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TRANSITIVITY, ERGATIVITY, AND TOPICALITY
IN CHAMORRO NARRATIVE DISCOURSE.¹⁾

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1. Introduction.

This paper investigates five different syntactic coding devices for semantically transitive sentences in the ergative Austronesian language Chamorro, spoken on the Northern Marianas.

The appearance of five such devices in one particular language is striking and invites the linguist to look for an explanation for their existence. Since languages tend to be economical systems of communication one may at least assume that these five constructions have a different function, i.e. certain restrictions are imposed which may be syntactic or pragmatic in nature.

Below I will present some evidence that the five syntactic devices we find in Chamorro differ at least in one important pragmatic aspect, i.e. different relative degrees of topic continuity of the Agent and the Object (terms are borrowed from Dixon 1979) in the clause correspond to the choice of one construction over the others. We could conclude then that the five different syntactic devices code different segments of the functional domain of topicality in semantically transitive clauses.

2. Constructions coding semantically transitive sentences in Chamorro.

As indicated above there are basically five different ways in which a Chamorro speaker may code a semantically transitive sentence. Below I will present examples from each (see Chung 1981 for a sketch of basic verb morphology).

2.1. Ergative constructions:

(1) Si tata-hu ha-toksa hulu' i lemmai.
proper father-1S.POS 3S.E-poke up the breadfruit.
name mkr.

"My father poked up at the breadfruit."

(2) Tadza na ha-upus i banda-ña si Alu pat si Pän.
nothing SUB 3S.E-cross the side-3S.POS. P.N. Alu or P.N. Pän
"Neither Alu nor Pän crossed the other's border."

2.2. Non-ergative -UM- constructions:

Aside from the active transitive ergative constructions, one finds another type of transitive clause in Chamorro which appears less frequent but seems to refer as much to active events as the ergative exemplified above.

(3) Si Santa Maria h₁-um₂-a'atan₁ i tano' dzän i tsamorro.
P.N. saint Mary UM₂-p₁rotect₁-RED. the land and the Chamorros
PROG.

"The Virgin Mary protected the land and the Chamorros."

- (4) T₁-um₂-atpangi₁ lahi-n Mata'pang.
 UM₂-baptize₁ son-link.part. Mata'pang.
 "He₂ baptized₁ Mata'pang's son."

The infix -UM- in the transitive sentence, used for both singular and plural subjects in my data, has the same form as the singular agreement marker one finds in intransitive sentences. The plural intransitive agreement marker is MAN-. As of yet I have not seen the latter morpheme in transitive sentences. The relation between the transitive -UM- and the intransitive singular agreement marker needs to be investigated in more detail.

2.3. Antipassive:

- (5) I peskadot mang-onni' gwihan. (verb root = konni')
 the fisherman A.P.-catch fish
 "The fisherman catches/caught fish/a fish."
 (6) Man-man-nanaitai lisadzu kadda puengi.
 PL.-A.P.-pray rosary every night
 "They pray the rosary every night."

Just like the previous two constructions the antipassive is active. Even though I will not be concerned directly with clauses which have no Object, this construction also appears with Agents alone and the relation between the two types of antipassive needs to be investigated in detail in the future.

2.4. Passives with -IN- infix:

- (7) Si nana-hu ts₁-in₂-atgi₁ giðs tata-hu.
 P.N. mother-1S.POS IN₂-smile₁ OBL.P.N. father-1S.POS
 "My mother was smiled at by my father."
 (8) T₁-in₂-atti₁-dzi₃ ni esti i asagwa-ña si Mata'pang.
 IN₂-follow₁-DAT₃OBL this the wife-3S.POS P.N. Mata'pang
 "He₁ was followed₁ by Mata'pang's wife."

2.5. Passives with MA- prefix:

- (9) Ma-tungu' ni dzapanis na gaigi gwihhi na um-a'atuk.
 MA-know OBL Japanese SUB be/have there SUB SING-hide-RED
 PRO
 "It was known by the Japanese that he was there hiding."
 (10) Gwaha un amerikanu si George Tweed toatoa Oregon
 be/have an American P.N. G. T. man Oregon
 ma-na'-atuk ni tsamorro ma-adzuda ni tsamorro.
 MA-CAUS-hide OBL Chamorro PAS-help OBL Chamorro
 "There was an American, George Tweed, a man from Oregon,
 who was hidden and helped by the Chamorros."

3. Syntax as a function of Discourse Pragmatics.

All the examples above present us with three active semantically transitive sentences and two passive ones. The question arises why a language would need three different ways of coding a clause

in which the main participant is the Agent and two distinct ways of coding a clause in which the Object seems to be highlighted. The fact that the five constructions appear in overlapping syntactic environments (see also Chung 1979) suggests that their distribution cannot be predicted on the basis of syntactic considerations alone. One is thus obliged to look for an explanation for their existence elsewhere.

In the past decade more and more linguists have become interested in finding pragmatic functional grounds for syntactic and morphosyntactic coding devices and a large body of literature has arisen on that topic. (Bolinger 1979; Creider 1979; Duranti and Ochs 1979; Erteschik-Shir 1979; Garcia 1979; Givón 1979, 1980; Hopper 1979; Hopper and Thompson 1980, among others).

There are many indications in recent literature that the syntactic coding of semantically transitive clauses, i.e. those with both an Agent and an Object, is not entirely independent of discourse context, e.g. the topic status of both arguments in the clause.

There are at least two aspects involved in measuring the topic status of any referent in the discourse:

- i) the nature of the NP through which reference is made
- ii) the status of this referent as given or new information in the discourse register established between interlocutors.

In connection with the first aspect, linguists have observed that certain NP's (e.g. pronouns) tend to appear as topics in the discourse more often than others (e.g. indefinite NP's) and thus they have ranked these NP's on a hierarchy of natural topics (cf. Hawkinson and Hyman 1974, Givón 1976, inter alia). There are several indications in the literature of the importance of this natural topic hierarchy with respect to syntax.

Hopper and Thompson (1980) have related the way transitive clauses are coded syntactically to the properties of both Agent and Object. Two of the parameters involved in their analysis, viz. the degree of "individuation" and "agency", can clearly be correlated to the hierarchy of topicality. Furthermore, they noted that the way transitivity gets marked in the sentence is dependent on the function of the sentence as a whole in the discourse, which they ultimately related back to the distinction between backgrounded and foregrounded information.

In some ergative languages the choice between the ergative and non-ergative markers in a semantically transitive sentence is also dependent on the topic status of the two major arguments. To cite one example: Chung (1981) claimed that in Chamorro a semantic parameter filters out sentences in which the Object is of higher "individuation" than the Agent/Subject. This constraint seems to be rather a discourse-pragmatic restriction as it operates along the same hierarchy of topicality. Chamorro seems to rule out sentences in which Agent NP's rank lower than Object NP's on the hierarchy. According to Chung antipassives and passives will be used instead of the ergative construction in such cases.

The same hierarchy of natural topic seems to be involved in the explanation of split ergativity systems.

Based on the theory of markedness Silverstein (1976) set up a hierarchy of NP's which he called the "hierarchy of features". He observed that in many languages with split ergativity, those NP's which are the most marked in his system tend to be involved in a nominative-accusative coding system for transitive clauses. The least marked NP's on the other hand, are syntactically coded along ergative-absolutive lines. Since Silverstein's hierarchy matches the hierarchy of natural topics, one is led to conclude that the different syntactic coding systems, ergative vs. accusative, are dependent on the discourse context, related to the degree of topicality of the major arguments in the transitive clause. The items which are likely to be marked on a nominative-accusative basis are also more likely to appear as topics in natural discourse.

Similarly, Scott De Lancey's explanation (1981) of split ergativity systems in terms of "attention flow" and "viewpoint" can be brought to terms with the same hierarchy of topicality.

There are two clear examples of languages in which the distinction between given and new information provides a pragmatic discourse based constraint on the syntactic coding of semantically transitive clauses.

Dixon (1972) observes that in Dyirbal the antipassive construction with the na- marker on the verb is used in sentence coordination and indicates that the second sentence of the coordinated pair has a transitive Agent/Subject NP which is coreferential with either the absolutive intransitive Agent or the absolutive transitive Object of the previous clause. This particular antipassive construction is involved in creating topic chains (Dixon 1972:79-81) and will never be the first clause at the onset of a new discourse.

According to Kalmár (1979, 1980), the converse of this principle holds in Inuktituk (Eskimo). The direct object in antipassive sentences may be definite or indefinite but is always a new item in the discourse register as established between the interlocutors. Text frequency counts result in the observation that the antipassive is constrained to the first few clauses in discourse. Ergative sentence types make up the bulk of the transitive sentences in the body of the stories.

Already Chung's analysis of the choice between the ergative and non-ergative passive or antipassive construction in certain cases can be ultimately traced back to the discourse notion of topicality. A detailed study of the five semantically transitive constructions in Chamorro in terms of topicality of both the Agent and the Object will explain the difference also between the ergative and the non-ergative -UM- construction and the distinction between the two passives.

4. The quantitative method.

The quantitative method was suggested by Givón (1979, 1980). It has since been used for a cross-linguistic study including such languages as colloquial and written English, Biblical Hebrew, Spanish, Ute, Hausa, Japanese, and Amharic (cf. Givón 1983 (ed.)). The quantitative analysis assumes that each NP in the discourse has some degree of topicality and provides an adequate, empirical

method to measure this degree of topicality for any NP in the discourse. Topicality here does not refer to what has been called the subject or theme of the discourse or the paragraph, rather it refers to the degree of referential continuity of a given NP on the clausal level.

In a pilot study of roughly fifty pages of transcribed Chamorro narrative each Agent and Object NP²) of a semantically transitive sentence was subjected to two different measurements:

- i) referential distance
- ii) decay.

The parameter of referential distance measures the degree of continuity of the topic NP in terms of how many clauses to the left intervene between the last mention of the topic NP and the new mention in the clause under study. The maximum value is set at twenty since there is reason to believe that a hearer will not normally be able to retrieve referential information prior to roughly 20 clauses to the left of a new clause. Thus all indefinite NP's automatically get the value 20 assigned for referential distance. The parameter of decay involves the persistence of the NP as a topic, i.e. how many clauses to the right of the clause containing the NP will persist in having the same topic as argument of the verb.

One would expect typically that a highly topical NP in the discourse has a low value for referential distance and a high one for decay and that a non-topical NP is characterized by the opposite relation. The inverse relationship which seems to exist between the two measurements should not lead one to believe that the parameters measure basically the same thing. Referential distance roughly measures the ease with which the hearer can identify the referent of a particular argument NP in the clause. Presumably in speech perception the reference of an entity is most easily identified when there is only a small gap between the previous and the new mention of that entity. The parameter of decay is roughly related to the speaker's speech production, i.e. the way he/she plans ahead which entities should be topical in the next piece of discourse. A NP which has a high value for distance does not necessarily have a low value for decay. Indefinite NP's may introduce new elements in the discourse which are highly continuous and keep being mentioned in the rest of the narrative, thus causing a high value for decay.

Below I will present the averages of both measurements for the Agent and the Object in the five different syntactic constructions. The syntactic coding devices of the NP's can also be ordered hierarchically, where at the top are syntactic devices involving higher topicality or continuity and thus presumably ones for which referential identification is easier. Closer to the bottom are syntactic devices involving less continuity, higher surprise and therefore difficulty in assigning referentiality of the topic. Givón (1981a and 1982) proposes the following hierarchy which is in part attested by my own Chamorro data and by the languages studied in Givón ((ed.)198:

- (11) zero anaphora > unstressed/bound pronouns or gramm. agreement
 > stressed/independent pronouns > right dislocated NP's >
 simple def. NP's > left dislocated NP's > indef. NP's >
 Y-movement > cleft/focus constructions.

The measures for distance and decay are on the whole lower and higher respectively for the devices at the top of the scale as compared to those at the bottom. For this reason I have computed the measures for Agents and Objects in the five syntactic clause types according to the syntactic device used to code the NP's. Since other types of syntactic devices are underrepresented in the data or simply absent in some clause types, I will present only the results of the comparison between the Agents and the Objects which are coded as definite full NP's or as zero anaphora and/or by subject verb agreement. The overall measurements will be given first. They include all types of syntactically coded Objects and Agents and provide a good presentation of the overall average values for Agent and Object in all five constructions. These overall values are obviously skewed in favor of the most common syntactic device used for Agent and Object NP in the different constructions under study but they provide a valid and important distributional schema for the five syntactic constructions in terms of the average degree of topicality of Agent and Object.

5. Numeric results and graphs.

The average values of the two measurements for both Agent and Object in the five Chamorro constructions are presented below. The number between brackets next to the heading Agent and Object denotes the amount of instances found in the data. No values are given for Objects in the two last columns of the antipassive since all Objects in this construction are indefinite and non-referential NP's.

	A. Overall Results		B. Def.full NP's		C. \emptyset An./Verb agr.	
	Agent (7)	Object (7)	Agent (1)	Object	Agent (6)	Object
Distance	1.86	20	7	-	1	-
Decay	1.29	0	0	-	1.5	-

table 1. Antipassive

	A. Overall Results		B. Def.full NP's		C. \emptyset An./Verb agr.	
	Agent (150)	Object (150)	Agent (7)	Object (95)	Agent (134)	Object (3)
Distance	1.49	4.35	7.6	8.56	1.1	1.38
Decay	2.45	0.81	1.29	0.66	2.44	1.09

table 2. Ergative

	A. Overall Results		B. Def.full NP's		C. \emptyset An./Verb agr.	
	Agent (16)	Object (16)	Agent (4)	Object (8)	Agent (10)	Object (4)
Distance	2.88	3	7.5	4.25	1	1.25
Decay	0.63	0.81	0.25	0.5	0.7	0.5

table 3. -UM- construction

	A. Overall Results		B. Def.full NP's		C. \emptyset An./Verb agr.	
	Agent (16)	Object (16)	Agent (7)	Object (3)	Agent (7)	Object (12)
Distance	4.06	1.38	7	1.67	1.14	1.42
Decay	1.31	2	0.57	2.33	2.29	2.08

table 4. -IN- passive

	A. Overall Results		B. Def.full NP's		C. \emptyset An./Verb agr.	
	Agent (9)	Object (9)	Agent (6)	Object (5)	Agent (2)	Object (4)
Distance	6.33	3.55	5.3	5.6	2.5	1
Decay	0.56	1.44	0.5	1	0.5	2

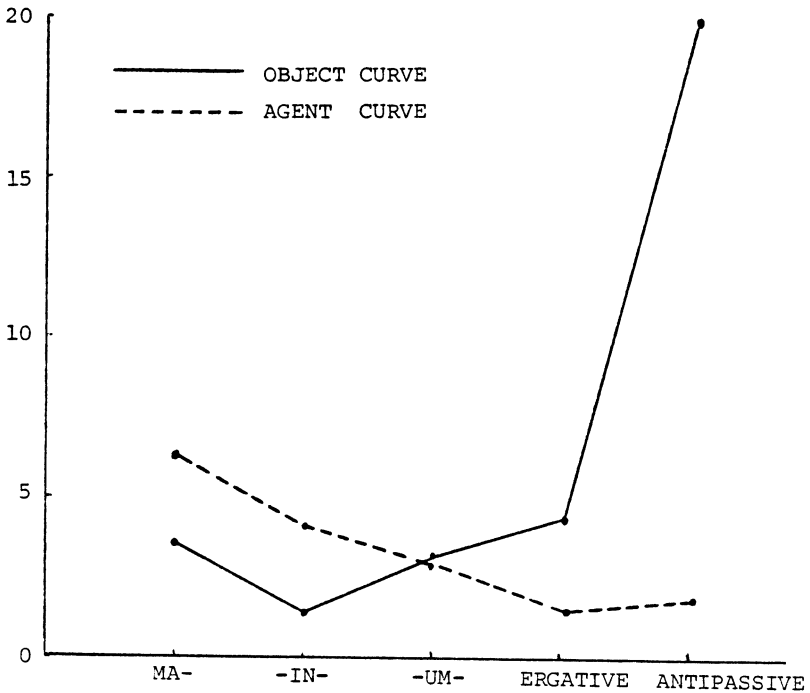
table 5. MA- passive

figure 1. Distance of Object and Agent: Overall Results

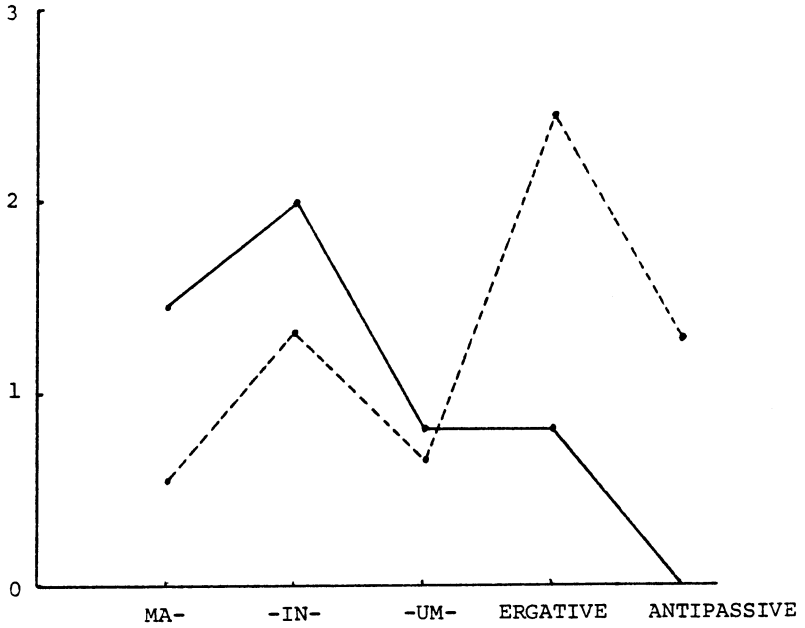


figure 2. Decay of Object and Agent: Overall Results

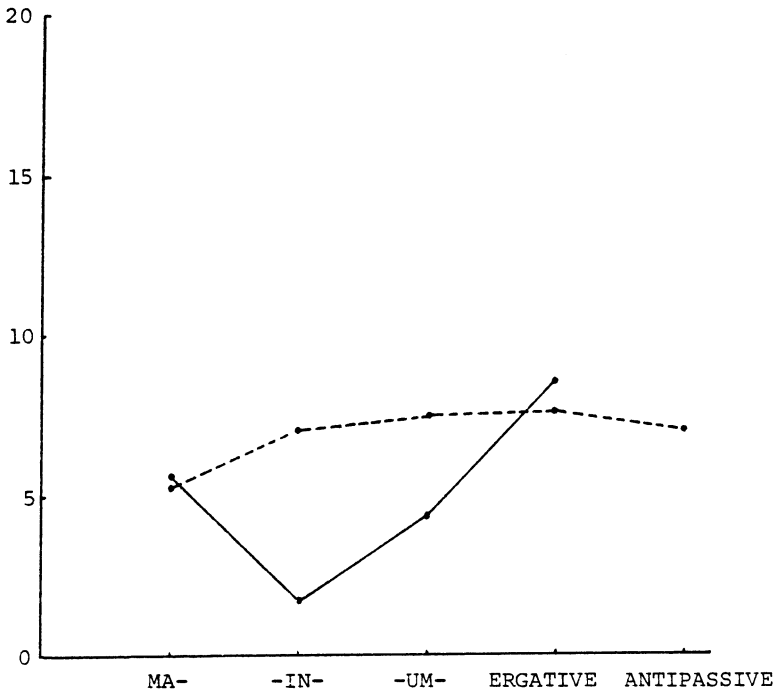


figure 3. Distance of Object and Agent: Def. Full NP's

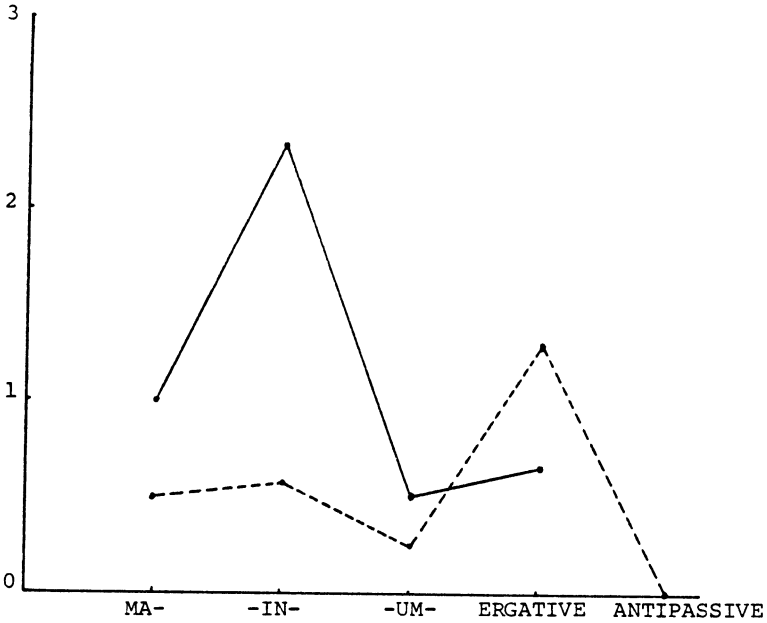


figure 4. Decay of Object and Agent: Def. Full NP's

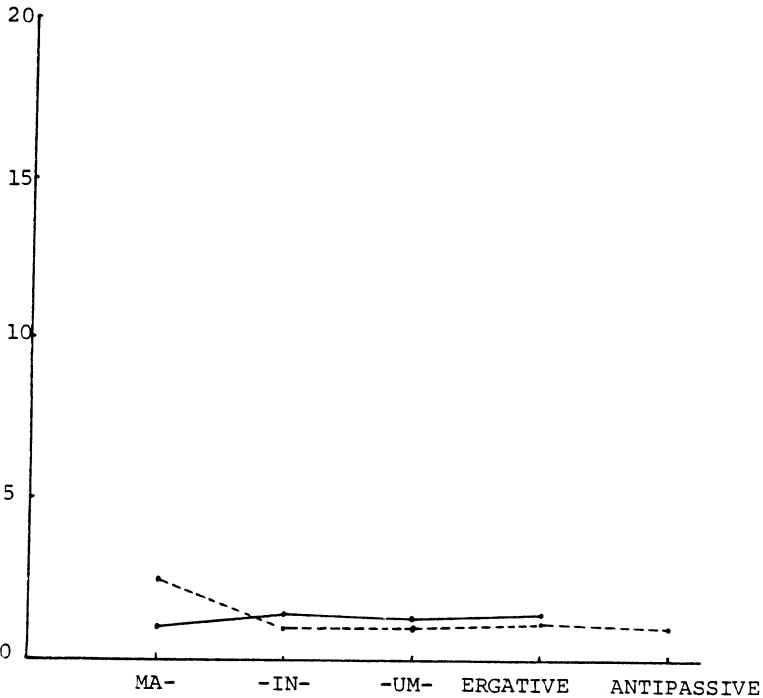


figure 5. Distance of Object and Agent: Ø An./Verb Agr.

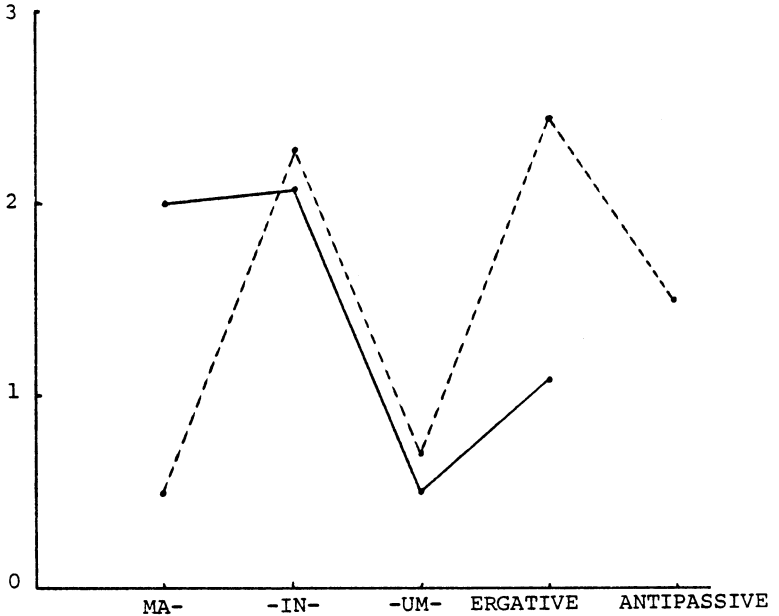


figure 6. Decay of Object and Agent: \emptyset An./Verb Ag

6. Discussion.

The results of this pilot study on a limited amount of data, viz. fifty pages of transcribed Chamorro narrative, are naturally somewhat tentative. However, as the curves show (fig. 1-6) there seems to be a fairly consistent correlation between the syntactic construction chosen by the Chamorro speaker and the values for referential distance and decay of at least the Object NP. With the exception of the MA- passive we get a consistent rising cline for the measurement of referential distance for the Object moving from the passive -IN- construction to the antipassive. The curves for the measurement of decay show the inverse relation where Object NP's have high decay in passive constructions moving to no decay in the antipassive. The two clines suggest that the Object NP's are highly continuous in passive constructions and become less continuous/less topical as one approaches the antipassive on the scale where one finds the indefinite/non-referential Objects. The overall measurements show that those constructions with highly topical Objects have Agent NP's which are less continuous/less topical. As is the case in most languages (cf. Givón 1979, 1983 (ed.), among others) we may observe that in Chamorro the most continuous/most topical argument in the sentence will tend to be selected as the syntactic subject.

As I shall discuss in more detail below the -UM- construction

provides some sort of middle ground where the Agent and Object NP's have a fairly equal degree of topicality. Because of the limited data some of the values presented in the tables 1-5 are not very representative as I will explain below. However, one may expect that the upgrading of the counts by extending the data base will iron out these difficulties and still support the tentative findings presented in this paper.

6.1. The Ergative.

On the basis of frequency - 150 ergative clauses as opposed to 48 instances of the 4 other syntactic types combined - we may conclude that the active ergative is the most basic construction in Chamorro narrative, i.e. the most common way in which the Chamorro speaker presents information about actions and events. The Chamorro speaker is thus more inclined to present the Agent as the NP with highest referential continuity/highest topicality. The measure of referential distance for the Agent is relatively low, the measure of decay relatively high and the reverse is the case for the Objects in this construction.

From a universal point of view it is not surprising that the construction which assigns highest topicality to the Agent is the most frequent in narrative discourse in a particular language since it has been established that such discourse on the whole is universally Agent oriented.

We can make the additional observation (cf. table 2) that the highest topical element in the ergative construction, viz. the Agent, tends to be coded syntactically by verb agreement alone (83% of the instances). The less topical element, viz. the Object, is most often coded as a definite full NP (63.3% of the cases). With the exception of the -UM- construction (cf. 6.3 below) subjects in all other constructions are higher in continuity/topicality than the second argument in the clause. Thus we find that the Agent is more topical than the Object in the antipassive and the ergative whereas the Object is more topical than the Agent in both passive constructions. Frequency counts of the distribution between subjects and the syntactic device by which they are coded in the sentence reveals the following (cf. also tables 1-5):

subject/∅ An./Verb Agr.	167	89.78%
subject/def. <u>full NP</u>	19	10.22%
Total	186	100%

table 6. distribution of syntactic devices for subjects

A similar frequency count for direct objects in transitive clauses in the Chamorro data shows the following percentages ♪):

direct object/∅ An.	43	22.51%
direct object/pronoun	7	3.66%
direct object/full def. NP	89	46.6%
direct object/name or unique NP	33	17.28%
direct object/ <u>indef. NP</u>	19	9.95%
Total	191	100%

table 7. distribution of syntactic devices for direct objects

The direct objects are usually the least topical in the transitive clause. The class of names and uniquely identifiable NP's show roughly the same values for both referential distance and decay as do definite full NP's. They are also used most frequently when a fairly large gap occurs between the new reference and the previous mention of an element in the discourse or when ambiguity may arise. They can thus be grouped together with the definite full NP's and combined provide 63.88% of the cases for direct objects in clauses in Chamorro narrative discourse. Both tables 6 and 7 corroborate in part the hierarchy given in (11). The subjects which tend to be highest in referential continuity/topicality are more likely to be coded as zero anaphora or by verb agreement (89.78% of the cases); direct object in transitive clauses are less topical and are most likely to be coded as definite full NP's or a similar coding device (63.88%).

6.2. The Antipassive.

The antipassive serves a specific pragmatic function in Chamorro when it is used as a semantically transitive sentence. This can be read off of figures 1 and 2 straightforwardly. The Object has the maximum value of 20 for referential distance indicating that it is new in the discourse. The additional fact that the Object has zero decay reflects its non-referentiality, non-specificity. The antipassive in Chamorro goes one step further than the antipassive in Inuktituk (Eskimo) as described by Kalmár (1979, 1980) (see section 3 above). There the antipassive indicated pragmatically that a new not necessarily indefinite item was being introduced in the discourse. Antipassives in Eskimo introduce new possibly topical referents in the Object position whereas the Object of the Chamorro antipassive has the lowest possible degree of topicality. One would thus expect the informational value coded in these constructions to the rest of the discourse to be fairly low. This expectation is borne out by the fact that antipassives have a high tendency to occur in backgrounded clauses, i.e. in general they are not involved in the main line of the thematic development of the narrative. To decide whether a clause is foregrounded or not I relied on two basic principles outlined and exemplified in more detail in Hopper and Thompson (1980):

- a) the clause has to give information about main events in the narrative, thus contributing to the "backbone" or "skeleton" of the text,
- b) the informational content of the clause has to be presented in sequential order.

It has been established that backgrounded clauses are not ordered with respect to one another and may be moved with respect to the foregrounded sentences in the narrative (cf. Hopper and Thompson 1980, *inter alia*).

Compare the following:

	Ergative	Antipassive with Object
foregrounded clauses	78 52%	1 14%
backgrounded clauses	72 48%	6 86%
Total	150 100%	7 100%

table 8. Distribution of Ergative and Antipassive in foregrounded and backgrounded clauses.

The sharp contrast in distribution between the ergative and antipassive in backgrounded and foregrounded clauses may provide an explanation for the relatively lower topicality of Agents in the antipassive as opposed to the ergative. Even though this needs to be checked more carefully, one suspects that the topicality of elements in foregrounded clauses will be higher than that of elements in backgrounded clauses.

The pragmatic function of the antipassive in Chamorro then is to mark those Objects in narrative discourse which are non-referential, have the lowest degree of topicality. This function of antipassives with Objects is in fact compatible with the function of those without. The Objectless antipassive provides the extreme case of introducing non-topical elements. At the same time they provide the majority of antipassive constructions in my data:

objectless antipassives	16	69.57%
antipassives with Objects	7	30.43%
Total	23	100%

table 9. Distribution of antipassives with and without Objects in narrative discourse.

As we shall see below, there is a converse situation with the MA-passive at the other end of the scale of syntactic constructions, where the prototypical, most frequent MA-passive is Agentless.

6.3. The -UM- construction.

The -UM- construction is the third active clause type I found in the data. According to my informant in all these sentences - when taken in isolation - the -UM- infix can be replaced without difficulty by the appropriate ergative verb agreement marker. This construction like the ergative one occurs with equal frequency in backgrounded and in foregrounded clauses (50% in both cases).

Topping (1973: 243-244) has attempted to explain this construction as an "actor focus construction", similar to the ones we may find in Philippine type languages⁴):

"The actor focus construction in Chamorro is used when the focus (or emphasis) is on the actor. (the actor is the one that performs the action, and is usually the subject of the sentence). The actor focus involves the use of emphatic pronouns and the actor infixes -UM- and MAN-. (...) If the actor of the sentence is expressed by a proper name, the emphatic pronoun may be omitted. (...) The prefix MAN- is used instead of the -UM- when the object is indefinite.⁵)"

Of the 16 examples of -UM- constructions in my data, none of them were accompanied by an emphatic pronoun and only two had a proper

name referent.⁶⁾

If the -UM- construction really were a Philippine type actor topic construction, one would expect the Agent to be of markedly higher topicality/continuity than the Object and obviously this is not borne out by the facts (cf. table 3 and figures 1-6). Rather, it seems to be the case that the Agent and the Object in this construction have roughly the same degree of topicality. Compared to the ergative and the two passive constructions (tables 2, 4, and 5) where there is a significant difference in the values for referential distance and/or decay of Agent vs. Object, we do not find such a gap between the values of Agent and Object in the -UM- construction. The differences are insignificant and could go either way, slightly in favor of a more topical Agent or slightly in favor of a more topical Object. The seemingly large difference in the values for referential distance between the Agents and the Objects which are syntactically coded as definite full NP's, is due to the fact that one of the Agents out of four instances in the data has a referential distance of 20, is introduced as a new element in the narrative. This high value for one of the instances is bound to boost the average value up. One may expect that such an infrequent high value will be less significant for the average outcome in a larger data base.

One may observe that this active construction is markedly less frequent than the ergative in narrative discourse (16 instances as against 150). This is not surprising since Agents on the whole tend to be more topical than Objects in narratives. The instances where this is not the case are rare and are specially marked in Chamorro.

The observation that the -UM- construction tends to mark pragmatically Agents and Objects which have roughly the same degree of topicality has a semantic correlate in Chamorro. The same construction is used for reciprocals where both arguments in the clause have equally important semantic roles in the event. Example:

- (12) Esti i palao'an um- a - sudda' dzän un pobli na hobbin tac
 this the woman UM-REC-meet and/with one poor link.young mar
 part.

"This woman met (with) a poor young man."

The -UM- construction marks the third step down on a cline of relative topicality of both Object and Agent. In the antipassive the Agent is the only topical argument, the Object being non-specific/non-referential and hence non-topical. The ergative pragmatically codes highly topical Agents and Objects which are relatively low in continuity or topicality. The -UM- construction in turn presents Agents and Objects with equal degree of topicality. As the next step on the cline one expects a construction in which the Object is more topical than the Agent.

6.4. The passive constructions.

Both passive constructions code information units in which the Object is more topical than the Agent. A discussion of both will necessarily involve a comparison in order to find the function

in which they differ.

Both constructions appear with equal frequency in foregrounded (-IN- passive: 45%; MA- passive 43%) and in backgrounded clauses so that on the thematic level of the narrative there seems to be no marked difference between the two.

The limited amount of data again are responsible for the skewed outcome of some of the numerical results. For the -IN- passive in column C (table 4), it seems that on the whole the Agent is more topical than the Object since the average values of referential distance and decay are slightly lower and higher respectively for the Agent than for the Object. The close match in low values for distance is expected since both are syntactically coded by zero anaphora. A similar close match for decay is against our expectations. Again, one out of the seven instances of the Agents has an exceptionally high value of 8 for the measurement of decay, which increased the average value by about 70%. Without this one instance the average of the remaining 6 instances would have been remarkably lower, viz. 1.33. The high value for decay for this particular instance indicates a switch reference in the narrative. The speaker abandoned the Object referent of the -IN- passive and continued talking about the Agent referent for the next 8 clauses. Again, one may expect that increasing the data base will level out the exceptionally high average values.

The graphs and column with numeric results do not present all the facts. They give the counts of those passive clauses alone where both an Agent and an Object are present. The overall distribution of passives with and without an Agent in the data is as follows:

	with Agent		without Agent		Total
<u>-IN-</u> passive	16	80%	4	20%	20
<u>MA-</u> passive	9	15%	53	85%	61

table 10. Distribution of passives with and without Agent.

Moreover, the Agents in the -IN- passive are all singular, previously identified referents. Three of the four 'unexpressed Agents' in this construction referred to particular events which were presented in the discourse immediately prior to the clause with the -IN- passive, stating the effect of the event on the Object participant. All of the Agents expressed in the MA- passive were plural Agents and often, when the Agent was not expressed, it could be interpreted as referring to a group of people mentioned in the narrative such as the Japanese, the Spaniards, or simply the Chamorro people in general. The distribution of -IN- passives and MA- passives according to whether the Agent is singular or plural respectively may provide an explanation for the fact that the overall results seem to suggest that the Agent in the MA- passive, even though consistently less topical than the Object, is on the whole less topical than the Agent of the -IN- passive, since singular referents tend to be more topical than plural referents in narratives (see Givón 1976 among others).

The -IN- passive has been called a Goal focus construction by Topping (1973: 245) where Goal refers to the direct object of a verb.

Unlike the wrongful comparison of the -UM- construction with the Agent topic constructions (cf. 6.3 above), the -IN- passive is very similar to the Patient focus or topic constructions one finds in the Philippine languages.

Givón (1981) identified three universal functions of passives:

- i) a non-agent argument assumes clausal topic function instead of the subject/agent,
- ii) the identity of the agent is suppressed, creating an impersonal construction,
- iii) the clause is detransitivized, becomes more stative, less transitive.

It seems clear that both the -IN- passive and the MA- passive share the first and in part the third function. They both take the plural subject agreement marker MAN- which is the intransitive plural agreement marker in Chamorro. In addition, the MA- passive codes function ii) as well, so that presumably it is the more passive construction of the two.

The prefix MA- of the passive may very well be related to the ergative third person plural marker MA-, so that in fact we have a historical remnant which indicates that the event was or is controlled by a plural Agent, not necessarily, in fact most unlikely present in the discourse. The fact that the passive with plural Agents, rather than the one with singular Agents, should give rise to an impersonal construction is not surprising since - as already mentioned above - singular referents are more topical than plural referents.

7. Conclusion.

The five different constructions in Chamorro for semantically transitive sentences code different points along a continuum which marks the functional domain of relative topicality of both Agent and Object in clauses. The measure for distance in figure 1 for the overall results suggest almost a complete reverse relationship between the topicality of the Agent in relation to the Object as one moves down from the antipassive to the MA- passive. The term antipassive seems to be most appropriate in this context as its function is exactly the opposite of the function of the "most" passive MA- construction: the antipassive totally suppresses the Object, the Object is non-referential or not mentioned at all. The MA- passive prototypically suppresses the Agent, which is less topical than in the -IN- passive or not mentioned at all. The antipassive in addition is syntactically marked as an intransitive sentence, evident from the fact that it takes the prefix MAN-, the plural intransitive agreement marker, as do both passives. Syntactic transitivity involves a cline with two possible extremes, the antipassive and the MA- passive on opposite ends. There are two separable semantic characteristics involved in syntactic transitivity:

- i) the presence of an Agent who initiates the event,
- ii) the presence of an Object that registers the bulk of the impact.

There seems to be an additional pragmatic condition for syntactical

transitive sentences:

- iii) the Agent NP has to be more referentially continuous/
more topical than the Object NP in the clause.

The ergative construction in Chamorro is the best candidate to be syntactically transitive as all the characteristics/conditions apply. The antipassive is a very active construction but either involves a non-referential and hence non-identifiable Object or no Object at all. The -IN- passive involves both an Agent and an Object but the latter surpasses the former in degree of topicality. Both passives foreground an Object referent over the Agent, thus concentrating more on the resulting state than on the action itself. The MA- passive prototypically includes only the Object and is thus the more stative of the two. All three constructions then, the antipassive and both passives do not abide by the three conditions stated above and are thus marked as being syntactically intransitive.

The -UM- construction violates the third condition but whether it is syntactically transitive or intransitive needs to be investigated in full detail. There is probably a historical relationship between the -UM- infix of the semantically transitive clause and the -UM- singular agreement marker for intransitive sentences. In the semantically transitive constructions in my data the -UM- is used for both singular and plural subjects.

Even though one can observe some overlap in the functions of the five different syntactic constructions - especially in individual instances - the tendencies unearthed in this study by the quantitative analysis are important and may be schematically presented as follows:

<u>Construction Type</u>	<u>Degree of Topicality</u>	
antipassive	Agent >> Object	(the Object gets suppressed completely)
ergative	Agent > Object	
<u>-UM-</u> construction	Agent = Object	
<u>-IN-</u> passive	Agent < Object	
<u>MA-</u> passive	Agent << Object	(the Agent prototypically gets suppressed)

Footnotes:

- 1) Many thanks to my informant Vicky Manibussan, a native speaker from the island of Guam, who provided and helped transcribe the narratives on which this pilot study is based. The reader should be aware of the limitations involved in working with only one speaker aside from the limitations of the data itself. The pilot study should not be seen as a final end product but needs to be enlarged by incorporating narratives from different native speakers and by looking at conversations as well to check whether the same pragmatic principles hold. Many thanks are also due to Tom Givón who was my advisor throughout the research for this paper.
- 2) The term Object in this paper should not be considered a syntactic term. Rather it is a semantic one referring to that argument in the sentence which registers the bulk of the impact initiated by

- the Agent and thus can be the direct object of the active clauses and subject of passive clauses.
- 3) These transitive clauses include not only the ergative and the -UM- construction but also a set of sentences in which the verb showed possessive agreement with the subject and sentences in which the verb was not marked at all. These two types of construction are not discussed in this paper.
 - 4) The focus constructions in the Philippine languages have also been called topicalization constructions.
 - 5) The MAN-prefix Topping refers to here is the antipassive marker which I discussed earlier.
 - 6) These inaccuracies on Topping's part most likely stem from looking only at example sentences obtained through direct elicitation or looking at sentences in isolation without their proper discourse context.
 - 7) Without the value 20 for referential distance of one of the Agents the average value for the three remaining instances comes out to be 3.33.

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