements

There are some verbs which can only select C' complements. If these verbs can select complements headed by either *waa* or *thii*, this would be evidence that *thii* belongs to the same category as *waa*.

Some of the same verbs which can select complements headed by *waa* can also select complements headed by *thii*, as seen in the examples below.

(165) khaw tatsincay waa/thii ca pay pii naa.

s/he decided waa/thii FUT go year next

'S/he decided that (s/he) will go next year.'

The verb, *tatsincay* 'decide', cannot take an N' or a P' complement as seen in (166).

- (166) *khaw tatsincay \*kaanrian /\*thii kaanrian pii naa*  
 s/he decide \*studies/\*about studies year next  
 'She decided \*studies/\*about studies next year.'

The fact that the verb *tatsincay* 'decide' cannot take N' and P' complements but can take complements headed by *thii* and *waa* is evidence that *thii* belongs to the same category as *waa* and that *thii* is neither a noun or preposition. Like *waa* it must be a C.

There are some verbs (e.g. *diicay* 'to be happy', *siacay* 'to be sorry') which do not select *waa* but rather can only select *thii*:

- (167) *chan siacay thii /\*waa khun maa may day*  
 I sorry that you come not able  
 'I'm sorry that you are unable to come.'

As well, there are some verbs that select *waa* and not *thii*:

- (168) *Mali phuut waa/\*thii khaw ca pay kanadaa*  
 Mali say that she FUT go Canada  
 'Mali said that she will go to Canada.'

This is not inconsistent with *thii* and *waa* both being C as in English some verbs select the C *whether* and some the C *that*.

- (169) I hope that/\*whether you can come.

- (170) I wonder whether/\*that you can come.

Like English *whether* and *that*, there are some subtle constraints on the use of *thii* and *waa*. This is clearly seen with the verb *fan*. *Fan* +

*thii* has the meaning 'to hope' whereas *fan + waa* has the meaning 'to dream'. The first meaning involves something which has not been actualized i.e. you are just 'hoping' something will happen. But 'to dream' is something which has already been actualized; i.e. the dream has already occurred. A 'hope' is not 'actualized' in the same way that a dream is.

(171) *khaw fan thii ca pay Amerikaa*

s/he hope that FUT go America

'She hopes to go to America.'

(172) *khaw fan waa ca pay Amerikaa*

s/he dream that FUT go America

'She dreamt that she would go to America.'

The difference is further illustrated by the fact that when an event has already occurred, *thii* cannot be used because you cannot 'hope' for something that has already happened:

(173) *thii + past = ungrammatical*

\**khaw fan thii day pay Amerikaa*

s/he hope that PST go America

\*'She hoped that she had gone to America.'

*Waa*, however, can be used with either a past or future event (compare 174 with 168):

(174) *waa* + past = grammatical

khaw fan *waa* day pay Amerikaa

s/he dream that PST go America

'She dreamt that she went to America.'

#### 6.2.4 The that-trace effect

As with *waa* there is also a that-trace effect when *thii* is used

(175) a. without topicalization

Mali diicay thii raw chɔɔp dekdek

Mali glad that we like children

'Mali is glad that we like children.'

b. topicalization of object of embedded clause

dekdek Mali diicay thii raw chɔɔp t

children Mali glad that we like t

'Children, Mali is glad that we like.'

c. topicalization of subject in embedded clause

\*phuak raw Mali diicay thii t chɔɔp dekdek

group us Mali glad that t like children

'Us, Mali is glad that t like children.'

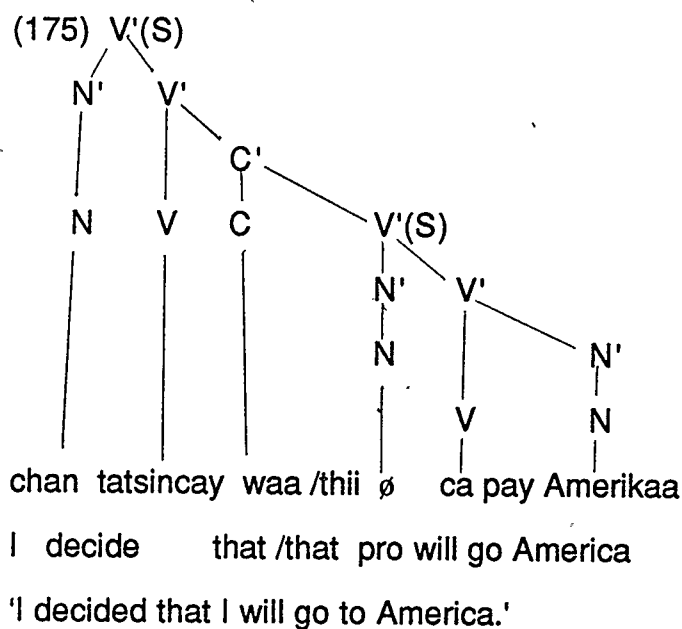
The fact that there is a that-trace effect with *thii* provides strong evidence that *thii* is C.

### 6.3 Conclusion re *thii*

Since *thii* can be used alternatively with *waa* in many cases, I conclude that the controversial *thii* is also C. As *thii* is used in relative clauses this is further evidence that *thii* is C.

### 6.4 Category C in Thai

Because there is no specifier position in projections of C in Thai, thus there is no WH-movement either as there is no position into which a WH word can move. As neither *waa* nor *thii* have F-features, they are non-Kase assigners. In other words, the category C projects only up to the C' level and there is no landing site (or CP projection) for a moved WH word (see example 175).



Thus, we see that Fukui's prediction that there may be languages which can have Functional Categories without F-features and specifiers proves correct.

A summary of C category in Thai is as follows:

F-features

non-Kase assigner none      waa, thii

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<sup>1</sup>This evidence contradicts Cole's (1987) conclusion that there is no subject-object asymmetry in Thai and that extraction of both is allowed. Cole uses the following examples of relativization taken from Pingkarawat (1985) (phonetic symbols are as Pingkarawat uses and differ slightly from those used in this thesis.):

a) subject relativization

Dek khon thii Nuan bɔ̀ɔk Lek waa [θ hen Chart] pai laaw.

child that Nuan speak Lek waa see Chart go already

'The child that Nuan told Lek that θ saw Chart already went.'

b) object relativization

Dek khon thii Nuam bɔ̀ɔk Lek waa [Chart hen θ] pai laaw

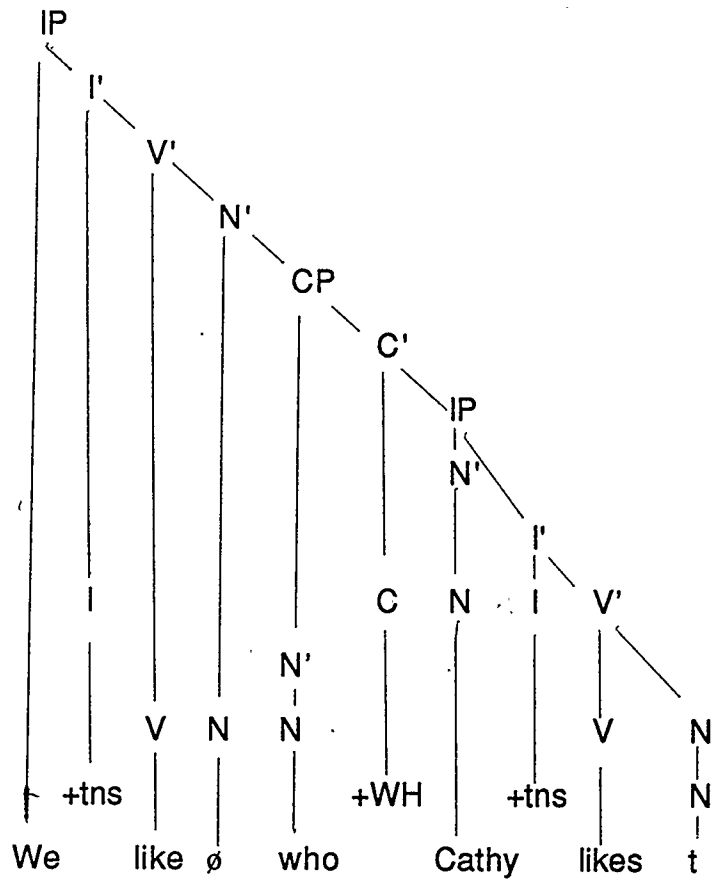
child that Nuan speak Lek waa Chart see go already

'The child that Nuan told Lek that Chart saw θ already left.'

Thai speakers that I consulted found these sentences very confusing (as are the English translations) and judged them as ungrammatical.

<sup>2</sup>The term *free relative* is used by Bresnan (1978) and refers to the fact that the noun which is modified (the head of the noun phrase) is non-overt. The head of the relative clause (C or COMP) is either overt as 'that' or the specifier position is filled by the moved relative pronoun. The term 'headless relatives' has also been used. The following surface

structure tree shows the relative pronoun moved to the specifier position under CP, leaving a trace behind in the deep structure position.





## Chapter 7

## Conclusion

## 7.0 Summary

In the preceding chapters I have shown that Thai does not have the Functional Categories D (Determiner) and I (Inflection) but does have the Category C (Comp). However, since category C does not have any F-features or Kase to assign in Thai, it never projects to the CP level. Because only Functional Categories with F-features have specifier positions, Thai therefore does not have specifiers.

Following is a summary of Functional Categories in Thai:

Functional Categories	C	I	D
Kase assigner	none	none	none
non-Kase assigner	waa, thii	none	none

Fukui predicted (Fukui 1986:262), a language may have one, two or all three Functional Categories. Whether or not the Functional Categories have Kase assigners and non-Kase assigners provides several different parameter combinations. There would be a total possible number of 27 combinations of the parameters ( $3 \times 3 \times 3$ ). However, all of these combinations may not be represented by a real language. For example, it may be true that there is no language which has I but does not have C.

### 7.1 Typological differences between Thai, English and Japanese

The lack of Kase-assigning Functional Categories in Thai explains some of the typological differences between English and Thai and similarities between Thai and Japanese. These are as follows:

	Thai	Japanese	English
1) Subject-aux inversion	no	no	yes
2) Need for expletives	no	no	yes
3) Multiple nominatives	yes	yes	no
4) WH-movement	no	no	yes
5) Determiners	no	no	yes
6) Multiple genitives	no	yes	no
7) Specifiers	no	no	yes

The fact that Thai and Japanese do not have I accounts for the lack of expletives, lack of subject-aux inversion and the possibility of multiple nominatives in both languages.

Even though Japanese does not have a C category and Thai does, neither language has WH movement. This is because C in Thai is a non Kase assigner and there is no specifier position for a WH word to move into.

The lack of D in both Japanese and Thai would suggest that both language have multiple genitives. However, Thai possession is expressed by use of a preposition *khɔ̀ɔ̀ŋ* and is not a true genitive

construction as in Japanese. This makes it possible for Japanese to have multiple genitives (as nothing closes off the phrase). In Thai, however, multiple constructions using the same preposition, in this case *khooŋ*, are ungrammatical.

Specifiers, of course, are absent in both Japanese and Thai because Japanese does not have Functional Categories and Thai has only one (C) and it does not assign Case.

As other languages are studied with these parameters in mind, it is hoped that some of the unsolved mysteries of typological differences will be solved as well, as has been the case with Japanese and Thai.

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