An Interface between Language and Cognition: Evidence from the Acquisition of Classifiers in Thai*

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Abstract

Six strategies for the acquisition of classifiers are proposed here with regard to spontaneous use of classifiers by two Thai subjects. They are: the early attempt strategy (2 – 2 ½ years), the 'noun' identification strategy (2 – 2 ½ years) , the identical noun deletion (2 ½ - 3 years), the over-extension strategy (3 – 4 ½ years), the trial and error strategy (4 ½ - 5 years) and the dodging strategy (4 ½ - 5 years). All these strategies reflect an interface between language and cognition.

บทคัดย่อ

บทความนี้แสดงให้เห็นหลักการสำคัญในกระบวนการแรกรับภาษาแม่ของเด็ก โดยพิจารณาว่าการพัฒนาทางภาษาเกิดควบคู่กับการพัฒนาทางพุทธิปัญญา (cognitive development) ทั้งนี้เห็นได้จากกลวิธีการพัฒนาลักษณนามของเด็กไทยซึ่งผู้เขียนศึกษาในระยะยาว กลวิธีดังกล่าวมีหลายขั้นตอนคือ ขั้นเริ่มรับรู้การปรากฏของลักษณนาม (2 –2 ½ ขวบ) ขั้นการใช้นามซ้ำรูปแทนลักษณนาม (2 – 2 ½ ขวบ) ขั้นตัดนามซ้ำรูปซึ่งใช้แทนลักษณนาม (2 ½ - 3 ขวบ) ขั้นขยายการใช้ลักษณนามอื่นด้วยลักษณนามเดิมที่เรียนรู้มาแล้ว (3 – 4 ½ ขวบ) ขั้นลองผิดลองถูกเมื่อต้องใช้ลักษณนามหลากหลาย (4 ½ - 5 ขวบ) และขั้นเลี่ยงการใช้ลักษณนามด้วยการใช้คำอธิบาย (4 ½ - 5 ขวบ)

Introduction

Evidence from the writer's previous work on "Interactional Process and Adult Language Addressed to a Thai child" (Tuaycharoen, 1995) gives an indication how a Thai child, through interaction, learns new words, widens the conversational frames and increases complexity in his language use. In this paper, the writer aims to give another longitudinal account of the acquisition of classifiers in Thai in order to show that cognition is also an essential factor in language processing.

The data for this study consist of two sets from spontaneous speech of a brother and a sister of the same family. The first set of data comes from tape-recordings of the boy subject, from the age of 3 months to the age of 24 months; additional diary-observations from the age of 2 ½ years to 4 years were also taken into consideration. The second set of data comes from diary observations of the speech of the girl subject, the first subject's younger sister, in various situations from the age of 3 to the age of 5 years. Observations from the two sets of data support each other, and as the two subjects are brother and sister whose family surroundings are the same, it is believed that the data are valid for an analysis when sex-differences are not taken into account.

The Acquisition of Classifiers

Classifiers are acquired late, i.e. after most of the phonological and some of the semantic and syntactic features have been acquired. However, it appears that there is a 'blank' attempt to use a

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classifier at the age of 24 months. By the age of 5 years, the classifiers are not yet fully acquired. The way classifiers are acquired is now described.

Six strategies for the acquisition of classifiers are proposed here with regard to the spontaneous use of classifiers by the two subjects.

I. **The Early Attempt Strategy (2 - 2 ½ years).** In interaction with the adults, every time a number was given, the first subject showed some hesitation, which appeared in pitch and vowel prolongation. The hesitation was followed either by another piece of utterance or by silence. A detailed account of this stage is to be given below.

At the age of 24 months, all the five tones are in use, but the use of the falling and the high tones is sporadic, and they are sometimes replaced by any one of the other three tones, i.e. Low, Mid, and Rising. As far as the segmental units are concerned, all of the vowels and most of the consonantal units have been acquired. However, the velar plosive, velar nasal, alveolar fricative, alveolar flap as well as the liquid - clusters, e.g. /pl-/,/phl-/, /pr-/, /phr-/,/tr-/, /kl-/, /khl-/, /kr-/, /khr-/, are not yet fully developed. The first orientation with numbers, which are significant for the use of classifiers, took place when the child was 22 months old. At this stage the first child was taught how to count from one to five; this was done by manipulating the child's fingers for each number, i.e., /nùŋ/ 'one', /sŏ:ŋ/ 'two', /săːm/ 'three', /sìi:/ 'four', /hâ:/ 'five'. The early response to these numbers was silence possibly because of inability to understand the concept and because of limited production ability. It took about two months before the child could produce /thŏ:/ for the model /sŏ:ŋ/, 'two'. Everytime a series of five numbers was recited, the child responded to /sŏ:ŋ/ only by saying /thŏ:/ and was silent for the rest. It may be said that during this period the child's repertoire consists of one form of numeral, /thŏ:/, and it is used frequently regardless of appropriateness.

The evidence that a Thai child at the age between 2 and 2 ½ years uses a number or a series of newly acquired numbers in interaction only to complete the discourse process even though it is semantically inappropriate is further supported by another set of data collected by a group of undergraduate students who were attending the Language Acquisition course at Thammasat University during Oct.-March, 1984. The "stereotype expressions" used as answers are given in Examples 1 and 2.

Example 1 : Stereotype Expressions 1

Situation: A girl, Um, aged 2 ½ years, was talking to an adult about a visit to a Magic Land. (The classifiers are underlined.)

Adult:	/pai thâŋ mòt kì: khon/
	'How many people visited (the Magic Land)?'.
Um:	/nùŋ tɕŏŋ kì: tɕì: khon/
	'one two ? four (classifiers)'.
Adult:	(laugh) /kì: khon ná daŋ daŋ/
	'How many people? Loudly please.'
Um:	/nùŋ tɕŏ:ŋ tɕì:/
	'one two four' (the numbers are incorrect)

The interaction went on until----

Adult:	/pai PATA ûm tɕhô:p kin arai/
	'What did Um have at the PATA department store?'
Um:	/daŋ kîn/
	'Dunkin'
Adult:	/daŋ kîŋ arai/
	'Dunkin what?'
Um:	/daŋ kîŋ do: nát/
	'Dunkin Donut'

Adult: /lέ:u nám arai/
'And what kind of drink (did you) have?'
Um: /nám khùət/
'bottled drink' (e.g. Pepsi, Coca Cola)
Adult /nám khùət duâi kì: bàːt /
'Oh a drink as well. How many bahts did it cost?'
Um: /nùŋ tɕɔ̌ːŋ tɕì: tɕì: /
'one two four four'
(Collected by Prae Popermhem, Yawarate Siripreedapak, Pontip Piyarat, and Petchalada Suwanpong)

In this example, the child used a series of one-two-four (four) in the responses when numbers were required. It is clearly seen that she acquired the numbers as a set or chunk, and used them consistently where numbers were needed regardless of the meaning.

From the data of the present study, it was found that whenever a number was required in an interaction with an adult the one form, /thɔ̌:/, was used. In some situations the meaning is appropriate; in others it is not. Together with the number, the early recognition of the presence of a classifier is seen from silence or hesitation as shown is Example 2.

Example 2: Stereotype Expressions 2

2.1) The subject Pui aged 24 months. (The classifier in the adult's speech is underlined.)
Adult: /nai sà bâːn luŋ wíɕhai miː plaː kìː tuə lûːk/
'How many fish (did Baby see) in Uncle Wichai's pond?'
Pui: /thɔ̌:/ (silence)---tɕhai tɕhai/
'two Wichai'. (the number is correct.)
Adult: /sɔ̌ːŋ lɔ̌ lûːk/
'Two, really Baby?'
Pui: Silence - (The correct response from the child would be /thɔ̌ː tuə/)

2.2) Adult: /mɯ̂ə tɕháu níː lûːk hěn nók kìː tuə/
'How many birds did Baby see this morning?'
Pui: /thɔ̌ : : : : : / (hesitation then silence)
- (The answer 'Two' is not correct : there was only one bird.)

2.3) Adult: /lûːk kìː dɯən léːu luːk/
'How old (how many months) is Baby now?'
Pui: /thɔ̌ : : : : : / - (The answer is not correct; he was then 24 months.)
'Two'

It is possible to say that in interaction with an adult, the child is often exposed to classifiers in the adult's utterances, especially when the classifier is accompanied by the word /kìː/ 'how many'. It seems that the child is aware of the presence of a classifier in adult speech, but does not try to produce it as he has not yet sorted out which classifier to use with which noun, and may even not yet have understood the concept of classifier. However, an awareness of the classifier is shown in the child's use of hesitation and pause.

II. **The Noun Identification Strategy (2 – 2 ½ years).** From the age of 2 to 2 ½ years, the child's indication of the presence of a classifier appears in the use of the repetitive noun form but this

was overextended . The child used a noun followed by a number and added the same noun to indicate the unit classifiers. It is, perhaps, reasonable to say that the child perceives the representation of a noun and its referential clue; and since there are many different forms of classifiers in the adult speech, it is impossible for the child, at this stage, to use the appropriate form. Thus the strategy of applying noun identification is attempted in place of a classifier. Examples are from the data of Pui, who at this time was able to recite some nursery rhymes, and used the numbers from 1 to 10; the noun and the noun identification used in place of a classifier, illustrated in Example 3, are underlined.

Example 3 : Noun Identification

3.1) Pui: /phûən mi: <u>pău</u>/ 2 / <u>pău</u> / (/pău/ is the child's reduced form of /krapău/ 'pocket'.)
'Friend has 2 pockets." (the child meant the side pockets of trousers; the adult classifier is /khâːŋ/).

3.2) Pui was describing the food he had for lunch; the first two words in his utterance are not correct. He had two pieces of chicken only.
Pui: /phík kûŋ <u>kài</u> 2 <u>kài</u>/
'chili, shrimp, chicken 2 chicken.'
(The adult classifier for chicken is /tuə/ 'whole', and /tɕhín/ 'piece'.)

3.3) Pui: /nók 3 nók/
'bird 3 bird.'
(The adult classifier is /tuə/.)

3.4) Pui: /kɛ̂ːu 1 kɛ̂ːu/
'glass 1 glass.' (The adult classifier is /bai/.)

However, some of the repetitive classifiers which appeared in the child's utterances were in the conventional form of Noun + Numeral + Noun, e.g. /níu 5 níu/ 'finger 5 finger', /taː 2 taː/ 'eye 2 eye'.

It was worth pointing out that adult members of the family, when interacting with the child, never corrected his usage. Instead, they repeated his utterances but with the appropriate classifiers, and sometimes with emphasis on the classifiers. This must have helped the child to gradually identify the relevant classifiers from the adult utterances, and he eventually tried to match his forms with the adults'. However, before the matching was complete, the child went through another strategy, the deletion strategy.

III. **The Identical Noun Deletion Strategy (2 ½ - 3 years).** From the age of 2 ½ to 3 years, Noun repetition was observed to gradually come into use, and as pointed out earlier, some uses were conventionally appropriate. However, during this period the child became more advanced linguistically. He appeared to be able to register the differences between the classifiers and the preceding nouns used in the adult speech, and made attempts to match his production with the adults'. In addition, the child acquired the neutral classifier, /ʔan/, and used it in response to the phrase /thâu rài/ 'how much' or 'how many', as shown in Example 4.

Example 4: Neutral Classifier /ʔan/

4.1) Adult: /pŭi mi: tɕháːŋ thâu rài / 'How many elephants does Pui have?'
Pui: 2 /ʔan/ (The adult classifier for 'elephant' is /tuə/.)

4.2) Adult: /nai tɕa:n mi: khanŏm thâu rài/
'How many candies are there on the plate?'
Pui: 4 /ʔan/ (/ʔan/ is appropriate here.)

The Identical Noun Deletion Strategy was used when the child was uncertain about the correctness of the classifier he used during interaction, or when the adults smiled or repeated the question. Examples are from the data of Pui; the identical nouns and the numbers as well as the adult's classifier are underlined, as shown in Example 5.

Example 5: Identical Noun Deletion

5.1) Pui: /phî: wă:n mi: <u>mă:</u> 2 <u>mă:</u> /
'Cousin Waan has 2 dogs.'
Adult: (smile) /arai ná lû:k/
'What, Baby?'
Pui: /<u>mă: sŏ:ŋ</u> ---/
' dog 2'

5.2) Adult: /bon tôn mái mi: nók kì: tuə lû:k/
'How many birds were there on the tree?'
Pui: /<u>săːm nók</u>/ (The first noun is left out as it has already been used
' 3 bird' in the adult's speech.)
Adult: /thâu rài lû:k/
'How many, Baby?'
Pui: /<u>nók săːm</u> ---/ (The second noun is deleted.)
'bird 3'

The deletion strategy is practised at this stage when the child appears to realize that the form of the classifier is different from the noun form. This is prior to the period when different forms of classifiers become widely used by the subjects.

IV. **The Over-extension Strategy (3 – 4 ½ years).** In this stage classifying forms are used extensively. Some are conventionally appropriate; others are over-extended. The term 'Over-extension' is used to describe the classifiers produced by the subjects of this study since the conditions of application are along the same lines as Eve Clark's report on the acquisition of meaning (Clark, 1975).

From this stage onwards, both sets of data are taken into consideration. Most of the classifiers which are recognized as correct forms at this stage are related to the children themselves and their environment, e.g., body parts, objects used in the home situation, and in school. Examples are given in Table I. Here only the classifiers are transcribed; the conventional forms are given in brackets where they differ from the child's forms.

Table I Child's Forms of Classifier

OBJECT	MACHINE	BODY FEATURE
1. book 1 /lêm/	1. radio 1 /khɯ̂əŋ/ (khrɯ̂əŋ)	1. nose 1 /tɕamù:k/
2. talc 1 /kapŏŋ/ (krapŏŋ)	2. electric fan 1 /khɯ̂əŋ/	2. ear 2 /hŭ:/
3. glass 2 /bai/	3. tape-recorder 1 / khɯ̂əŋ/	3. tooth 4 /sî:/
4. dish 1 { /bai/ /bai nɯŋ/	4. TV 1 / khɯ̂əŋ/	4. hand 2 /mɯ:/
5. banana 2 { /bai/ /lû:k/	5. lego 1 { /ja:n/ /lam/ (An aeroplane made from a lego set.)	5. finger 5 /níu/
6. medicine 2 /khùət/ (in bottle)		6. tongue 1 /lîn/
7. lotion 1 /khùət/		
8. Baby oil 1 /khùət/		
9. medicine 1 /lɔ̀:t/ (in tube)		
10. pen 2 /thɛ̂:ŋ/		
11. paint-brush 1 /thɛ̂:ŋ/		
12. pencil 4 /thɛ̂:ŋ/		
13. electric-lead 1 /sên/		
14. blanket 1 /phŭ:n/		
15. orange 2 /lû:k/ (whole)		
16. orange 1 /kì:p/(klì:p) (piece)		

The classifiers which are over-extended appear to be either perceptual-based or functional-based, but the numbers of items found with the perceptual-based criterion are greater than the functional-based. The over-extension strategy was of two kinds : a) Generic to specific, and b) Major classification to its components.

a) **Generic to specific.** The children used classifiers with reference to the general form when specifying its parts or objects with perceptual or functional similarity. Some examples are given below in Example 6.

Example 6 Overextension Strategy a)
(The classifiers are underlined.)

6.1) Pui: (aged 3 ½ years)/mɯ̂ə tɕháu nŭ: kèp malí 2 <u>tôn</u> pai fà:k khu: (khru:)/
'this morning I pick jasmine 2 <u>tree</u> for teacher' (literal translation);
(/tôn/ is the classifier for trees and plants; the classifier for flowers is /dɔ̀:k/.)

6.2) Pui: /nŭ: jà:k dâi kradà:t 2 lêm/
'I would like paper 2 book'
(/lêm/ is the classifier for "book"; the classifier for "paper" should be /phè:n/ "piece".)

6.3) Pum, aged 4 ½ years (having dinner with her aunt)
Pum: /au kài ma: tuə nɯŋ/ (taking one piece of chicken)
'get chicken 1' (literal translation)
Adult: /rau mi: kài khê: năi/
'How many (pieces of) chicken are we having?'
Pum: /rau mi: kà: khê: 2 tuɔ/
'we have chicken only 2 chicken' (literal translation)
/au tuə nî: kɔ̀:n/
'get this first'
(/tuə/ is the classifier for a whole chicken, but /tɕhîn/ is for pieces of chicken. In this example the child used /tuə/ in place of /tɕhîn/ throughout.)

The other examples that follow are taken from Pum's data in a 'How many' game where the adult deliberately avoided using leading classifiers in her question.

Table II Over-extension Strategy a)
(The classifiers are transcribed; the appropriate adult classifiers are in brackets.)

NOUN	NUMERAL	CLASSIFIER	REFERENT OBJECT (The first referent the child used with the particular classifier)	REFERENT CLASSIFIER
1. tooth-brush	1	/thê:ŋ/ (/ʔan/)	pencil	/thê:ŋ/
2. hair-cream (in a jar like container)	1	/kapŏŋ/ (/krapùk/)	plastic or aluminium container	/krapŏŋ/
3. powder-compact	1	/kapŏŋ/ (/talàp/)	same as 2	
4. toilet-paper (in round plastic container)	1	/kapŏŋ/ (/muán/)	plastic container	/kapŏŋ/
5. balm	1	/khùət/ (/krapùk/)	glass container	/khùət/
6. orange-rind	1	/bai/ (/tɕín/)	orange (whole)	/bai/, /lû:k/
7. ash-tray	1	/thûəi/ (/ʔan/)	cup, bowl	/bai/, /thûəi/
8. key(1 key)	1	/phuəŋ/ (/ʔan, dɔ̀:k/)	bunch of keys	/phuəŋ/
9. scotch-tape	1	/kɔ̂:n/ (/ʔan, muán/)	round rubber eraser, stone	/ʔan/, /kɔ̂:n/
10. vase(with flowers in)	2	/dɔ̀:k/ (/bai/)	flowers	/dɔ̀:k/
11. toe	10	/thá:u/ (/nîu/)	foot	/thá:u/, /khâ:ŋ/
12. pillow-case	1	/phuŭ:n/ (/plòk, /bai/)	sheet, blanket	/phuŭ:n/

In the case of the lexical item number 3, viz, 'powder-compact', the child seems to have used the functional criterion. For Pum, the second subject, the first referential experience was the use of talc in a bottle-like aluminium container, and the classifier /krapŏŋ/ or /kapŏŋ/ had been heard and used by the child for a long time. So the appropriate form of classifier for talc, i.e., /kapŏŋ/, was used. When shown a powder compact, she probably knew that the function of the powder was the same as that of the talc, i.e. to use on the face. Regardless of the different shapes of the containers, the same form of classifier was produced.

Example number 6, orange-rind, illustrates over-extension based on the generic form, i.e. orange (whole). In fact the child was capable of using the classifiers for a whole orange, i.e., /lûːk/, and for pieces of orange, i.e., /kìːp/ for /klìːp/, (see Table I Nos. 15 and 16). The classifier for orange-rind, /tɕhín/, is unfamiliar to the child. Of the two classifiers for 'orange' which she had in her repertoire, i.e. /lûːk/ and /kìːp/, she selected /lûːk/ which indicates the over-extension of the generic form to refer to the specific part.

Item number 10, 'vase', also illustrates the over-extension of the whole setting rather than its elements. It is very common for the child to see a vase with flowers in, and the first attraction is probably the flowers. Therefore when a vase with flowers was shown, the child unhesitatingly used the flower classifier /dɔ̀ːk/. In fact, she could have used the neutral classifier /ʔan/ for the vase since the classifier /ʔan/ was used sporadically by her in reply when some objects were shown to her. In this case the application of the classifier depends on the perception of the whole unit and on the most salient signal.

b) **Major classification to its component.** The classifiers used under this category are mainly for things related to machines or things with sound and/or electrical power. At this stage, the children are able to use some classifiers for machines properly (cf. list in Table I); however, the classifiers of some other objects with machine components appear to be over-extended. Examples are given in Table III.

Table III Over-extension Strategy b)
Data from Pum

NOUN	NUMERAL	CHILD CLASSIFIER	ADULT CLASSIFIER
1. Volkswagen car	1	/khwîəŋ/	/khan/
2. motor cycle	1	/khwîəŋ/	/khan/
3. bicycle	1	/khwîəŋ/	/khan/
4. refrigerator	1	/khwîəŋ/	/tûː/
5. alarm clock	1	/khwîəŋ/	/rɯən/
6. ironing-board	1	/khwîəŋ/ (for khrwîəŋ)	/ʔan/

Examples 1 to 3 in the Table indicate over-extension under the functional-similarity criterion as mobile vehicle on wheels. It's interesting to note that the adult has the same classifier for car, motor-bike, and bicycle, i.e. /khan/. However, examples 2 and 3 also share several aspects of perceptual similarity.

Example 6 in the same Table shows that the child associates the ironing-board with its component, i.e. an iron; thus the classifier /khrwîəŋ/ was used instead of /ʔan/

V. The Trial and Error Strategy (4 ½ - 5 years). During the age of 4 ½ to 5 years when the children are using some classifiers, and have a degree of over-extension, they also make use of a Trial and Error Strategy for some classifiers that they are not sure of. Such a strategy involves the other strategies used earlier, i.e., Noun Identification, Deletion, and Over-extension. The shift from one strategy to another is also seen, as in Table IV below.

Table IV Trial and Error Strategy

NOUN	NUMERAL	CHILD FORM	ADULT FORM	SELF CORRECTION	STRATEGY
/taː/ 'eye'	2	/lûːk/	/khâːŋ, taː/	/taː/	Over-ext./ Noun Iden.
/khíu/ 'eyebrow'	2	/khíu/	/khâːŋ/	/khâːŋ/	Noun Iden.
/tháːu/ 'foot'	2	ø	/khâːŋ/	-	Deletion
/thîː jép kradàːt/ 'stapler'	1	ø	/ʔan/	-	Deletion
/níu tháːu/ 'toe'	10	/tháːu/	/níu/	-	Over-ext.
/túkkataːmǐː/ 'teddy bear'	1	/mǐː/	/tuə/	/tuə/	Noun Iden.
/rôm/ 'umbrella'	1	/rôm/	/khan/	/lêm/	Noun Iden./ Over ext.
/krapău wăːi/ 'cane case'	1	ø	/bai/	/wǎːi/	Delet./ Noun Iden.
/tóʔ/ 'table'	1	ø	/tuə/	/tóʔ/	Delet./ Noun Iden.
/plɯ̀ak sôm/ 'orange-rind'	1	/sôm/	/tɕhín/	/plɯ̀ak/	Over ext./ Noun Iden.
/kaːŋ keːŋ/ 'trousers'	1	ø	/tuə/	-	Deletion

Most of the classifiers of the items mentioned above are not commonly used in the child's environment; therefore she resorted to the Trial and Error Strategy.

VI. **The Dodging Strategy (4 ½ - 5 years).** In addition, there is another strategy which was found in the data of the second subject only. That is, whenever she was asked about something in pairs, she did use the classifier for 'pair', i.e. /khûː/, but when only one of the pair was shown, she used, what will be called a dodging strategy, and the result is acceptable if not common, as shown in Example 7.

Example 7 Dodging Strategy

	ANSWER
- 1 hair - pin was shown	/khûŋ (khrûŋ) ʔan/ 'half of it'
- 1 shoe was shown	/khûŋ nɯŋ/ 'half'

Conclusion

To summarize the strategies in the acquisition of classifiers by the children in this study, it is proposed that the children first become aware of the existence of classifiers, but are unable to arrive at the system and therefore cannot produce the relevant forms; later they perceive the pattern with noun repetition, so use this identical noun form classifier. The first general use is of the repetitive which is obviously the easiest because it is a repetition of the noun; then the addition of /ʔan/, which is the most neutral, i.e., can be used as an alternative to some of the specific classifiers; then others followed. That is to say when the linguistic repertoire is more developed, the children over-extend the use of classifiers by using a generic form for a specific part or item, as well as using the major classification for its component. For unfamiliar objects, the children use the trial and error process. With growing confidence in the use of classifiers, the children shift from one strategy to another when they are unsure of the adult

form. The change of classifier is, however, restricted to the strategies the children were using in the earlier stages.

It is believed that the above-mentioned strategies are used until the children reach elementary school level. Take Pui, the first subject, as an example. When he was 10 and was in the 6th grade of the elementary school level, he sometimes shifted from one classifier to another. However, over-extension was never found in Pui's speech at that time.

The writer believes that interaction, cognition and language ability, apart from the brain functions, are three basic factors in the course of language development. Cognition strengthens awareness of what to be acquired. The interface between language and cognition from the empirical evidence presented above illustrates basic cognitive processes, namely identification, salient, and holistic perception. The data from this study provide evidence how Thai children employ a variety of strategies in order to achieve effectiveness in language processing. Above all, the last strategy, the dodging by paraphrasing, indicates the influence of cognition in retrieving meaning, the internal code.

References

Clark, E. 1975. " Knowledge, Context, and Strategy in the Acquisition of Meaning." In *Developmental Psycholinguistics. Theory and Application.* Georgetown University, School of Language and Linguistics.

Tuaycharoen, P. 1984. "Developmental Strategies in the Acquisition of Classifiers in Thai." In *Selected Papers from the International Symposium on Language and Linguistics*, P.Tuaycharoen et al (eds.) Thailand: Chiang Mai University.

_____. 1995. " Interactional Process and Adult Language Addressed to a Thai Child". *Journal of Language and Linguistics* vol 2/13. Thailand: Thammasat University.

Ungerer, F. and H.J. Schmid. 1996. *Introduction to Cognitive Linguistics*. London: Longman.