Advancement and Ascension to Direct Object in Chamorro

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0. Introduction.* Evidence is mounting that certain types of grammatical rules are universal. By universal, I mean that these rules are part of an inventory of possible rules from which a particular grammar selects a subset.[1] Two such types of rules which have been proposed are Advancement and Ascension rules.[2] In an Advancement rule, a nominal bearing a given grammatical relation at one point, later bears a relation higher on a hierarchy of relations. In an Ascension rule, a nominal ascends out of a subordinate structure to bear the grammatical relation which that subordinate structure bore in the matrix clause. In this paper I present evidence that Advancement and Ascension to Direct Object are part of the grammar of Chamorro, a Western Austronesian language. This evidence further substantiates the claim that rules of Advancement and Ascension are part of universal grammar.

In Chamorro, an NP bearing any of a number of semantic relations may be found as the surface direct object of a clause. I will examine two types of nominals which may be found as surface direct objects: notional indirect objects, as illustrated in (1), and notional possessors of direct objects, as illustrated in (2).

(1) Ha-taitä-yi   i   famagu'un ni lebblu.
     3s-read-A   D   children   NT book

     'She/He read the book to the children.'

(2) Ha-chuda'guan   yu' i   neni ni nä-hu.
     3s-spill-A   me   D   baby NT food-my

     'The baby spilled my food.'

These sentences may be contrasted with (3) and (4) in which the notional indirect object and possessor are surface IO and possessor respectively.

(3) Ha-taitai   i   lebblu   pära   i   famagu'un.
     3s-read   D   book   to   D   children

     'He/She read the book to the children.'

(4) Ha-chuda   i   neni   i   nä-hu.
     3s-spill   D   baby   D   food-my

     'The baby spilled my food.'

One would like to have an analysis which relates sentence (1) to (3) and (2) to (4) in a principled manner. I will attempt to provide this by proposing two rules which create derived direct objects in Chamorro. I claim that (1) involves an Advancement rule, which I will call 3-2 Advancement, which promotes an underlying IO to surface DO, and that (2) involves an Ascension rule, which I will call Possessor Ascension, which promotes an underlying possessor to surface DO.

I will utilize the Relational Grammar framework and terminology as presented in Perlmutter and Postal (1977, 1978),[3] but I deviate from this framework by assuming a derivational model of grammar rather than the

Uninetwork model proposed in Perlmutter and Postal (1978). This deviation entails no empirical consequences for the phenomena which will be considered here. Clause structure will be represented in terms of stratal diagrams in which the symbols 1,2,3 correspond to the grammatical relations of subject (S), direct object (DO), and indirect object (IO), respectively. Each successive stratum in a stratal diagram represents a derivational level in which a syntactic rule has applied.

In the argumentation which follows, I will compare two possible analyses of the data: a bistratal analysis in which a nominal bearing the initial IO or possessor relation bears the derived DO relation, and a monostratal analysis in which the initial and final grammatical relations are the same. I will argue that the bistratal analysis, involving rules of Advancement and Ascension, results in a simpler grammar for Chamorro.

This paper is organized as follows. Section 1 presents some syntactic phenomena of Chamorro which can be used to distinguish direct objects from non-DOs. Section 2 examines the interaction of these processes with 3-2 Advancement and concludes that a bistratal analysis of 3-2 Advancement is superior to a monostratal analysis. Section 3 examines the interaction of these processes with Possessor Ascension and concludes that a bistratal analysis of Possessor Ascension is superior to a monostratal analysis. Section 4 contains concluding remarks.

1. Direct Objects

1.1 General Facts. Chamorro is a verb initial language with a partially ergative system of verbal subject agreement prefixes. Verbs are morphologically marked for tense (future vs. nonfuture) and aspect (perfective vs. imperfective). Verbs are also marked for number agreement when the clause is finally intransitive.

Final direct objects are superficially distinguished from other final nonsubjects by the case marking system. Definite NPs are preceded by case markers, indefinite NPs are not.

(5)   Case Marking System

	Unmarked	Oblique	IO
common noun	--	ni	pära
proper noun	si	äs	pära si
pronoun	--	nu	pära

The Unmarked case is used for final subjects and direct objects. The Oblique case is used for NPs bearing oblique relations as well as with chômeurs.

Direct objects can also be distinguished from NPs bearing other relations by their interaction with certain syntactic operations. These operations affect direct objects differently than they affect obliques or indirect objects. In this section, I will present five such syntactic
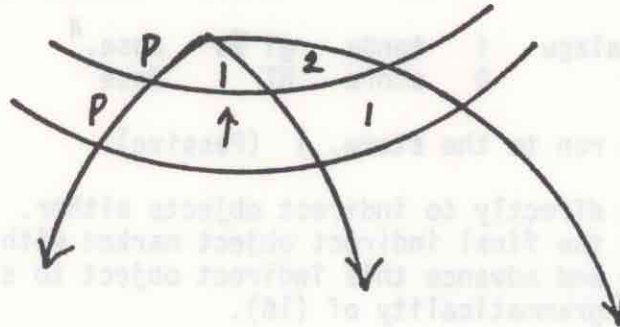
phenomena which will later be used to test for DO-hood of a given nominal.

1.2 Passive. There is a rule of Passive in Chamorro which advances direct objects to subjects. The initial subject becomes a chômeur after the application of Passive, and is marked with the oblique case markers. In general, the verb is marked with the prefix ma- if the initial subject is plural, otherwise, the verb is marked with the infix -in-. The Passive rule is stated informally in (6) and is illustrated in (7).

(6) Passive

In a stratum containing both a 1 and a 2, the nominal bearing the 2 relation advances to bear the 1 relation. The nominal bearing the 1 relation is demoted to bear the chômeur relation.

(7)

Examples (8) and (10) are active sentences, while examples (9) and (11) are the corresponding passive sentences.

(8) Ha-punu'   si   Antonio   si   Juan.
     3s-kill   u   Antonio   D   Juan

     'Antonio killed Juan.'

(9) P-in-inu'   si   Juan   gi äs   Antonio.
     PS-kill   u   Juan   NT   Antonio

     'John was killed by Antonio.'

(10) In-pinu'   i   lähi.
     1pl-kill   D   man

     'We killed the man.'

(11) Ma-punu'   i   lähi   ni   sindalu   siha.
     PS-kill   N   man   NT   soldier   P

     'The man was killed by the soldiers.'

All passive clauses are finally intransitive, as evidenced by number agreement on the verb as well as by lack of ergative agreement. (12) is a passive clause, obligatorily marked with the plural subject marker, man-, .

rather than the ergative agreement marker ma-. Compare it to (10) which is finally transitive.

(12) Man-p-in-inu'   i   lalahi   gi äs   Antonio.
     PLS-PS-kill   D   men   NT   Antonio

'The men were killed by Antonio.'

Passive promotes only direct objects. It cannot apply directly to nominals bearing oblique relations such as Goal as illustrated in (13) and (14). I tenda is the goal in (13). There is no passive clause like (14) in which i tenda bears the subject relation.

(13) Malagu   si   Jose   pära   i   tenda.
     run   u   Jose   to   D   store

'Jose ran to the store.'

(14) *F-in-alagu   i   tenda   gi äs   Jose.[4]
     Ps-run   D   store   NT   Jose

(Jose ran to the store.) (Passive)

Passive cannot apply directly to indirect objects either. In (15), i istudianti siha is the final indirect object marked with pära. Passive cannot apply and advance this indirect object to subject, as illustrated by the ungrammaticality of (16).

(15) Ha-tugi'   edyu na katta   i   ma'estru pära   i   istudianti siha.
     3s-write   that L letter D   teacher   to   D   student   P

"The teacher wrote that letter to the students.'

(16) *(Pära)   i   istudianti   siha   man-t-in-igi'   edyu   na
     to   D   student   PLS-PS-write   that   L

     katta   ni   i   ma'estru.
     letter   NT   D   teacher

(The students were written that letter by the teacher.)

Passive cannot apply directly to possessors. In (17), i famagu'un is the possessor of i biskleta. Example (18) illustrates that i famagu'un cannot be advanced to subject by passive.

(17) Ha-sakki   si   Juan   i   biskleta-n   i   famagu'un.
     3s-steal   u   Juan   D   bicycle-L   D   children

'John stole the children's bicycle.'

(18) *I famagu'un man-s-in-äkki äs Juan i biskleta-(n).
     D children PLD-PS-steal NT Juan D bicycle-L

(John stole the children's bicycle.)

1.3 Reciprocals. Stated informally, reciprocal clauses are formed when, at some level of derivation, the subject and the direct object of a clause stand in a semantically reciprocal relationship. These clauses translate as English clauses with 'each other'. Compare (19), which is nonreciprocal, with (20), which is reciprocal.

(19) Si Pedro ha-sokni   si Jose.
     u Pedro 3s-accuse D Jose

'Pedro accused Jose.'

(20) Todu i säkki man-ä-sokni.
     All D thieves PLS-R-accuse

'All the thieves accused each other.'

Morphologically, reciprocal clauses appear as surface intransitives. Examine the verb marking in (20). If (20) were finally transitive we would not expect the plural agreement marker (man-). The verb in a reciprocal clause is marked with the stressed prefix, a-. The 'each other' NP does not appear overtly.[5]

The 'each other' NP must be a direct object of the clause at the time reciprocal applies. For example, reciprocal clauses cannot be formed directly from clauses with intransitive verbs with oblique objects. Example (21) illustrates such an intransitive clause. Example (22) would be the corresponding reciprocal.

(21) Man-ma'cho'chu i famagu'un pära i atungu'-niha.
     PLS-work   D children   for   D friend-P3p

'The children worked for their friends.'

(22) *Man-a-fa'cho'chu i famagu'un.
      PLS-R-work   D children

(The children worked for each other.)

Indirect objects may not be the 'each other' NP in reciprocal clauses, as illustrated by (23) and (24), where i famagu'un is the indirect object.

(23) Ha-sangan i istoria pära i famagu'un.
     3s-tell   D story   to   D children

'He/She told the story to the children.'

(24) *Man-ä-sangan   i   famagu'un   (ni)   i   istoria.
      PLS-R-tell   D   children   NT   D   story

      (The children told each other the story.)

Possessors may not be the 'each other' NP in a reciprocal clause, as
illustrated by (25) and (26), where i famagu'un is the possessor of the
direct object.

(25) Ha-yulang   i   muneka-n   i   famagu'un si Maria.
      3s-break   D   doll-L   D   children   u   Maria

      'Maria broke the children's doll.'

(26) *Man-ä-yulang   (ni)   i   muneka   i   famagu'un.
      PLS-R-break   NT   D   doll   D   children

      (The children broke each other's dolls.)

1.4 Relative Clauses.[6] Relative clauses in Chamorro are separated from
their heads by the complementizer, ni. The target nouns are deleted.
Verb morphology in relative clauses is sensitive to the final grammatical
relation of the relative noun in its clause. When direct objects are
relativized, the verb may appear with transitive morphology, i.e. ergative
agreement, as shown in (27).

(27) Hu-taitai   i   kätta   ni   ha-tugi'.
      1s-read   D   letter RC   3s-write

      'I read the letter that he/she wrote.'

Final indirect objects cannot be relativized by deletion. There is no
relative clause morphology which will make a sentence like (28) grammatical.

(28) *Kao un-li'i'   i   taotao ni   hu-tugi' i   kätta?
      Q   2s-see   D   man   RC   1s write D   letter

      (Did you see the man that I wrote the letter to?)

1.5 Person Constraints. Chamorro exhibits some interesting constraints
on the person of NPs within a clause. These Person Constraints have been
described by Chung (ms).' One of these constraints can be stated as follows.

(29) Person Constraint

      No clause may have a final subject which is 3 singular
      and a final pronominal direct object which is third
      person and not coreferential to the subject.

For example, compare (30) and (31).

(30) Man-ma-aresta siha nigap   ni i pulusia.
     PLS-PS-arrest they yesterday   NT D police

     'They were arrested yesterday by the police.'

(31) *Ha'aresta siha nigap   i pulusia.
     3s-arrest them yesterday   D police

     (The police arrested them yesterday.)

Sentence (31) has been ruled out by the constraint stated above. Sentence (30) is the passive counterpart to (31). The fact that (30) is grammatical provides evidence that this constraint must be stated in terms of final grammatical relations.

1.6 Indefinite Object Constraint. There is a constraint in Chamorro against surface indefinite direct objects.[8] The constraint can be stated informally as follows:

(32) Indefinite Object Constraint

     The nominal bearing the final 2 relation of a given clause must not be an indefinite nominal.

Morphologically, indefinite NPs can be identified by the lack of a determiner. This constraint accounts for the ungrammaticality of sentences like (33). Compare (33) to (34), in which the final direct object is definite.

(33) *Hu-risibi kätta ginen i lahi-hu.
     1s-receive letter from D son-Pls

     (I received a letter from my son.)

(34) Hu-risibi i kätta ginen äs Delores.
     1s-receive D letter from NT Delores

     'I received the letter from Delores.'

Final indefinite indirect objects do not violate the Indefinite Object Constraint. Examine (35) and (36), in which the definiteness of the final indirect object, taotao, does not affect grammaticality.

(35) Ha-tugi' i kätta pära i taotao.
     3s-write D letter to D man

     'He/She wrote the letter to the man.'

(36) Ha-tugi' i kätta pära taotao.
     3s-write D letter to man

     'He/She wrote the letter to a man.'

The definiteness of the final direct object in such a sentence does, however, affect grammaticality, as illustrated by (37).

(37) *Ha-tugi'   katta   pära   i   taotao.
      3s-write   letter   to   D   man

(She/He wrote a letter to the man.)

Such a sentence can be made grammatical by the application of a Detransitivization rule marked by the prefix man-/fan-. (38) is a Detransitivized sentence.

(38) Manggi'   katta   pära   i   taotao.
     DT write   letter   to   D   man

'She/He wrote a letter to the man.'

1.7 Summary. Five syntactic constructions have been discussed which will prove crucial in identifying direct objects. Passive and Reciprocal operate on and thus require a direct object. Relative clause formation can operate on DOs (as well as some other grammatical relations) but it cannot operate on IOs. The Indefinite Object Constraint and the Person Constraints ban certain types of final direct objects.

2.   3-2 Advancement

In this section, I will discuss sentences in which the notional IO behaves like a final DO with respect to the phenomena discussed in section 1.

2.1 General Description and Proposed Analysis. The optional rule which I will call 3-2 Advancement applies to sentences with an underlying direct object and an underlying indirect object. After 3-2 Advancement has applied, the underlying IO surfaces with the unmarked case and the underlying DO is marked with ni, the oblique case marker. Applying 3-2 Advancement produces (40) which is synonymous with (39), its unadvanced counterpart.

(39) Ha-sangan   i   istoria   pära   si   Margarita.
     3s-tell   D   story   to   D   Margarita

'He/She told the story to Margarita.'

(40) Ha-sangan-i   si   Margarita   ni   i   istoria.
     3s-tell-A   D   Margarita   NT   D   story

'He/She told Margarita the story.'

▪ 3-2 Advancement is registered on some verbs by the presence of a suffix, -i (allomorphs: -yi, -gui). There is another class of verbs which includes na'i 'give', bendi 'sell', and faisin 'ask', which bear no overt suffix to register 3-2 Advancement.[9] 3-2 Advancement has not applied in (41), but has applied in (42), evidenced by case marking.

(41) Hu-na'i   i   lebblu   para   i   che'lu-hu.
     1s-give   D   book   to   D   sibling-P1s

'I gave the book to my sister/brother.'

(42) Hu-na'i   i   che'lu-hu   ni   i   lebblu.
     1s-give   D   sibling-P1s   NT   D   book
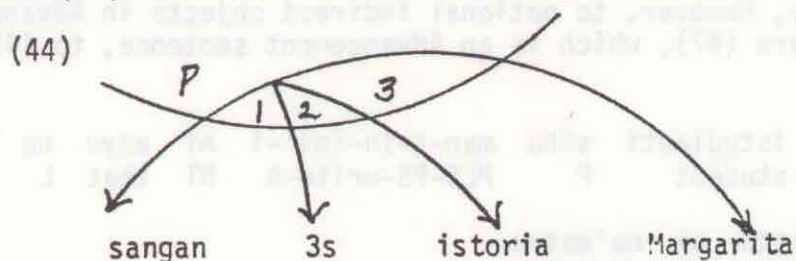
'I gave my sister/brother the book.'

For convenience, I will use examples which register 3-2 Advancement overtly.

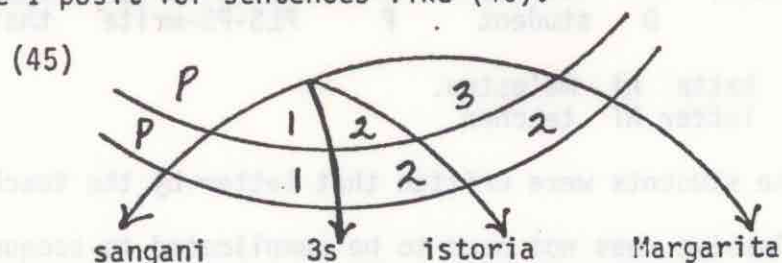The rule of 3-2 Advancement can be stated informally as follows.

(43) <u>3-2 Advancement</u>

> Given a stratum containing both a 2 and a 3, a nominal
> bearing the 3 relation may advance to bear the 2 relation.
> The initial 2 is demoted to bear the chômeur relation.

Sentences like (39) are monostratal, i.e. they involve no relation-changing rules. Figure (44) represents the structure I posit for sentences like (39).

(44)
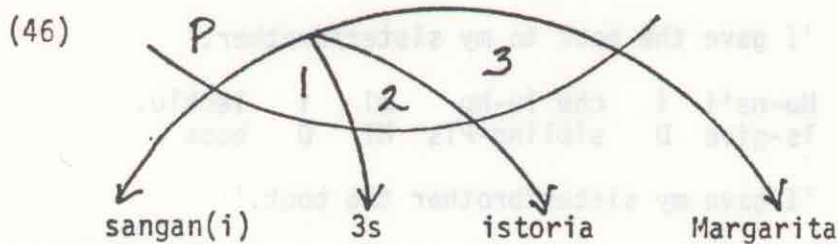

   sangan   3s   istoria   Margarita

Sentences like (40) are bistratal. By bistratal, I mean that the initial grammatical relations borne by the nominals in the clause are different from their final grammatical relations. Figure (45) represents the structure I posit for sentences like (40).

(45)

   sangani   3s   istoria   Margarita

I will hereafter refer to sentences which I claim involve 3-2 Advancement as Advancement sentences. I will refer to a nominal which I claim has advanced from IO to DO as an Advancement nominal.

2.2 Alternative Analysis. There are many possible monostratal structures which could be claimed for (40). I will argue only against the one which

I feel is the most plausible. Such a monostratal analysis would claim that (39) and (40) have the same relational structure, illustrated in Figure (46).

(46)

sangan(i)   3s   istoria   Margarita

I will refer to this alternative analysis as the Initial=Final Analysis. Such an analysis has been claimed for Chamorro by Topping (1973). He ascribes the difference in a pair of sentences like (39) and (40) to a change in focus rather than to a change in grammatical relations. I will not specifically argue against Topping's focus analysis, but rather against any analysis which claims that both (39) and (40) have the relational structure shown in Figure (46).

2.3 Arguments for Final DO-hood of the Advancement Nominal. In this section, four phenomena will be discussed which provide evidence for the final DO-hood of the Advancement nominal.

2.3.1 Passive. Passive cannot apply to final IOs as shown in section 1.2. Passive can apply, however, to notional indirect objects in Advancement sentences. Compare (47), which is an Advancement sentence, to (48), which is not.

(47) I istudianti siha man-t-in-igi'-i ni edyu na
     D student   P   PLS-PS-write-A NT that L
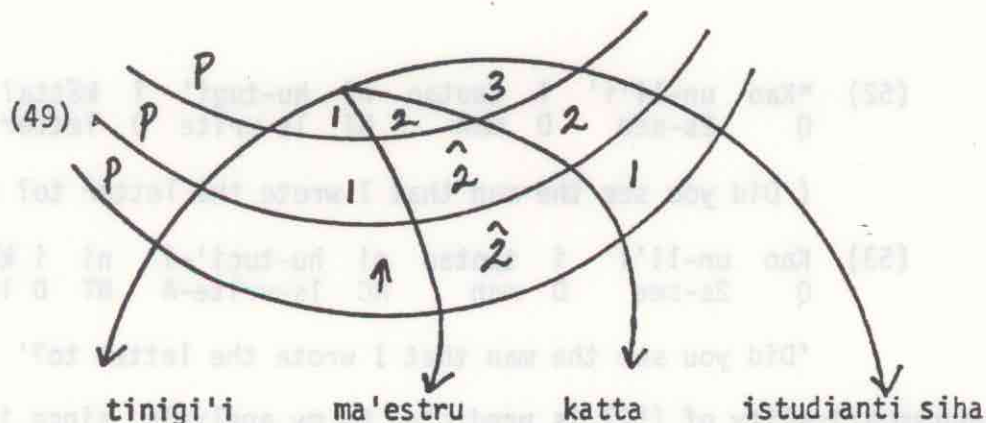
     katta ni ma'estru.
     letter NT teacher

     'The students were written that letter by the teacher.'

(48) *(Pära)   i istudianti siha man-t-in-igi' edyu
      To   D student   P   PLS-PS-write that

     na katta ni ma'estru.
     L letter NT teacher

     (The students were written that letter by the teacher.)

The rule of Passive does not need to be complicated to account for sentence (47) if one acknowledges that i istudianti siha was advanced from 3 to 2 before the application of Passive. Figure (49) illustrates the structure claimed for sentence (47).

(49)

tinigi'i   ma'estru   katta   istudianti siha

The advancement analysis explains the ungrammaticality of (48) as well as the grammaticality of (47). In (48), the NP <u>i istudianti siha</u> was never a direct object and thus was never available for passivization. In (47), however, the morphological evidence that advancement has occurred can be correlated with the possibility of passivization of the notional indirect object.

The Initial=Final analysis would have to state that Passive applies to notional indirect objects only in case the verb belongs to a certain syntactic class. This class cannot be defined morphologically (i.e. <u>-i</u> verbs) since not all verbs allowing advancement take the suffix <u>-i</u>. Thus some syntactic feature would be necessitated, which seems to be a 'brute force' solution. Furthermore, the generalization would be missed that Passive applies only to direct objects.

2.3.2 Reciprocal. Reciprocals can only be formed when reciprocal nom-inals bear the S and DO relation at some level of derivation. If an initial IO is semantically reciprocal with an initial S, there are two possibilities. The initial IO is the final IO, and reciprocal formation is impossible, as in (50). But if the initial IO bears the DO relation in a succeeding stratum, reciprocal formation is possible (in fact oblig-atory), as in (51).

(50) *Man-ä-sangan i famagu'un i estoria (pära siha).
       PLS-R-tell   D children   D story   to   them

(The children told the story to each other.)

(51) Man-ä-sangan-i ni i istoria i famagu'un.
       PLS-R-tell-A   NT D story   D children

'The children told each other the story.'

Under the Advancement analysis, no special statement is needed to account for these facts. Under the Initial=Final analysis, the rule of Reciprocal would have to be complicated in order to account for the con-trast between (50) and (51). Such a revised rule of Reciprocal is sug-gested in section 2.4.2.

2.3.3 Relative Clauses. Relative clauses provide an argument for the final DO-hood of the Advancement nominal. Examine the contrast between sentences (52) and (53).

(52) *Kao un-li'i' i taotao ni hu-tugi' i kätta?
     Q   2s-see D man   NT 1s-write D letter

(Did you see the man that I wrote the letter to?)

(53) Kao un-li'i' i taotao ni hu-tugi'-i' ni i kätta?
     Q   2s-see D man   RC 1s-write-A NT D letter

'Did you see the man that I wrote the letter to?'

The ungrammaticality of (52) is predicted by my analysis, since i taotao
is the initial and final IO, and thus is not available to be relativized.
The grammaticality of (53) is predicted by the Advancement analysis, in
which i taotao is the final DO, and thus available to relativization.
The Initial=Final analysis would have to complicate the rule of relative
clause formation in order to account for the contrast between (52) and
(53). One could say that IOs can be relativized only in clauses with
verbs which are syntactically marked in some way, but again this is an
ad hoc analysis.

2.3.4 Person Constraint. The Person Constraint which was stated in
section 2.3 provides an argument for the final DO-hood of the Advance-
ment nominal. Examine the contrast between (54), (55), and (56).

(54) Ha-chuli' i salappi' si Juan pära guiya.
     3s-bring D money   u Jaun to E3s

'Juan brought the money to her/him.'

(55) *Ha-chuli'-i gui' si Juan ni salappi'.
     3s-bring -A A3s u Juan NT money

(John brought her/him the money.)

(56) Ha-chuli'-i si Pedro si Juan ni salappi'.
     3s-write- A u Pedro u Juan NT money

'John brought Pedro the money.'

In (54), the third person pronoun is a final indirect object; thus the
Person Constraint is not violated. In (56), there is no third person
pronoun, so regardless of GRs the Person Constraint is not violated. In
(55), however, the Person Constraint has been violated.

The contrast between (54), (55), and (56) is explained with no
special statement if one accepts the 3-2 Advancement analysis for (55).
Since gui' is the final DO in (55), the sentence is automatically ruled
out by the Person Constraint.

The Initial=Final analysis would have to complicate the Person Con-
straint in an ad hoc way in order to account for the above contrast.
Such a revised Person Constraint is suggested in section 2.4.3.

2.4 Arguments for Final Non-DO-hood of Initial DO. In this section,

five phenomena will be discussed which provide evidence for the final non-DO-hood of the initial DO in Advancement sentences.

2.4.1 Passive. Passive clauses provide an argument for the final non-DO-hood of the initial DO in 3-2 Advancement sentences. The Passive rule applies only to DOs. Under the Advancement analysis, the initial DO bears the final chômeur relation in Advancement sentences. It is predicted that the initial DO cannot be passivized after 3-2 Advancement has applied. Such sentences are ungrammatical, as predicted. Compare (57), in which 3-2 Advancement has not occurred and the DO, edyu na katta may be passivized, with (58), in which 3-2 Advancement has applied, causing edyu na katta to bear the chômeur relation and not be passivizable.

(57) Edyu na katta t-in-igi' pära i istudianti siha ni ma'estru.
     that L letter PS-write   to D student   P NT teacher

     'That letter was written to the students by the teacher.'

(58) *(Ni) edyu na katta t-in-igi'-i (pära) i
      NT   that L letter PS-write-A   to   D

     istudianti siha ni ma'estru.
     student   P   NT teacher

     (That letter was written (to) the students by the teacher.)

The Initial=Final analysis would have to complicate the rule of Passive in order to account for sentences like (58). One would be forced to complicate the Passive rule. The rule could perhaps be stated in terms of syntactic features, as in (59). For example:

(59) Passive (Initial=Final)

     Indirect object may become subject if verb has special
     syntactic feature. Otherwise, direct object becomes
     subject.

Notice, however, that in clauses with specially marked verbs this formulation fails to predict which nominal (IO or DO) will be advanced by Passive. It is thus a less desirable formulation than that given in (6).

2.4.2 Reciprocals. Reciprocals provide evidence for the non-DO-hood of the initial DO in Advancement sentences. Compare sentence (60), in which Reciprocal has applied, with sentence (61), in which Reciprocal cannot apply.

(60) Man-ä-konni' i taotao siha pära i pulusia.
     PLS-R-bring   D man   P   to   D police

     'The men brought each other to the police.'

(61)　*Man-ä-konni'-i i/ ni　pulusia　i　taotao　siha.
　　　　PLS-R-bring-A　D NT　police　D　man　P

(The men brought each other to the police.)

In (60) Reciprocal has applied, providing evidence that i taotao siha
is the DO. In (61), which is an Advancement sentence, Reciprocal
cannot apply. This is predicted by the Advancement analysis, since in
(61) i taotao siha is not the final direct object, but rather a chomeur.

　　　The Initial=Final analysis would have to complicate the rule of
Reciprocal in order to account for the data. One would again need
recourse to a syntactic feature or some ad hoc method of distinguishing
those verbs allowing advancement from other verbs.

2.4.3 Person Constraint. The Person Constraint also provides an
argument for the final non-DO-hood of the initial DO in Advancement
sentences. Compare sentence (62), which violates the Person Constraint,
with (63), which does not.

(62)　*Ha-konni　gui'　si Juan　pära　i　pulusia.
　　　　3s-bring　A3s　u　Juan　to　D　police

(John brought him/her to the police.)

(63)　Ha-konni'-i　i　pulusia　si　Juan　nu　guiya.
　　　　3s-bring-A　D　police　u　Juan　NT　E3s

'John brought him/her to the police.'

These facts are predicted by the Advancement analysis of a sentence like
(63), which includes chômage of the initial DO. In this sentence, i
pulusia rather than guiya is the final DO. Thus, this sentence does not
violate the Person Constraint as stated. If one wanted to claim that
guiya were a final direct object in (63), then the Person Constraint would
have to be complicated in order to account for the distinction between
(62) and (63).

　　　Under the Initial=Final analysis, one might have two separate Per-
son Constraints. There would be a constraint against final third person
pronominal IOs in clauses with -i verbs. There would be a constraint
against final and third person IOs sometimes in clauses with unmarked
3-2 verbs like na'i, 'give'. There would be a constraint against final
third person DOs elsewhere. Such a formulation seems hopelessly ad hoc,
and loses the generality of the Person Constraint.

2.4.4 Indefinite Object Constraint. The constraint against final indef-
inite DOs provides an argument for the final non-DO-hood of the initial
DO in Advancement sentences. Sentences with indefinite final DOs are
ill-formed in Chamorro. Examine the contrast between (64), (65) and
(66).

(64) *Ha-tugi'   kanta   pãra   i   nubia-ña.
     3s-write   song   to   D   girlfriend-P3s

(He wrote a song for his girlfriend.)

(65) Ha-tugi'-i   i   nubia-ña   kanta.
     3s-write-A   D   girlfriend-P3s   song

'He wrote a song for his girlfriend.'

(66) Ha-tugi'-i   kanta   i   nubia-ña.
     3s-write-A   song   D   girlfriend-P3s

'He wrote a song for his girlfriend.'

Example (64) is ill-formed because kanta, the initial and final DO, is indefinite. The grammaticality of (65) and (66) provides evidence that kanta is not a final DO in these sentences.

The Initial=Final analysis would be forced to complicate the statement of the Indefinite Object Constraint in an ad hoc manner in order to account for sentences like (65) and (66). Moreover, the generalization would be missed that Chamorro has no clauses with final indefinite DOs.

2.4.5 Case Marking. The distribution of the oblique case marker provides evidence for the final non-DO-hood of the initial DO in Advancement sentences.

Ni is a final common noun oblique case marker. It marks passive chômeurs, as illustrated in example (67), as well as some other oblique relations.

(67) Si Carmen pãra u-ni-na'-fattu atrasahu ni i mangglu.
     u Carmen Fut 3s-PS-C-arrive late   NT D storm

'Carmen will be made to arrive late by the storm.'

Ni cannot mark final direct objects. Compare (68), which is a transitive clause, with (69), in which ni marks the surface direct object.

(68) Hu-li'i'   i   ga'lagu.
     1s-see   D   dog

'I saw the dog.'

(69) *Hu-li'i'   ni   i   ga'lagu.
     1s-see   NT   D   dog

(I saw the dog.)

Now examine the contrast between (70), (71), and (72).

(70) *Hu-taitai   ni   i   istoria   pära   si   Carmen.
      1s-read   NT   D   story   to   u   Carmen

      (I read the story to Carmen.)

(71) Hu-taitä-yi   ni   i   istoria   si   Carmen.
      1s-read -A   NT   D   story   u   Carmen

      'I read Carmen the story.'

(72) *Hu-taitä-yi   i   istoria   si   Carmen.
      1s-read- A   D   story   u   Carmen

      (I read Carmen the story.)

In Advancement sentences like (71) and (72), ni obligatorily marks the
initial DO. In a non-Advancement sentence like (70), ni cannot mark
the initial DO. These facts are predicted by the Advancement analysis
if ni marks final common noun non-terms (obliques and chômeurs), as
was asserted in section 1.1. Under the Advancement analysis, i kätta
in (70) is a final chomeur, not a final DO. Thus, it must be marked
with ni.

The Initial=Final analysis would have to account for ni distribu-
tion differently. It could be said that ni sometimes marks DOs in
clauses with specially marked verbs, otherwise ni marks non-terms.
Such a formulation has little predictive power, and it misses the gen-
eralization that ni marks final non-terms.

2.5 Argument for Initial IO-hood of Advancement Nominal. The distribu-
tion of the preosition pära provides an argument for the initial IO-
nood of the final DO in Advancement sentences. Pära obligatorily marks
final indirect objects.

(73) Hu-chuli'   i   lepblu   pära   si   Rosa.
      1s-bring   D   book   to   u   Rosa

      'I brought the book to Rosa.'

(74) *Hu-chuli'   i   lepblu   si   Rosa.
      1s-bring   D   book   u   Rosa

      (I brought the book to Rosa.)

It does not mark final direct objects which were initial direct objects,
as illustrated by (75).

<pre>
        (75) *Hu-li'i'   pära si Juan.
              1s-see   to   D   Juan

        (I saw Juan.)
</pre>

Examine sentence (76).

<pre>
        (76) Hu-chuli'-i (pära) si Rosa ni   i lepblu.
              1s-bring- A   to   u   Rosa NT   D   book
</pre>

'I brought Rosa the book.'

This is an Advancement sentence in which pära optionally marks the
Advancement nominal. I claim that the rule for the distribution of
pära is best stated as follows.

        (77) **Pära Distribution**

                A nominal bearing the initial 3 relation may be marked
                optionally with pära. A nominal bearing the final 3
                relation must be marked with pära.

This rule accounts for the distribution of pära under the Advance-
ment analysis. Under the Initial=Final analysis, the rule, as stated,
will not account for the distinction between optional and obligatory
pära. In order to account for this distribution without an initial 3/
final 3 distinction, one might state the pära rule as follows.

        (78) **Pära (Initial=Final)**

                Mark an IO with pära. If the verb of the clause is a
                specially marked verb, pära may be optional. Otherwise
                pära is obligatory.

Such a statement has very little predictive value. Without the initial
3/final 3 distinction, it would be very difficult, if not impossible, to
account for the distribution of pära in a motivated manner.

2.6 Summary. In this section, I have contrasted two analyses of the
same set of data. A bistratal analysis, the Advancement analysis, has
been compared to a monostratal analysis, the Initial=Final analysis.
These two analyses were examined in light of the five syntactic and
morphological processes described in section 1.

        Sentences with two objects interact with these processes in the
following manner. Such sentences have two possible forms. In one
form, the notional DO behaves like a direct object with respect to the
syntactic processes, and the notional IO does not. In the other form,
which is often correlated with the verbal suffix -i, the notional DO
does not behave like a DO. Rather, its behavior is consistent with that
of a non-term. In such sentences, the notional IO behaves like a DO
with respect to the syntactic processes. The different behavior of
object NPs in these two kinds of sentences is completely accounted for
by one rule of 3-2 Advancement.

The Initial=Final analysis is forced to complicate each of the five processes independently, while achieving no overall generalization, in order to account for the same range of data. In several cases, the analysis is forced to mark verbs with syntactic features to indicate whether or not they are 'special' verbs and allow the IO to behave like a DO. This strategy is further complicated by the optional nature of what I call 3-2 Advancement. Even if verbs are marked as 'special', this does not correctly predict the surface facts, but only predicts that either the DO, or the IO may behave like a surface DO.

3. Possessor Ascension

In this section, I will discuss sentences in which the notional possessor of a DO behaves like a DO with respect to the phenomena discussed in section 1.

3.1 General Description and Proposed Analysis. Possessors in Chamorro normally occur as either possessive pronouns suffixed to the head noun, or as full NPs linked to the head noun with a linking -n (if the head noun ends in a vowel). Such possessive constructions are illustrated by examples (79) and (80).

(79) Ha-chuda' i neni i nä'-hu.
      3s-spill   D baby D food-Pls

      'The baby spilled my food.'

(80) Ha-sakki si Juan i biskleta-n i famagu'un.
      3s-steal u Juan D bicycle-L   D children

      'Juan stole the children's bicycle.'

Possessor Ascension copies the possessor as a possessive pronoun and suffixes it to the noun. The possessor itself is moved out of its NP into the matrix clause. The underlying direct object is marked with ni, the oblique case marker. Applying Possessor Ascension produces (81) and (82) which are synonymous with (79) and (80) respectively.

(81) Ha-chuda'-guan yu' i neni ni i nä'-hu.
      3s-spill- PA   Als D baby NT D food-Pls

      'The baby spilled my food.'

(82) Ha-sakkeng-guan si Juan i famagu'un ni i biskletan-niha.
      3s-steal-Pa   u Juan D children NT D bicycle-P3p

      'John stole the children's bicycle.'

The question of morphological registration is not as clear as it was in the case of 3-2 Advancement. The suffix -guan is glossed by Topping (1975, p. 82) as :

'in spite of; a suffix denoting that something happened counter to one's intention or against ones wishes.'

Verbs with this suffix often require Possessor Ascension. Yulang-guan, 'break (by accident)', is such a suffixed verb. Compare (83), in which Possessor Ascension has applied, with (84), in which the rule has not applied.

(83) Hu-yulang-guan si Maria ni i munikan-ña.
     1s-break-PA   u Maria NT D doll-P3s

'I broke Maria's doll.'

(84) *Hu-yulang-guan i muneka-n Maria.
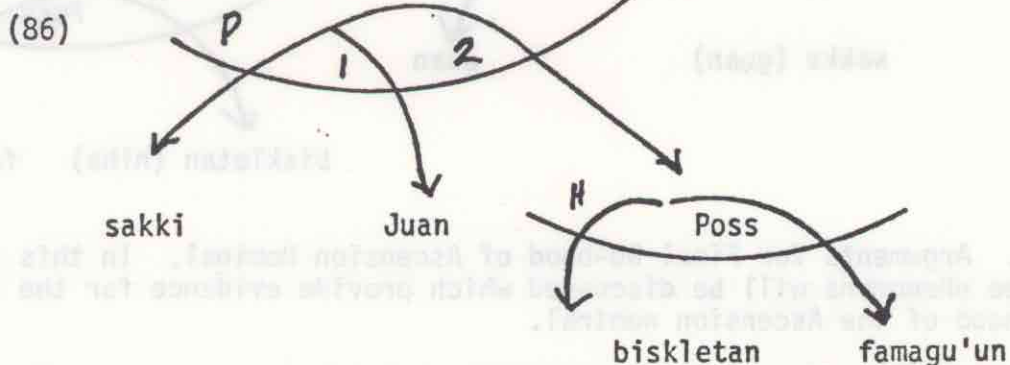   1s-break-PA   D doll-L   Maria

(I broke Maria's doll.)

For the sake of exposition, I will refer to -guan as a Possessor Ascension registration suffix. I expect that this is an oversimplification since the semantic content of -guan is clearly more complex.

I propose a rule of Possessor Ascension which relates sentences like (80) and (82). The rule can be stated informally as follows.
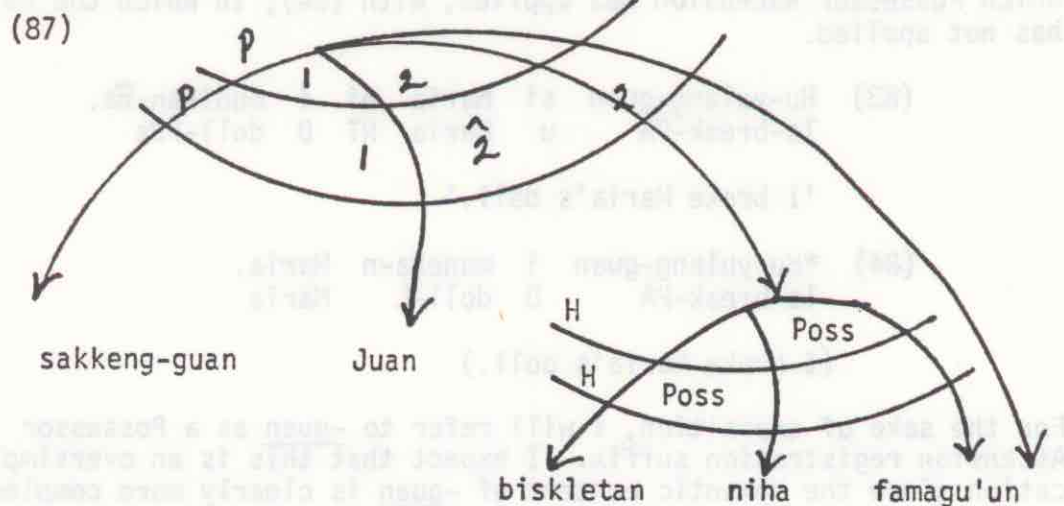
(85) Possessor Ascension

Clause b is a clause with a verb in Class X and a possessed nominal bearing the initial 2 relation in the clause. The nominal bearing the initial possessor relation with respect to the initial 2 may ascend to bear the 2 relation in clause b. This nominal (the ascendee) then bears no relation to the initial 2. The initial 2 bears the final chômeur relation in clause b. A pronominal copy of the ascendee is created to bear the possessor relation with respect to the final 2 chômeur.

Sentences like (80) are monostratal, i.e. they involve no relation-changing rules. Figure (86) represents the structure I posit for (80).
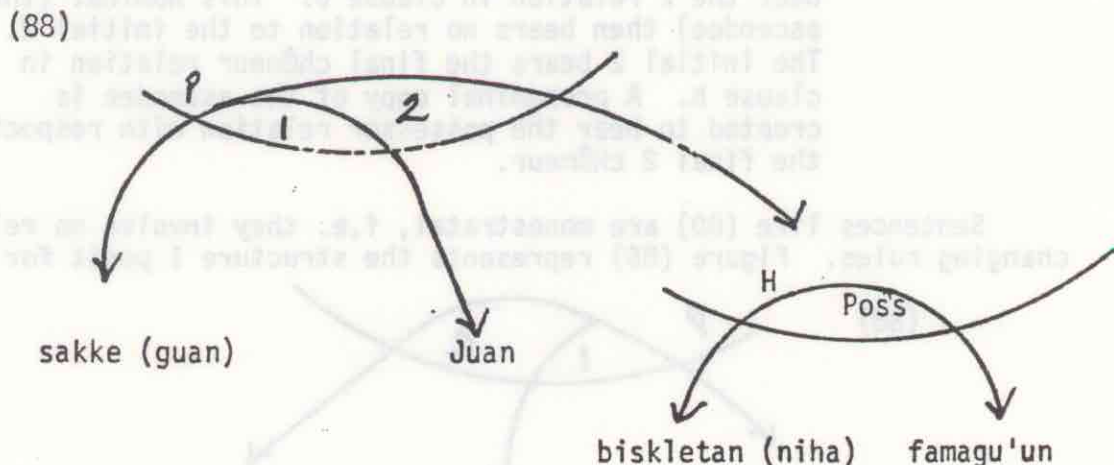
(86)

    sakki   Juan   Poss

                        biskletan   famagu'un

Sentences like (82) are bistratal. Figure (87) represents the structure I posit for sentence (82).

(87)

sakkeng-guan   Juan   bishletan   niha   famagu'un

I will hereafter refer to sentences which I claim involve Possessor Ascension as Ascension sentences. I will refer to a nominal which I claim has ascended from Possessor to DO as an Ascension nominal.

3.2 A monostratal analysis of sentences like (82), which I will refer to as the <u>Initial=Final Analysis</u>, would claim that (80) and (82) have the same relational structure, as illustrated in Figure (88). The pronominal copy of the possessor which appears in (82) might be treated as an optional intensifier.

(88)

sakke (guan)   Juan   bishletan (niha)   famagu'un

3.3. Arguments for Final DO-hood of Ascension Nominal. In this section, three phenomena will be discussed which provide evidence for the final DO-hood of the Ascension nominal.

3.3.1 Passive. Passive cannot apply to final Possessors as shown in section 1.2. Passive can apply, however, to notional possessors in Ascension sentences. Compare (89), which is an Ascension sentence, with (90), which is not.

(89) I famagu'un siha man-s-in-akkeng-guan ni i
      D children   P   PLS-PS-steal-PA   NT D

      biskletan-niha gi äs   Juan.
      bicycle-P3p   NT   Juan

      'John stole the children's bicycle.'

(90) *I famagu'un siha man-s-in-akki i biskletan-niha
       D children   P   PLS-PS-steal D bicycle-P3p

      gi äs   Juan.
      NT   Juan

      (John stole the children's bicycle.)

In (89), Passive has advanced the initial possessor to subject.
In (90), such an advancement is impossible. These facts are predicted
by the Ascension analysis of (89), since i famagu'un ascends to become
DO before the application of Passive. Example (90) is ill-formed,
since the rule of Passive can not apply to possessors.

Under the Ascension analysis, the rule of Passive need not be
complicated to account for the distinction between (89) and (90).
Under the Initial=Final analysis, the rule of Passive must be complicated
so that it may apply either to possessors or to DOs if the clause con-
tains a specially marked verb. Note that this class of specially marked
verbs is distinct from those needed earlier in the discussion of 3-2
Advancement. Such an analysis misses the generalization achieved by
the proposed analysis that Passive applies only to direct objects.

3.3.2 Reciprocal. It was shown in section 1.3 that the rule of Recip-
rocal cannot apply to final possessors. In Ascension sentences, Recip-
rocal can apply, however, as illustrated by example (91).

(91) Man-ä-yulang-guan hämyu ni i munikan-miyu.
      PLS-R-break-PA   A2p NT D doll-P2p

      'You broke each other's dolls.'

Under the Ascension analysis, no complication of the Reciprocal
rule is needed to account for sentence (91). Reciprocal can apply to
hämyu, since hämyu has ascended to DO by Possessor Ascension. The
Initial=Final analysis would have to complicate the rule of Reciprocal.
One could say that Reciprocal may apply to subjects and possessors of
direct objects if the verb is in Class X; to subjects and indirect
objects if the verb is in Class Y; to subjects and direct objects else-
where. This formulation has little (if any) predictive value. More-
over, it will result in complication of the grammar through the estab-
lishment of these two verb classes marked presumably with syntactic
features.

3.3.3 Person Constraint. The Person Constraint which was stated in
Section 2.3 provides an argument for the final DO-hood of the initial

possessor in Ascension sentences. Examine the contrast between (92) and (93). The possessor is noncoreferential with Susan in these sentences.

(92)   Ha-yulang si Susan i biskletan-ña.
        3s-break   u   Susan D bicycle-P3s

'Susan broke his/her bicyle.'

(93)   *Ha-yulang-guan gui' si Susan ni i biskletan-ña.
        3s-break-PA   A3s   u   Susan NT D bicycle-P3s

(Susan broke his/her bicycle.)

In (92), the third person pronoun is a final possessor, thus the Person Constraint is not violated. In (93), which is an Ascension sentence, the Person Concstraint has been violated.

The contrast between (92) and (93) is explained with no special statement if one accepts the Ascension analysis for (93). Since <u>gui'</u> is the final DO in (93), the sentence is automatically ruled out by the Person Constraint. The Initial=Final analysis would have to complicate the Person Constraint in an ad hoc way in order to account for the above contrast. Such a revised Person Constraint is suggested in section 3.4.3.

3.4 Arguments for Final Non-DO-hood of Initial DO. In this section, two phenomena will be discussed which provide evidence for the final non-DO-hood of the initial DO in Advancement sentences.

3.4.1 Passive. As was illustrated in section 2.2, the rule of Passive applies to nominals bearing the DO relation. Under the Ascension analysis, the initial DO bears the final chômeur relation in Ascension sentences. It is predicted that this nominal cannot be passivized after the application of Possessor Ascension. Such sentences are ungrammatical, as predicted. Examine (94), in which Possessor Ascension has not occurred, and the DO <u>i biskletan i famagu'un</u> may be passivized.

(94)   I biskletan i famagu'un s-in-äkki gi äs Juan.
        D bicycle   D children   PS-steal   NT   Juan

'The children's bicycle was stolen by Juan.'

Compare (94) to (95), in which Possessor Ascension has applied, and <u>i biskletan-niha</u> may not be passivized. There is no word order which will make this sentence grammatical.

(95)   *I biskletan-niha s-in-äkkeng-guan i famagu'un
        D bicycle-P3p   PS-steal-PA   D children

siha gi äs Juan.
P   NT   Juan

(The children's bicycle was stolen by Juan.)

The <u>Initial=Final</u> analysis would have to complicate the rule of
Passive in order to account for sentences like (95). The Passive
rule might be stated as follows.

(96) <u>Passive (Initial=Final)</u>

Possessor of DO may become subject in clauses with verbs
of Class X. Indirect objects may become subject in
clauses with verbs of Class Y. Otherwise, direct object
becomes subject.

This rule has little predictive power and results in complications to
the grammar, as noted earlier, i.e. unmotivated lists of verbs and loss
of the generalization that Passive applies to direct objects.

3.4.2 Case Marking. The distribution of <u>ni</u>, the oblique case marker,
provides evidence for the final non-DO-hood of the initial DO in Ascension
sentences. It was shown in section 2.6 that <u>ni</u> cannot mark final DOs.
In Ascension sentences, <u>ni</u> must mark the initial DO. This is illustrated
by (97) and (98), in which <u>i muneka</u> is the initial DO.

(97) Hu-yulang-guan si Maria ni i munika-ña.
       1s-break-PA   u   Maria NT D doll-3s

'I broke Maria's doll.'

(98) *Hu-yulang-guan si Maria i munika-ña.
        1s-break-PA   u   Maria D doll-P3s

(I broke Maria's doll.)

These facts are explained automatically under the Ascension analysis.
Under this analysis, <u>i munika-ña</u> in (97) and (98) is a final chômeur, not
a final DO. Thus, it must be marked with <u>ni</u>.

The <u>Initial=Final</u> analysis would have to complicate the rule determin-
ing the distribution of <u>ni</u>. It could be said that <u>ni</u> may mark DOs in
clauses with Class X verbs and Class Y verbs. Otherwise, <u>ni</u> marks non-
terms. Such a formulation is ad hoc, has little predictive value, and
misses the generalization that <u>ni</u> marks final non-terms.

3.5 Summary. In this section, I have contrasted two analyses of the
same data. A bistratal analysis, the Ascension analysis, has been com-
pared to a monostratal analysis, the Initial=Final analysis. These two
analyses were examined in light of four of the phenomena described in
section 1.

Sentences with possessed DOs whose verbs fall into a certain class
interact with these phenomena in the following manner. Such sentences
have two possible forms. In one form, the notional DO behaves like a DO
with respect to the four phenomena, and the notional possessor does not.
In the second form, which is often correlated with the verbal suffix

-quan, the notional DO does not behave like a DO. Rather, its behavior is consistent with that of a non-term. In such sentences, the notional possessor behaves like a DO with respect to the four phenomena. The behavior of these nominals in both of these sentence types is accounted for by one rule of Possessor Ascension. The Initial=Final analysis is forced to complicate and weaken the statement of each of the four phenomena independently to account for the same range of data, while achieving no overall generalization. Moreover, morphological registration of Possessor Ascension is rather complex, i.e. -quan is not always correlated with Possessor Ascension. It thus is unclear how the Initial=Final analysis could ensure that its rules apply to the correct nominal in every situation. I conclude that the Ascension analysis is superior to the Initial=Final analysis.

4. Conclusion

Two rules have been proposed which create derived direct objects in Chamorro, 3-2 Advancement and Possessor Ascension. It was shown that five syntactic and morphological processes interact with these rules serving to identify direct objects. In each case, the correct predictions are made by an analysis incorporating these rules, and no complication of any other rule is entailed.

One significant generalization which this analysis achieves is to establish a relationship between Possessor Ascension and 3-2 Advancement. These rules are related, in that they produce very similar surface structures: a derived direct object and direct object chômeur.

It was shown that an analysis without these two rules entailed a great deal of complication in the grammar of Chamorro. Each rule that interacts with these Advancement or Ascension sentences must be complicated in a disturbingly similar way. Each rule must be made less general, thus losing predictive power. Rather than applying or referring only to direct objects, each rule must separately state that it applies sometimes to possessors, sometimes to indirect objects and sometimes to direct objects. Moreover, no explanation is given by such an analysis as to why possessors, indirect objects, and direct objects should behave similarly.

An alternative analysis which I have not discussed would involve positing different underlying structures for each sentence of each set of synonymous pairs. For example, in 3-2 Advancement sentence pairs there would be two possible structures. In one, the notional DO would be an initial and final DO and the notional IO would be an initial and final IO. In the other structure, the notional IO would be an initial and final DO, and notional DO would be an initial and final chômeur. This analysis has several serious weaknesses. First, such a solution would complicate the rules required to map semantic roles onto syntactic structures. (I am not prepared to examine these rules in any detail.) Second, such a solution would force one to posit the chômeur relation (or a relation with properties identical to the chômeur relation) as an initial relation. This is a complication of universal grammar with no known motivation from any other language, and is thus undesirable. Finally, such a solution does not account for the optional nature of

pãra distribution in 3-2 Advancement sentences, which was discussed in section 2.5. For these reasons then, I reject this alternative analysis.

An analysis incorporating the rules of 3-2 Advancement and Possessor Ascension is interesting in a cross-linguistic perspective, as well. As noted earlier, Advancement and Ascension rules similar to those proposed here have been proposed for a variety of the world's languages. The Chamorro data is consistent with the claim that Advancement and Ascension rules are universal rule types which are available for use in human language.

Abbreviations

1-3s/p	Subject Agreement prefixes; first, second, or third person; singular or plural
A	3-2 Advancement suffix
A1-3s/p	Absolute pronouns; first, second, or third person; singular or plural
AF	Actor focus
C	Causative
D	Determiner
DA	Durative aspect (Indicated by reduplication)
E1-3s/p	Emphatic prounouns; first, second, or third person; singular or plural.
Fut	Future
IV	Active intransitive verbalizer
L	Linker
NT	Non-term case marker
P	Plural
P1-3s/p	Possessive prounouns; first, second, or third person; singular or plural
PA	Possessor Ascension suffix
PLS	Plural subject marker
PS	Passive
Q	Yes/no question marker
R	Reciprocal
RC	Relative clause linker
u	Unmarked case

Footnotes

In the orthography used here: ch-[ts], y=[dz], ng=[n], ku=[kʷ], '=[?], gu=[gʷ]. I have not indicated word stress in my examples. Primary word stress is usually penultimate. Primary stress shifts to the penultimate syllable in suffixed words. The presence or absence of stress often affects vowel quality. These changes are indicated by my orthography. There is a process of umlaut which fronts vowels after certain particles or affixes containing the vowel i, which also is indicated by my orthography.

A list of the abbreviations which appear in the morpheme glosses appears on page   .

[1]See Perlmutter and Postal (1977, 1978) for discussion of linguistic universals.

[2]For example, many languages have Passive rules which are Advancement rules. Rules similar to 3-2 Advancement have been proposed for BahasaIndonesia (Chung, 1976), and for Tzotzil (Aissen, 1978). One might also want to claim that English Dative Shift is a rule of 3-2 Advancement. Many languages have been shown to have rules of Raising, which are cases of Ascension rules. A rule similar to Possessor Ascension has been proposed for Cebuano (Bell, 1976).

[3]See Perlmutter and Postal (1978) for formal definitions of RG terminology. I will use the symbols 1, 2, 3 interchangeably with the symbols S, DO, IO for the term grammatical relations of subject, direct object, and indirect object respectively. A circumflex over a 1, 2, or 3 symbolizes an initial 1, 2, or 3 respectively, bearing the final chômeur relation. The chômeur relation is a particular knid of non-term relation. It is borne by a nominal which bore an initial term relation, but had this term relation removed at some point in their derivation. An oblique relation is one of a set of non-term grammatical relations corresponding to a set of oblique semantic relations including beneficiary, locative, temporal, and goal. The symbol H refers to the relation borne by the head noun in a possessive construction. Poss refers to the possessive relation borne by a possessor with respect to its head noun.

[4]Certain verbs such as malagu' 'run' exhibit m/f alternation of
the initial segment. See Crain (1979) for further discussion.

[5]There are some interesting parallels between this construction
and a construction described by Aissen in Tzotzil (paper presented at
BLS, 1979). Also see Postal, 'Antipassive in French'.

[6]See Lindner (1977) for a typological description of relative
clauses in Chamorro. See Chung (1979) for a discussion of Wh Movement
in Chamorro, in which relative clause verb morphology is described in
detail. I will describe only one dialect of Chamorro with respect to
relative clauses. The facts I present in this section are not con-
sistent from dialect to dialect.

[7]It has recently come to light that the constraint described
here is part of an animacy hierarchy. See Chung (forthcoming) for
details.

[8]This was discussed by Verluyten (1977). The formulation used
here was suggested by Perlmutter (personal communication). It is
unclear whether the constraint is against indefinite or nonspecific
NPs.

[9]There are certain conditions governing the appearance of this
suffix. See Gibson (forthcoming) for a discussion of these conditions.

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