

ACQUISITION OF VOICE AFFIXES IN PSYCHOLOGICAL VERBS IN TAGALOG

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0. Introduction*

Like other Philippine languages, Tagalog is best known for having a complex verbal system which is tied to selecting a cooccurring nominal and marking it as the 'focus' constituent in a given clause structure. This focused nominal is referred to as the grammatical or the surface subject, and it plays a central part in many syntactic rules. In the literature, the pertinent verbal affixes that fulfil the grammatical function of signalling the chosen focus nominal have been called either voice (De Guzman, 1978) or focus affixes (Schachter and Otnes, 1972). Thus, with active verbs the common affixes encountered are *-um-* or *m-* for the agent/actor focus (AF), *-in-*, *i-* or *-an* for the object/patient (OF), *-an* for the locative or dative (LF), *i-* for the benefactive (BF) as well as for the instrumental (IF), these last two being distinguished by the different verb stem forms the affix attaches to. If we compare the class of psychological verb forms, we find that the set of affixes used is quite different. The experiencer focus (EF) is usually marked by *ma-* (attached to a *ka-* stem) or *ma-* (attached to a root), the object/theme focus (OF) by *ma-* or *ma-* *-an* or *ka-* *-an* and the reason/cause focus (RF) by *i-* attached to the verb stem with the prefix *ka-*.

Given these differences, the question that this paper addresses is whether the child acquiring Tagalog as a first language masters the objective or the experiencer form of transitive psychological verbs first. My interest in this question derives from the implication the sequence of acquisition bears on the notion that patient is more primary than agent, which leads further to either supporting or disconfirming the Ergative Analysis as a viable approach to the analysis of Tagalog grammar. This question is motivated by a previous study conducted by Galang (1982) on the acquisition of Tagalog verbal morphology which concluded that the goal or object (patient) focus forms of verbs are acquired before the agent focus forms. Since the verbs tested in that study were drawn only from active verbs I wondered if the same conclusion could be generalized to psychological verbs as well. Galang's

study has been used by Cena (1977) and De Guzman (1979; 1990) as supporting, among other arguments, the primacy of patient as subject in Tagalog. With both syntactic and morphological pieces of evidence being backed up by a psycholinguistic study, the justification for considering the Ergative Analysis for Philippine languages (Gerdtz, 1988; De Guzman, 1988) is made stronger.

Before I describe the acquisition study to determine the answer to the question stated above, let us look briefly at the basic forms of the verbs, both active and psychological, in some simple structures for easy reference and quick comparison. Likewise, consider the variations of forms within each subclass of psychological verbs.

1. Active Versus Psychological Verbs in Tagalog

The following examples introduce briefly the voice and case marking system in Tagalog. Using the verb roots *bilih* 'buy' and *kita* 'see', the sentences below will show the differences in voice forms between an active and a psychological verb in Tagalog and the corresponding focus nominal, i.e. marked by *ang*, that each verb form takes as its grammatical subject.

A. Active verb *bilih* 'buy'

- (1) *bumilih ang bata nang saging*
 buy-AF FM child banana
 'The child bought a banana/bananas.'
- (2) *bibil(i)hin nang bata ang saging*
 will buy-OF child FM banana
- (3) *bibilhan nang bata ang tindahan sa kanto nang saging*
 will buy from-LF child FM store at corner banana
- (4) *ibibili nang bata nang saging ang nanay niya*
 will buy for-BF child banana FM mother his/her

The affix *-um-* in (1), which at the same time marks the completed aspect of the verb in this focus, identifies the nominal with the agent role as the nominal in focus. This nominal is overtly marked by the particle *ang* preceding the noun. In sentence (2), the contemplated aspect form of the verb shows the affix *-in* (it is zero in the incompleted and completed aspect forms) and, correspondingly, the patient/object/theme nominal gets the focus marker *ang*. It will be noted that the cooccurring agent *bata* 'child' is marked by the non-focus marker *nang*. In (3), the affix *-an* signals the locative nominal *tindahan sa kanto* 'store at the corner' as the focus nominal. Lastly in (4), the affix *i-* points to another nominal, a benefactive, as the focused nominal. The infinitive forms of the voice inflected verbs above are: *bumilih*(AF), *bil(i)hin* (OF), *bil(i)han* (LF), *ibili* (BF). There are other forms that the root *bilih* may take, i.e. a variation in stem form

and collocating with a different or the same affix, to focus on other kinds of nominals, e.g. instrument reason, etc. But depending on the subcategorization of the active verb, the affixes marking the agent, the patient, or the locative are primarily *-um-* alternating with *m-*, *-in* alternating with *-an* or with *i-*, and *-an* respectively. Nominals such as instrument, benefactive result or cause, which are peripheral to the meaning of the verb, take the affix *i-* with varying stem forms.

In contrast, the class of psychological verbs are marked differently. Observe the alternant voice form (Experiencer Focus, Object Focus, Locative Focus and Reason/cause Focus) below:

B. Psychological verb *kita* 'see':

- (5) **na+kakita** **ang** **bata** nang **ibon** sa **puno**
 saw-EF FM child bird tree
 'The child saw a bird on a tree.'
- (6) **nakita** nang **bata** **ang** **ibon** sa **puno**
 saw-OF chld FM bird tree
- (7) **nakitaan/** nang **bata** nang **ibon** **ang** **puno**
k-in-akitaan child bird FM tree
 saw-LF
- (8) **i+kinakita** na mas mabuti nang **lalaki** nang **laro**
 saw with-RF Lkr better man game
ang kaniyang largabista
 FM his binoculars
 'The man saw the game better with his binoculars.'

The infinitive forms of the voice inflected verbs in (5)-(8) are: **ma+kakita**(EF), **makita**(OF), **makitaan/kakita+an**(LF), **i+kakita**(RF). From the above examples, we note a different set of affixes and corresponding stem forms the verbs take that indicate the associated focused nominals. Within the class of psychological verbs, there are further complications to be observed in terms of overlaps in voice marking.

Three types of psychological verbs in Tagalog are treated in this study. They are perception, cognition and emotion verbs. In these subclasses, the same thematic role, e.g. experiencer, object, etc., may be marked as the focused nominal by different affixes and stems. To illustrate, the verbs picked out for the study under the three types have the following focus forms:

Root	Experiencer Focus (EF)	Object Focus (OF)	Reason/Other Focus (RF)
A. Perception Verbs¹			
(1) <i>kita</i> 'see'	MA-KA+kita	MA-kita	I-KA+kita (MA-kita-A)
(2) <i>dinig</i> 'hear'	MA-KA+dinig	MA-dinig	I-KA+dinig (MA-dinig-A)

(3) punah 'notice'	MA-KA+punah	MA-punah	KA+punah-AN
(4) damdam 'sense'	MA-KA+damdam	MA-damdam-AN	I-KA+damdam
B. Cognition Verbs			
(5) alala 'remember'	MA-KA+alala	MA-alala	(I-KA+alala)
(6) alam 'know'	MA-KA+alam	MA-(a)lam-AN	(I-KA+alam)
(7) isip 'think'	MA-KA+isip	MA-isip-(AN)	(I-KA+isip)
(8) tutoh 'learn'	MA-tutoh	MA-tutuh-AN	KA+tutuh-AN

C. Emotion Verbs

(9) takot 'fear'	MA-takot	KA-takut-AN	(I-KA+takot)
(10) inis 'annoyed'	MA-inis	KA-inis-AN	(I-KA+inis)

From the above examples, we find no absolute systematicity in marking each subclass of psychological verbs. At best, all we can say is that the majority of perception verbs, for example, take MA- and a KA-stem to signal an experiencer form regularly, but the corresponding object and locative forms may vary between MA- or MA- -AN and KA- -AN or MA- -AN, respectively. Under the cognition type, only the cause forms, marked by I- attached to a KA+STEM, is the consistent focus form. Both the experiencer and the object voice forms manifest two alternating forms marked by MA-KA+stem or MA-root (the latter being more frequently found in intransitively used emotion type verbs) and by MA-root or MA-root-AN, respectively. It is only with emotion verbs that we detect a certain degree of regularity in terms of marking, e.g. MA-root indicates an experiencer focus, KA-root-AN, an object/source focus, which morphologically can be identified with the other locative forms. For ease of presentation, we will refer to the affixes as MA-, MAK-AN, MA- -AN, KA- -AN, IKA-, without going into a detailed morphological analysis of the verb forms.²

2. The Study

The investigation is limited to determining the acquisition of voice-marked psychological verbs in Tagalog. Although Tagalog verbs are known to manifest an extensive array of possible surface subjects selected from nominals of different thematic roles, the competition in the use of these variant voice-forms is between the basic arguments of the verb, here namely, object and experiencer.

One comprehension and two production tests were administered to four groups of children whose native language is Tagalog. The first two tests - comprehension and production I - involved understanding and producing each test verb, respectively. Production II required the subject to produce the focus nominal that the given verb form entailed. (Due to time limitations, this paper will be only a partial report. It will cover the results of the first two tests, i.e.

comprehension and production of the two basic voice forms.)

3. Methodology

3.1 Subjects

Sixteen subjects were selected from each of four age groups - 3, 5, 7, and 8 - whose first language was Tagalog, and whose parents were also native speakers of Tagalog. The groups came from both a lower middle class and a higher low class socio-economic background residing in Diliman, Quezon City, Philippines. Each group was a mixture of boys and girls, and since socio-economic status and sex were found not to have a significant effect on the children's acquisition of focus and aspect marking devices in Galang's study (1982:14) , I disregarded these variables in the selection of subjects.

3.2 The Tests

The two tests involve ten representative samples of psychological verbs - four perception, four cognition and two emotion (see list above with their corresponding infinitive voice forms). Each test verb has at least two voice forms, namely, the experiencer and the object; five of the ten verbs included a third form focussing on either a location/source or a reason/cause. The experiencer(E) and the object(O) forms of each verb were exposed twice in each of the tests, giving a maximum correct response of 20 for each focus form in question in each test. The third voice form when used served to determine its relation to the mastery of the two basic forms. There were five locative/source or reason/cause(R) verb forms, with two exposures of each, included in the comprehension test and seven verb forms of the same type, with one exposure each, in the production test.

Each test was administered to each group of subjects with more than a two-week period in between.

3.2.1 Comprehension Test

A set of 20 pictures, cut out from children's coloring books and from magazines and selected for their simplicity and clarity in conveying as best as possible the meaning of each test verb, served as the stimulus for this test. There were two different pictures that corresponded to the semantic content of each psych verb. Each picture is paired with 2 or 3 instructions, depending on the number of voice forms each verb takes. These instructions were arranged in random order. Likewise, the twenty pictures were also arranged in random order. In this manner, the three types of psychological verbs were mixed up and each verb form was exposed at least twice.

The test was prefaced by some sample exercises to insure that each subject knew what to do in the actual test. It may be mentioned that with the three-year-olds, a pre-test was also conducted to determine whether each subject comprehended the verbs used in the three tests. Most of the instructions asked the subject to point to the item or object in each picture that the verb form mentioned by the examiner described. In Tagalog, there is an identificational structure of the form: *ang bata ang nakakakita* 'It is the child that sees (something)'. To say: *Ituro mo ang nakakakita* 'Point to the one that sees (something)', the expected response from the subject would be to point to the seer. Thus, given a picture where a man sees an airplane through a pair of binoculars, the examiner tells the child to "Point to the one that sees" (the expected answer being the *man*); "Point to the one seen" (the expected answer being the *airplane*) and "Point to the thing that is instrumental to seeing something (the expected response being the *binoculars*)". In each case, the corresponding voice form of the verb was used and if the focus nominal associated with it was correctly identified, then the subject recorded a mark.

In a few cases where the desired object or locative/reason nominal identified by the test verb form is an abstract noun, then a question form is given to elicit the answer. For example: *Ano ang nararamdaman niya?* 'What is it that he feels?'

3.2.2 Production Test

For the first production test, another set of twenty pictures was prepared which again depicted the ten test verbs (two pictures per test verb). As in the previous set, each picture contained two or three elements corresponding to the experiencer, the object and the location/reason/cause, where applicable, and communicated the meaning of the same test verbs. They were randomly arranged. For each picture stimulus, two or three randomly arranged incomplete statements were given one at a time for the subject to fill in with the correct verb form.

The testing proceeded as before. Each subject was given a few samples to work with to ensure that they understood what the task required. The test was tape-recorded in order to be able to analyze the exact forms produced by each subject. With each picture used as stimulus, a brief preliminary talk about the event therein was carried out between the examiner and the subject. Then the elicitation proceeded, e.g.: *Ang bata ang _____*. 'It is the child that _____. ' (the expected response being the form of the verb that coincides with 'the one that saw' - *nakakakita* or

nakakita. The correct voice form in whatever aspectual form, usually completed or incompleted aspect, was considered a right answer.

4. Data Analysis and Results

In the Comprehension Test each subject pointing to the correct item from the picture described by the stimulus verb form in one of two or three voices merited a right response, indicated by 1. A wrong response was marked 0.

The Production Test required each subject to produce the verb form containing the voice affix that matched the stimulus focus nominal given at the beginning of the statement that described the corresponding picture. The form bearing the appropriate voice marker, regardless of its aspectual form, was considered a correct response. This was again marked 1 and a wrong voice form produced was marked 0. There were a few instances where an alternative voice form exists, and thus, either one was considered correct. For example, the OF *ka-inis-an* and *ma-ka+inis-an*.

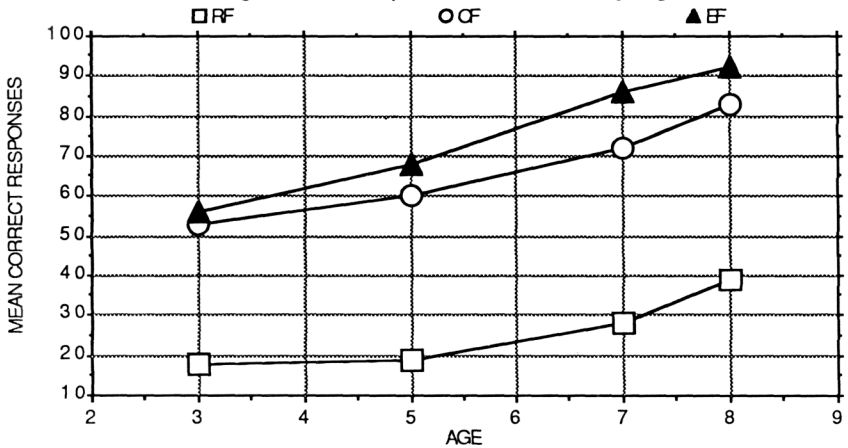
The mean scores and corresponding standard deviations for each test in each age group, covering Experiencer Focus (EF), Object Focus (OF) and Reason Focus (RF), were calculated and converted to percentages. The following tables and corresponding figures show the trends in the data.

4.1 Comprehension Test

Table 1. Comprehension Scores in Percentage by Age

<u>AGE</u>	<u>Reason Focus (10)</u>	<u>Object Focus (20)</u>	<u>Experiencer Focus (20)</u>
3	18%	53%	56%
5	19%	60%	68%
7	28%	72%	86%
8	39%	83%	92%

Figure 1. Comprehension Scores by Age



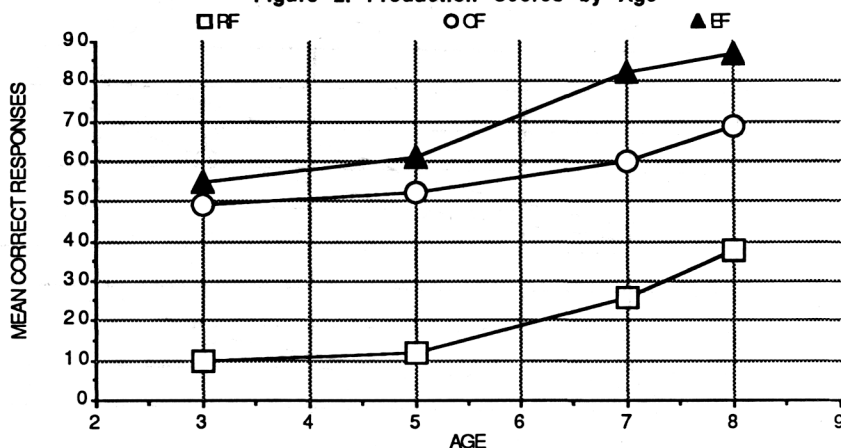
From Figure 1, we note that in each age group, the subjects performed better, i.e. comprehended more verb forms, in the EF than in either OF or RF. As expected, they understood the RF forms the least. It may be recalled that the thematic role involved in the RF form is usually a peripheral nominal, in the sense of having an adjunctive function compared to the complement function of the first two roles. Between the comprehension of EF forms versus OF forms, as a whole, the difference is significant at the .05 level.

4.2 Production Test

Table 2. Production Scores in Percentage by Age

AGE	Reason Focus (7)	Object Focus (20)	Experiencer Focus (20)
3	10%	49%	55%
5	12%	52%	61%
7	26%	60%	82%
8	38%	69%	87%

Figure 2. Production Scores by Age



Similar to those in the Comprehension Test, the mean scores in the Production Test above show a higher average of correct responses in EF than in OF. It is remarkable that the mean score attained in the EF forms by age 8 appears to be significantly higher than that achieved in OF. Again, as is to be expected, the scores in RF are the lowest. It will be noted that the scores in both EF and OF when compared with the scores achieved in the Comprehension Test, are lower by an average of 4% in EF and 9.5% in OF. When the combined mean scores for EF and OF are compared, the difference is still significant at the .05 level.

5. Explaining the Results

The results of this study show that the EF forms of the psychological verbs tested were mastered better than the OF forms in both comprehension and production tests. It is interesting that in every age group, the EF form consistently won over the OF, strongly suggesting that the experiencer, being mastered earlier, could be playing the more salient role than the object in situations involving psychological verbs. How can this result be reconciled with the result in Galang's (1982) study in which the OF forms of active verbs were learned first before the AF forms? Staggering as it may seem, the result renders the question more challenging and interesting than if it merely confirmed the hypothesis that the sequence of acquiring the voice forms of psychological verbs should also be OF before EF.

In this section, I will attempt to explain the preference for the experiencer over the object in transitive psych verbs by appealing to: (i) semantics of

the two thematic relations - experiencer and object - involved, (ii) greater consistency in the morphological marking of the experiencer rather than that of the object, and (iii) possible processing principles.

5.1. Semantics of the experiencer and the object of psych verbs

Comparing transitive active verbs with transitive psych verbs, we find that in the former the action which originates from the intentional agent 'affects' an object by a change of state, surface contact or movement, or it may even cause an object to emerge. In the latter type, the psychological process or psychological state occurs in or 'affects' the experiencer. According to Givon (1984:100), the "experiencer registers some internal/cognitive change".³ On the other hand, the object involved in the process, either directly or indirectly, may be seen as rather indifferent to or independent of the experiencer. It may be the unknowing target of emotions which Jayaseelan (1988:100) identifies as the goal argument. Although the object may be the cause or the non-intentional trigger/stimulus for the occurrence of the psychological process or state, it is the experiencer that undergoes the given process or is in a given psychological state. In this sense, the relatedness of the object of active verbs and the experiencer of psych verbs is captured by both being undergoers of what the verb indicates; both nominals express the 'affected' semantic roles. As such, it may be proposed that the semantic feature 'affected' contained in both the Patient/Object nominal of active verbs and the Experiencer nominal of psych verbs is what is perceived by the learner as the salient or prominent property of nominals. Although I arrived at this observation independently, I recently came across Roswadowska's chapter (1988:158) in which she states that thematic relations such as patients and experiencers have an overlapping feature of [+change]. She argues that thematic, rather than syntactic, restrictions are relevant in determining the distribution of arguments in derived nominals in Polish and English, which she examined. It is important to note, however, that syntactically, experiencers behave like agents in Tagalog, whether in focus or non-focus forms.

Viewed from this perspective, we can argue that the Experiencer of psychological verbs as the affected nominal is semantically more intimately related to the verb (just as the Patient of active verbs is) than a cooccurring Object, and thus, its role in the event is the most prominent. Possibly for this reason, the EF

form is mastered by the native speaker earlier than the OF.

5.2. Consistency in morphological marking

A general account of affix marking in psycholinguistics will predict that the *maka-* forms take the Experiencer as the grammatical subject and the *ma-* forms, the Object. Morphologically, the internal structure of the EF (as stated earlier) is more complex, i.e. MA-KA+root, than that of the OF, i.e. MA-root. However, there are also variations that have been pointed out previously. (See examples of the various voice forms earlier.) Of the 4 perception and 4 cognitive verbs, only one, *ma-tutoh* 'learn' deviates from the regular MA-KA+root form for EF. On the other hand, for the OF 1 perception and 2 cognition verbs take the marker MA-root-AN and 1 cognition takes MA-root-(AN), whereas 3 perception and 1 cognition forms follow the 'regular' MA-root pattern. Be that as it may, it was observed that in the Comprehension Test the emotion verbs *inis* 'be annoyed' and *takot* 'be afraid', the cognitive verb *tuto* 'learn' and the perception verb *damdam* 'sense' seemed to have been acquired earliest and most regularly in both EF and OF forms. Except for the last item that is marked by *maka-*, the simple affix *ma-* marks the EF forms of the first three stems, suggesting some kind of regularity, especially considering that these verbs are often used intransitively. The responses to the other verb forms are more erratic. The items which appeared to be most difficult to understand were those with the roots *puna* 'notice', *dinig* 'hear' and *kita* 'see'. These are all regularly marked and especially with the last two items being high-frequency verbs, I can only charge this failure, perhaps, to the imperfection in the pictures depicting these verbs.

It is in the Production Test where the distribution of mean scores is much more even. And what is interesting about the performance is that the items acquired earlier are the regularly marked forms and those that are acquired last are the irregular ones. Thus, *kita* 'see', *dinig* 'hear', from the perception group, and *takot* 'fear', *inis* 'annoyed' from the emotion subclass were most consistently produced correctly. The items that were problematic were the irregularly marked forms such as *tuto* 'learn', *alam* 'know' and *damdam* 'sense'.

If taken together with the saliency of the experiencer nominal in the clause, the 'regular' patterning of EF forms could be considered as a

contributing factor in their being learned better than the OF forms. Of course, it has to be admitted that one test that may be truly diagnostic of the morphological preference for *maka*-forms over *ma*-forms correlating with the thematic relation in focus, may be the abilitative or aptative forms of active verbs, which are marked by homophonous affixes *maka*- and *ma*-, e.g. *makabili* 'be able to buy something', AF, versus *mabili*, OF. A study of this kind will certainly provide answers to the question about the acquisition of morphological structures and, perhaps, even lead to an understanding of the priority given to the two contending factors in acquisition - semantic features of the thematic roles compared with the regularity of morphological forms of the corresponding verbs. Unfortunately, such studies are still unavailable at this time.

5.3 Possible processing principles

Here I would like to point out certain interesting facts in the test results that may bring to bear on the sequence of acquisition revealed in this study. First, if we look at the differences in the EF and OF performance of the subjects by age group, there are specific patterns that evolve. It is obvious that in the first stage (age 3), there is no significant difference between the child's comprehension and production of EF and OF forms. Beginning with age 5, a slightly significant difference is observable in comprehension but not in production. It may not be unreasonable to infer from these facts that generally, there is no difference, or just a negligible one if at all, in the comprehension and production of EF and OF forms in the first two stages. This period could be referred to as the stage of generalization rather than particularization. At age 7, a dramatic leap in performance in all three voice forms emerges. But between the EF and OF forms, the former is without question much more favoured. In fact there were some items, the irregular forms, which scored the same or slightly lower than in the preceding stage (age 5). It may be surmised that the instability may be attributed to a state of indecision or confusion, as the case may be, at least between the two basic forms. Following is the stage (age 8) of upward trend on a more even keel. The last two stages may be referred to as the period of specialization. While the first two stages saw the use of general categories, i.e. one or the other verb form could be marking either of the thematic relations as subject, without regard for the distinction, the last two seem to herald the start of an increased awareness between the forms in question. It is surprising that even at age 8, the performance in OF in both

comprehension and production is still lagging behind, with the wider gap obtaining in production. If anything, we can say that during the period of learning to discriminate, the OF ([-affected]) forms as well as the irregular ones must indeed be more difficult to process.

Another material which I consider relevant to the present study, but which came to my attention only recently was Lebeaux's work (1988:243). In the acquisition of passives, he states that there is a delay in the acquisition of non-actional passives compared with actional passives. The former type is equivalent to clauses with the OF forms of psychological verbs and the latter, to clauses with the OF forms of active verbs. The author argues for the thematic analysis, in which the s-structure subject is labelled +affected (!), being analytically prior to the case analysis of the passive. He uses the feature [+affected] for the thematic relation Patient or Object to account for the difference in the acquisition of the two kinds of passive forms. From Lebeaux's study, it can be deduced that the cause of the delay in acquiring non-actional passives is that the cooccurring Object is [-affected]. Tagalog, which has been shown previously as being patient-oriented in active clauses, can now be more appropriately referred to as [+affected] oriented. Such a description now naturally leads to the prediction that the Experiencer focus form, (the experiencer being the [+affected] thematic relation), will be acquired ahead of the Object focus form in clauses with psych verbs.

There is reason to believe that linguistic processing of similar forms that constitute a paradigmatic set starts off with setting parameters in the saliency of semantic roles based on certain semantic features of [\pm affect] or [\pm change] even before it begins to consider the formal realization of categories involved. The acquisition of forms, it appears, is constrained by the semantic features of the arguments before the grammatical functions are even considered.

6. Conclusion

It has been shown in this study that reference to semantic or thematic roles such as patient, agent, experiencer may be too general such that the immediate conclusion revealed here may be judged incompatible with the previous study which states that the patient/object is more primary than the agent as subject of the surface clause. Given the semantic roles that subcategorize psych verbs, we can only conclude that the experiencer, which is the grammatical analogue of the agent (Rozwadowska, 1988:159), is more prominent than the

cooccurring object/theme or 'patient'. Stated in this manner, psych verbs contradict the semantic role saliency stated for active verbs, and thus disturbing one of the significant justifications for employing the Ergative Analysis for Tagalog and some other Philippine languages.

However, by relating the semantic feature [+affected] or [+change] shared by both the patient of active verbs and the experiencer of psych verbs, we are able to isolate a more primitive semantic area that could indeed be playing the more significant role in accessing the preferred nominal in focus. Hence, I think that the Ergative Analysis still holds for Tagalog and the other Philippine languages, but obviously the supporting evidence from verb acquisition concerning the primacy of patient has to be restated as primacy of [+affected] semantic roles. Once again, this study, no matter how limited in scope and breadth, has provided some proof in support of the contribution and relevance of semantic features in the acquisition of morphosyntactic forms. Yet, there remains a whole lot more to be investigated in this area.

NOTES

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¹The verb forms in this list do not account for morphophonemic alternations. The forms in parentheses in the last column are existing forms but were not included in the tests. It may be stressed that the forms found in the last column just focus on nominals that are neither experiencer nor object. Note that the verbs in (9) and (10) are frequently used intransitively and their corresponding *ka-* *-an* forms are interpreted as the object/target/goal or source of what is expressed by the verb.

²There are linguists who have proposed that these affixes are all derivational and that, ultimately, what we have been referring to as voice affixes are actually derivational affixes and not inflectional ones. (Starosta, personal communication).

³In Lexicase Grammar, the experiencer or dative nominal is now labelled "inner correspondent" defined as "the entity perceived as being in correspondence with the patient" and patient is the general term which applies to "the perceived central participant in a state or event (formerly also Object or Theme)" (Starosta, 1988:126).

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