

Discourse-Based Evidence for an Ergative Analysis of Cebuano

Dennis Walters

1. Introduction*

The case-marking systems of Philippine languages have been difficult to classify as either nominative-accusative (NOM-ACC) or ergative-absolutive (ERG-ABS). The question hinges on the status of the “object-focus” clause type. Is it a passive voice clause as traditional analyses (beginning with Bloomfield 1917) suggest? Or is it active voice — the basic transitive clause type — as an ergative analysis would conclude? While purely structural clues at clause-level cannot tell us unambiguously which analysis is appropriate for this group of languages, a discourse-functional approach offers an escape from this dilemma.

Cebuano is spoken as a first language by about seventeen million people in the central and southern Philippines. It has been previously described by Morey (1961), Wolff (1965, 1967), Bunye and Yap (1971), and Bell (1976). The present paper presents evidence that the object-focus clause type in Cebuano is active voice, based on an assessment of the relative topic continuity of noun phrases in transitive clauses in a Cebuano narrative text taken from Wolff (1967).

The rationale and methodology in this paper follow Cooreman, Fox, and Givón (1984). Previous work has shown that semantic agents tend to be the most continuous discourse topics across languages (Givón, ed. 1983). It is rather the exception (in narrative) that a highly continuous topic is expressed as a semantic patient. When this happens, a passive voice clause type may encode the high topic continuity of the patient. Otherwise, highly topical semantic agents are typically encoded in transitive propositions in active voice clauses.

In ergative languages, ergative clauses encode high topic continuity for semantic agents and low topic continuity for patients; that is, ergative clauses are

* I would like to thank Susan Herring for feedback on previous versions of this paper. Thanks also to Jerry Edmondson for suggesting that I research the question of ergativity in Cebuano. An earlier version of this paper was presented at the First Annual University of Texas at Arlington Student Conference in Linguistics, February 18, 1994.

active voice (Cooreman, Fox and Givón 1984). Thus in order to find out whether the ergative analysis or the nominative analysis is more appropriate for Cebuano, we must find out which clause type expresses active voice. Two discourse-based criteria for identifying active versus passive voice are applied here. First, active voice clauses can be identified because of the high topic continuity of their semantic agents. Second, in a narrative text, the bulk of the transitive propositions will be encoded as active voice clauses. The overarching hypothesis of this paper is that object-focus clauses (rather than actor-focus clauses) in Cebuano express active voice. This hypothesis can be stated in two parts: (1) the object-focus clause type in Cebuano demonstrates high topic continuity for semantic agents and a lower topic continuity for semantic patients, and (2) the object-focus clause type encodes the majority of transitive propositions in narrative.

Following Givón's (1983) methodology, calculations are made of average referential distance (RD) and topic persistence (TP) for participants encoded as agents and patients in three different clause types in a Cebuano narrative. The results show that each of these three clause types differently encodes highly topical participants in the discourse. Based on their discourse functions of topic encoding, an active voice clause type (object focus) can be identified; an antipassive clause type (actor focus), and a passive voice clause type are also suggested. In addition, a tally of all clauses encoding transitive propositions shows that the majority of transitive propositions are encoded as object-focus clauses.

2. The problem

Existing clause-level grammatical analyses have failed to place Philippine languages cleanly into the existing typologies of NOM-ACC or ERG-ABS. NOM-ACC case-marking systems encode clausal subjects as nominative (NOM) case regardless of the transitivity of the clause. An English example illustrates the NOM-ACC pattern:

- (1) a. Intransitive clause
 He slept.
 NOM
- b. Transitive clause
 He kissed her.
 NOM ACC

ERG-ABS systems encode subjects of intransitive clauses as well as direct objects of transitive clauses with absolutive (ABS) case, in contrast to ergative (ERG) case marking on subjects of transitive clauses. Anderson's (1976:3) example from Tongan illustrates the ERG-ABS pattern.

- (2) a. Intransitive clause
na'e lea 'a etalavou.
 past speak ABS young man
 'The young man spoke.'
- b. Transitive clause
na'e ma'u 'e siale 'a e me'a'ofa.
 past receive ERG Charlie ABS def gift
 'Charlie received the gift.'

Philippine languages mark a single nominal (the "focused" nominal)¹ in a clause for agreement with the verb. In Cebuano, for instance, the focused nominal may be a semantic agent, patient, location, beneficiary, or instrument.²

- (3) Actor focus
ang iya- ng ikug mi- lusut sa buhuq.
 FOC 3SG-GEN tail ACT-pierce OBL hole
 'HIS TAIL stuck through a hole.'
- (4) Object focus
gi- hurut n- iya ang saging sa baqu.
 OBJ-consume GEN-3SG FOC banana GEN turtle
 'He ate all THE TURTLE'S BANANAS.'
- (5) Location/beneficiary focus
hatag-i n- iya ang baqu usa lang ka buquk.
 give-LOC GEN-3SG FOC turtle one only LK piece
 'He gave THE TURTLE just one piece.'
- (6) Instrument focus
i- sulat ni Linda ang lapis ug sulat.
 INS-write GEN Linda FOC pencil OBL letter
 'Linda will write a letter with THE PENCIL.'

Traditional analyses of Philippine languages (for Tagalog, Bloomfield 1917 and Blake 1925; for Kapampangan, Mirikitani 1971; for Cebuano, Bell 1976) assume a NOM-ACC pattern. The focused nominal in any clause is considered the subject of the clause. The actor-focus clause is considered to be the basic, active voice clause.³

¹ *Focus*, in the context of Philippine linguistics, is a technical term referring to the relationship between a single nominal (sometimes called "topic"), always +definite, and agreement morphology on the verb.

² Data from Wolff (1967:335-7) and Bell (1976:8,9).

³ Data based on Bell (1976:8,9).

- (7) Actor focus
mi- sulat si Inday ug sulat.
 ACT-write FOC OBL letter
 'INDAY wrote a letter.'

The object-focus clause according to traditional analyses is considered to be passive voice.

- (8) Object focus
gi- sulat ni Inday ang sulat.
 OBJ-write GEN FOC letter
 'The letter was written by Inday.'

However, more recent work (for Tagalog, Givón 1981, Payne 1982, DeGuzman 1988; for Kapampangan, Rowsell 1983 and DeGuzman 1988; for Ilokano, Gerds 1988) has shown that an ERG-ABS analysis is at least as plausible as the earlier NOM-ACC account. The focused nominal in a clause can be considered the absolutive nominal.⁴

- (9) Cebuano intransitive clause (actor focus)
mi- sakaq ang amuq.
 ACT-climb ABS monkey
 'The monkey climbed up.'
- (10) Cebuano transitive clause (object focus)
gi- putul sa amuq ang saging.
 OBJ-divide ERG monkey ABS banana plant
 'The monkey divided the banana plant.'

The examples above show that either the NOM-ACC or the ERG-ABS case-marking typology can describe Philippine languages at the level of isolated sentences or clauses. But we are left with the problem that existing clause-level analyses provide little motivation for choosing one analysis over the other. A discourse-functional approach, on the other hand, shows that actor-focus clauses and object-focus clauses serve different purposes in narrative. Distinguishing clause types which function as active voice from those which function as passive voice will show the ergative analysis to be preferable.

3. A discourse-based methodology

Active and passive clauses behave in predictably different ways in discourse, and this behavior can be measured. This study uses two independent, discourse-based methods to identify different clause types in Cebuano. The first

⁴ Data from Wolff (1967:335-7).

method compares the topic continuity of arguments in transitive clauses, and the second method assesses the proportion of transitive propositions encoded by different clause types.

3.1 *Topic continuity*

One type of behavior that distinguishes active and passive clauses involves topic continuity. In active transitive clauses, the agent tends to be a highly continuous topic, while in passive clauses, the agent has low topic continuity. Givón (1983) has devised a quantitative method to assess forward and backward continuous presence of participants in a narrative text.

3.1.1 *Referential distance*

In a given clause in a narrative, a semantic argument in that clause is a highly continuous topic if its last previous mention was nearer, rather than farther away, in the text. Beginning with a participant which is a semantic argument of a clause in a text, referential distance (RD) counts the number of clauses backward in the text until the last mention of the participant is encountered. For instance, if the last previous mention of the participant was in the previous clause, RD would be 1. Consequently, RD has a minimum value of 1 clause indicating maximum topic continuity. Givón (1983) arbitrarily assigned RD a maximum value of 20 clauses; this corresponds to minimum topic continuity.

3.1.2 *Topic persistence*

A semantic argument is highly continuous if it continues to be mentioned in each successive clause following its current mention. Topic persistence (TP) is the number of clauses after the present mention in which the same participant continues to be mentioned as a semantic argument. The higher the number, the more continuous is the topic. This is the “look forward” through the text. TP has a minimum value of zero and no assigned maximum value.

3.1.3 *Topic continuity and clause types in Chamorro*

Using the methodology just described, Cooreman, Fox, and Givón (1984) showed, for Chamorro, an ergative Austronesian language, how four different clause types represent diverse ways of encoding topic continuity. The *ergative* clause type encodes high topic continuity for semantic agents and somewhat lower continuity for patients. *Antipassive* clauses encode intermediate topic continuity for agents and still lower continuity for patients. The two types of *passive* clauses, in contrast, show high topic continuity for semantic patients as compared to semantic agents. Figure 1 is a graphic comparison of the topic continuity of agents and patients in the four different clause types considered by Cooreman, Fox, and Givón. Of special note is the contrast between the ergative

clause type and the two passives. In the figure, values near 1.0 reflect high topic continuity; values near 0.0 reflect low topic continuity.⁵

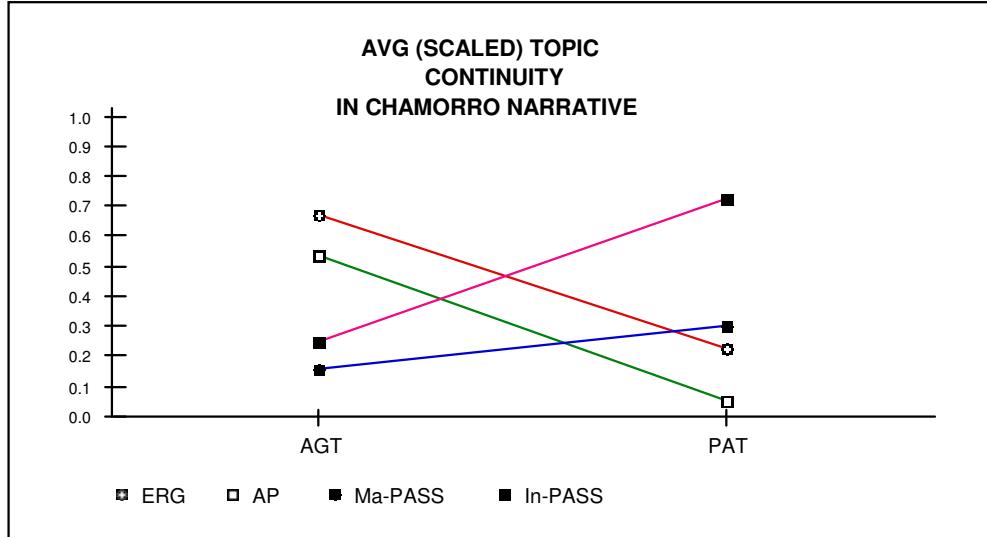


Figure 1. Graph of scaled topic continuity of semantic arguments in four clause types in Chamorro narrative (based on Cooreman, Fox, and Givón 1984)

3.2 Clause type most frequently expressing transitive propositions

The second point of methodology is to determine the proportion of transitive propositions which are encoded in each of the various clause types. This part of

⁵ RD bears an inverse correlation to topic continuity, while TP bears a direct relationship to topic continuity. To make these two measures comparable, I devised the following scheme of scaling.

RD

Maximum value = 20

=>low topic continuity

Minimum value = 1

=>high topic continuity

1/RD = SCALED RD (ScRD)

Maximum value = 1/1 = 1.0

=>high topic continuity

Minimum value = 1/20 = .05(≈0)

=>low topic continuity

TP

Maximum measured average value < 3.0

=>high topic continuity

Minimum value = 0

=>low topic continuity

TP/3 = SCALED TP (ScTP)

Maximum value < 1.0

=>high topic continuity

Minimum value = 0

=>low topic continuity

Scaling brings both RD and TP into a value range between 0 and 1 and brings their opposite correlations into alignment so that a value near 1 always indicates higher topic continuity than a value nearer to 0, regardless of which parameter one is considering. I then averaged the scaled parameters together to yield a composite measure of topic continuity:

$$\text{Average Scaled Topic Continuity} = (\text{ScRD} + \text{ScTP})/2$$

the methodology is concerned with which types of morphology most *often* encode transitive propositions in a narrative text. In narrative, passive voice constructions are rare regardless of whether the language tends toward NOM-ACC or ERG-ABS morphology. Therefore, the predominant clause type expressing transitive propositions can be considered to function as the “active voice” clause type.

It is important to consider only semantically transitive propositions because these contain two arguments by definition. Thus the two arguments have an equal chance of being encoded as ERG-ABS (corresponding to object focus) or as NOM-ACC (corresponding to actor focus) constructions, either of which can accommodate both an agent and a patient. Intransitive clauses, on the other hand, having only one argument, cannot show the contrast of case-marking between two arguments in the same clause.

The procedure for this part of the methodology is as follows. First, all transitive propositions from a narrative text are listed along with their respective clause types. The number of object-focus clauses, actor-focus clauses, and any others can then be expressed as a percentage of the total number of clauses expressing transitive propositions. The clause type which encodes the largest proportion of transitive propositions can be interpreted as the clause type expressing active voice.

This method was also employed by Cooreman, Fox, and Givón (1984) to demonstrate the prominence of the ergative clause type (82% of semantically transitive clauses) in Chamorro narrative.

4. A two-fold hypothesis

The hypothesis to be tested in this study, corresponding to an ergative analysis, is that object-focus clauses in Cebuano function as active voice clauses in narrative discourse. Based on Cooreman, Fox, and Givón’s (1984) topic continuity results for Chamorro, and on the attested high frequency of ergative constructions encoding transitive propositions, we can state this hypothesis in two parts. Object-focus clauses in Cebuano narrative (1) have agents that are the most continuous discourse topics, and (2) encode the majority of the transitive propositions.

An ergative pattern in a language distinguishes active voice clauses by encoding highly topical arguments as ERG-marked semantic agents, and less topical arguments as ABS-marked semantic patients. If ERG (or under the traditional analysis, GEN)-marked agents are more topical in object-focus clauses, we have evidence that these clauses are functionally active voice. If, on the other hand, it turns out that the ABS-marked patients are more topical in object-focus clauses, these clauses should be considered passives and the hypothesis of ergativity in Cebuano is unsupported.

Further, if the ergative analysis is correct, it will be object-focus clauses which encode most of the transitive propositions in the text. If actor-focus

clauses are found to encode most transitive propositions, the hypothesis of ergativity is unsupported.

5. Results

5.1 Language data

This study assesses RD and TP for agents and patients in three different clause types in a Cebuano folk tale.⁶ Counts are reported for both main and subordinate clauses which encode semantically transitive propositions. Excluding those containing clausal arguments⁷ and unusual constructions, counts were obtained for 40 transitive propositions. Object-focus clauses are reported in two different aspects: volitional aspect and potential aspect. Potential aspect is shown on object-focus clauses by a prefix *ma-* on the verb. Cooreman, Fox, and Givón (1984) reported topic continuity for a similar construction in Chamorro (*ma*-clause) and found it to be a functionally passive clause type. Since both Chamorro and Cebuano are Austronesian languages, I have shown Cebuano *ma*-clauses in the table and figures below for purposes of comparison. It may be that this construction is expressing passive voice in Cebuano also.

The numerical results for each clause type are presented in Table 1. Note that low RD correlates with high topic continuity while high TP correlates with high topic continuity.

Table 1. Average referential distance (RD) and topic persistence (TP) for three clause types in a Cebuano narrative

<i>Object focus, volitional aspect</i>			
24 clauses = 60%			
	Agents	RD = 1.3	TP = 2.7
	Patients	RD = 5.5	TP = 0.5
<i>Actor focus</i>			
8 clauses = 20%			
	Agents	RD = 5.4	TP = 1.9
	Patients	RD = 13.2	TP = 0.8
<i>Ma-clause (Object focus, potential aspect)</i>			
8 clauses = 20%			
	Agents	RD = 1.3	TP = 1.3
	Patients	RD = 2.9	TP = 0.4

⁶ The folk tale studied was the first of the readings found in Wolff (1967:335ff).

⁷ Nearly all the clauses eliminated contained clausal arguments such as direct or indirect quotes; these normally do not become topics in narrative discourse.

Note that object-focus, volitional aspect clauses encode most (60%) of the transitive propositions for which RD and TP were counted. The results for topic continuity as measured by RD, TP, and a scaled composite of the two are presented graphically in Figures 2, 3, and 4.

5.2 *Object-focus clauses (volitional aspect)*

In terms of both RD and TP, agents in object-focus (volitional aspect) clauses are more continuous topics than patients in these clauses. Agents had an average RD of 1.3 clauses while patients averaged 5.5 clauses. Likewise in terms of TP, agents persisted in the discourse an average of 2.7 clauses while patients persisted only .5 clauses on average. This is the pattern expected for active voice clauses; note the contrast with the passive clause types seen in Figure 1 for Chamorro.

Also in terms of proportion of transitive propositions encoded, object-focus clauses are predominant. Object-focus clauses in volitional aspect comprise 60% of the transitive clauses in the text.

Thus by both criteria for identifying active or passive discourse function, the object-focus clause type must be identified as active voice. This supports an ergative analysis rather than the traditional nominative analysis which interprets this clause type as passive.

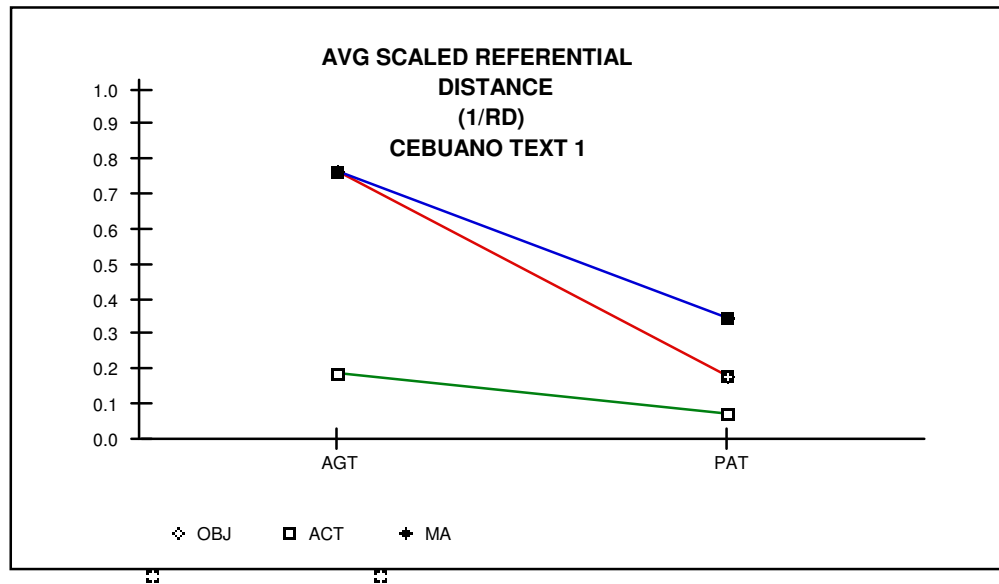


Figure 2. Scaled referential distance in three clause types in Cebuano narrative

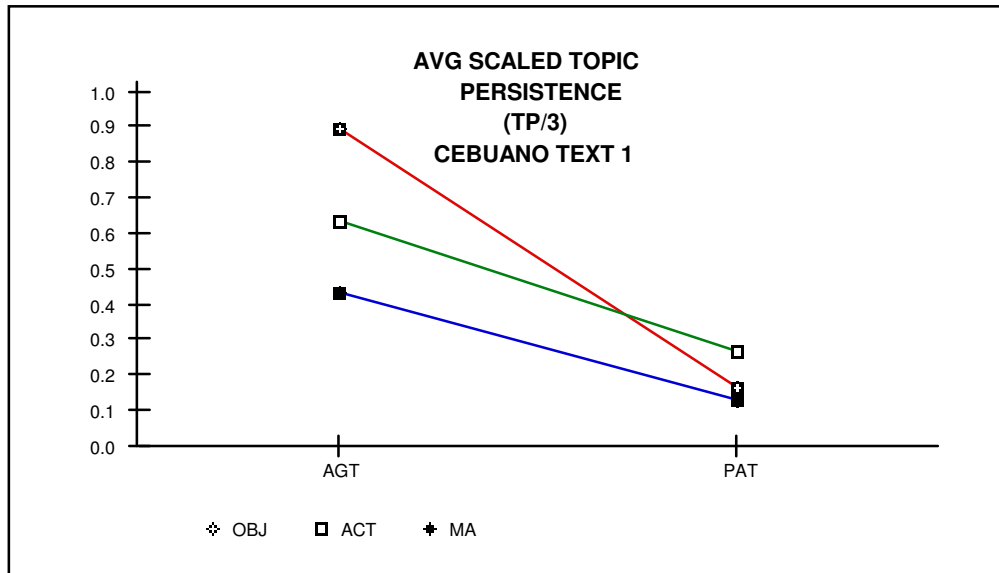


Figure 3. Scaled topic persistence in three clause types in Cebuano narrative

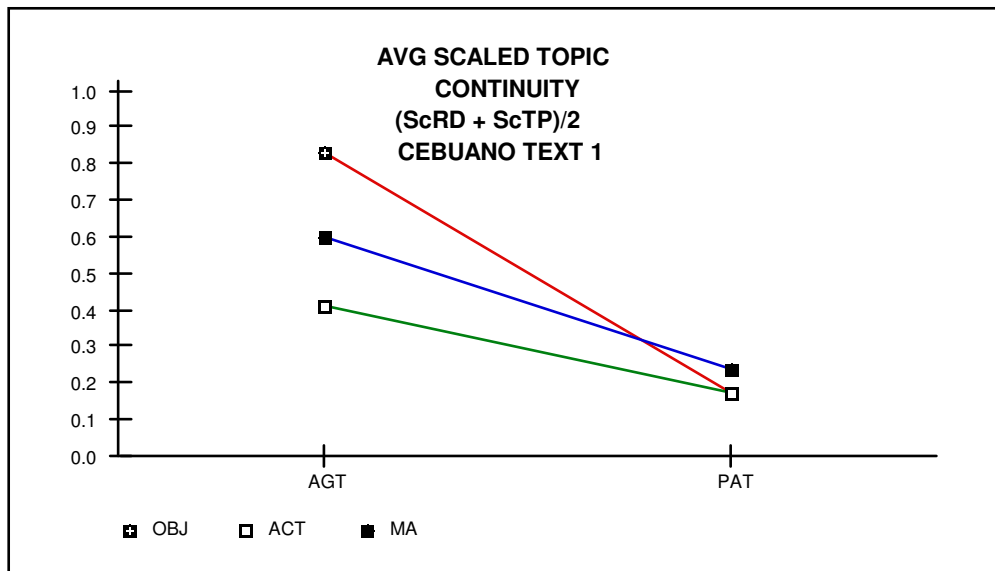


Figure 4. Scaled topic continuity in three clause types in Cebuano narrative

5.3 Actor-focus clauses

If object-focus clauses are comparable to the ergative clause type in Chamorro, one might be predisposed to consider Cebuano actor-focus clauses as antipassives. That is, if the focussed nominal is reanalyzed as ABS, the actor-focus clause (see example 3) must be interpreted as de-transitivized, with what was formerly its direct object now in the oblique case (Givón 1984, 1990). The

results of the present study are not in conflict with this conclusion, but neither are they exactly as expected.

Cooreman, Fox, and Givón (1984) characterized antipassives as having a greater difference between the topic continuity of their agents and patients than do ergative clauses. This difference is between an agent of moderate topic continuity and a patient of very low topic continuity (see Figure 1). In Chamorro, the antipassive usually deletes its patient altogether, and almost never employs a high-continuity device, such as zero anaphora, to encode a semantic patient. This contrasts with the ergative clause type which has high topic continuity for its agent and moderate topic continuity for its patient. In other words, the topic continuity of both agent and patient are reduced in the Chamorro antipassive.

In Cebuano, actor-focus clauses match this pattern in one respect: actor-focus clauses show reduced topic continuity for agents. However, actor-focus clauses do not show reduced topic continuity for semantic patients; nearly the same topic continuity obtains in both object-focus and actor-focus clauses.

A possible interpretation of these facts is that Cebuano is a young ergative language in which the actor-focus clause (formerly the active voice clause type) retains the moderate topic continuity of semantic patients as a vestige of its previous function as the basic transitive clause type.

Regardless, the reduced topic continuity of semantic agents in this clause type (compared to agents in object-focus clauses) argues against the NOM-ACC analysis and in favor of the ERG-ABS analysis which leads us independently to consider actor-focus clauses as antipassives on the basis of their morphology.

5.4 *Ma-clauses*

The present study is inconclusive with regard to the status of the Cebuano *ma-* clause as an active voice clause or a passive voice clause. Topic continuity in the *ma-* clause type is high in terms of RD, but low in terms of TP. This suggests that *ma-* clauses may have a special function of topic encoding within a thematic paragraph, but not across a paragraph boundary.

It is interesting that Chamorro also has a clause type characterized by a prefix *ma-* on the verb. Cooreman (1983) labelled this clause type the *ma-* passive and reported its topic continuity characteristics as shown in Figure 1. While the *ma-* clause in Cebuano does not show the dramatically reduced topic continuity of semantic agents that the Chamorro clause type demonstrated, the Cebuano *ma-* clause does have a higher topic continuity for semantic patients than any other clause type which encodes transitive propositions. It may be that, at a later stage of grammaticalization, the Cebuano *ma-* clause will take on the full function of a passive voice clause type.

6. Conclusion

To summarize, existing clause-level analyses of Philippine languages are inconclusive concerning the typological status of these languages as NOM-ACC or ERG-ABS. The question hinges mostly on the status of the clause type traditionally termed object focus. A nominative analysis classifies object-focus clauses as passive voice, while an ergative analysis classifies them as active voice.

A quantitative measure of topic continuity in narrative can clearly show the difference between active and passive clause types. In any language, active voice clauses are expected to encode the most continuous topics as semantic agents; passive voice clauses are expected to encode the most continuous topics as semantic patients. I have used a quantitative measure of topic continuity of agents and patients in the different clause types to identify active versus passive clause types in Cebuano.

Another way to judge which clause type is basically more active is to look at which clause type more often encodes transitive propositions. We expected an active voice clause to encode most transitive propositions and a passive clause type to encode transitives only on occasion.

This study has demonstrated both points for Cebuano: (1) object-focus clauses should be considered active voice clauses by virtue of their highly topical agents, and (2) object-focus clauses should be considered active voice clauses because they encode most of the transitive propositions in the text (in contrast to the few transitive propositions encoded as actor-focus clauses).

Two other clause types encode transitive propositions in Cebuano narrative: actor-focus clauses and *ma-* clauses. There is limited evidence that actor-focus clauses function as incipient antipassives, and *ma-* clauses show signs of possible movement toward a passive function. An expanded study using similar methodology may shed more light on the functions of various clause types in Cebuano.

The main implication of the prominence of object-focus clauses is that an ERG-ABS analysis is more plausible for Cebuano than a NOM-ACC analysis. Of course, once an ergative analysis is assumed, one must account for the remaining grammatical facts about the language. For instance, what would be the functions of the beneficiary-focus or instrument-focus clauses? Mithun (1994) suggests these other focus types exist to facilitate necessary syntactic processes like conjunction and relativization since only a “focussed” nominal may be relativized in most Philippine languages. Whatever other grammatical loose ends remain to be tied up within an ergative analysis, the results presented here give good reason for tackling the job.

Dennis Walters is currently working on an M.A. in Linguistics at the University of Texas at Arlington.

References

- Anderson, Stephen R.
 1976 "On the notion of subject in ergative languages." In Charles N. Li (ed.), *Subject and Topic*. New York: Academic Press, 1-23.
- Bell, Sarah Johanna
 1976 *Cebuano Subjects in Two Frameworks*. Ph.D. dissertation. Massachusetts Institute of Technology.
- Blake, Frank R.
 1925 *A Grammar of the Tagalog Language*. New Haven: American Oriental Society.
- Bloomfield, Leonard
 1917 *Tagalog Texts with Grammatical Analysis*. Urbana: University of Illinois.
- Bunye, Maria V.R. and Elsa P. Yap
 1971 *Cebuano Grammar Notes*. Hawaii: University of Hawaii Press.
- Cooreman, Anne M.
 1983 "Topic continuity and the voicing system of an ergative language: Chamorro." In Talmy Givón (ed.), 425-489.
- Cooreman, Anne M., Barbara Fox, and Talmy Givón
 1984 "The discourse definition of ergativity." *Studies in Language* 8(1).1-34.
- DeGuzman, Videia P.
 1988 "Ergative analysis for Philippine languages: an analysis." In Richard McGinn (ed.), *Studies in Austronesian Linguistics*. Southeast Asia series, no. 76. Athens, OH: Ohio University Center for International Studies, 323-345.
- Gerds, Donna B.
 1988 "Antipassives and causatives in Ilokano: evidence for an ergative analysis." In Richard McGinn (ed.), *Studies in Austronesian Linguistics*. Southeast Asia series, no. 76. Athens, OH: Ohio University Center for International Studies, 295-321.
- Givón, Talmy
 1981 "Typology and functional domains." *Studies in Language* 5(2).
- Givón, Talmy
 1983 "Topic continuity in discourse: an introduction." In Talmy Givón (ed.), 1-42.
- Givón, Talmy (ed.)
 1983 *Topic Continuity in Discourse: Quantitative Cross-Language Studies*. TSL 3. Amsterdam: John Benjamins.
- Givón, Talmy
 1984, 1990 *Syntax: A Functional-Typological Introduction*. Two volumes. Amsterdam/Philadelphia: John Benjamins.
- Mirikitani, Leatrice T.
 1971 *Speaking Kapampangan*. Honolulu: University of Hawaii Press.

Mithun, Marianne

- 1994 "The implications of ergativity for a Philippine voice system." In Barbara Fox and Paul Hopper (eds.), *Grammatical Voice: Its Form and Function*. Amsterdam: John Benjamins.

Morey, Virginia

- 1961 *Cebuano Reference Materials*. Philippines: The Summer Institute of Linguistics and Philippine Association for Language Teaching.

Payne, Thomas

- 1982 "Role and reference related subject properties and ergativity in Yup'ik Eskimo and Tagalog." *Studies in Language* 6.75-106.

Rowsell, Lorna V.

- 1983 *An Ergative Analysis of Kapampangan*. M.A. Thesis. University of Calgary.

Wolff, John U.

- 1965 *Cebuano Bisayan syntax*. Ph.D. thesis, Massachusetts Institute of Technology.

- 1967 *Beginning Cebuano: Part II*. Yale linguistic series, 9. New Haven: Yale University Press.