RESTRICTURING AND VERB-INITIAL
ORDER IN CHAMORRO

Sandra Chung

Abstract. The Austronesian language Chamorro has a restructuring construction in which the embedded clause-like constituent looks like a finite realis clause. Following Bhatt’s (2002) minimalist analysis of Hindi-Urdu, I argue that Chamorro restructuring permits long-distance Agree but not long-distance licensing of objective Case. I then bring the word order of restructuring to bear on the larger issue of how verb-initial order is derived. Along the way, an account is developed in which some of the distinctive characteristics of restructuring are determined in the syntax, but others are the result of post-Spell-Out operations.

1. Introduction

This article has two aims. The first is to analyze the Chamorro version of the construction known as restructuring (or clause reduction; see, e.g., Aissen & Perlmutter 1983 [1976], Rizzi 1978, Moore 1991, Wurmbrand 2001, and Bhatt 2002). Restructuring in Chamorro has a morphology and syntax that set it apart in some intriguing ways from sentences containing infinitives. To begin with, the embedded clause-like constituent in restructuring—henceforth, the clauselet—looks like a finite realis clause. This sharply differentiates the Chamorro construction from better known versions of restructuring, which display embedded infinitives (see, e.g., German, Hindi-Urdu, Italian, and Spanish). Working basically within the minimalist framework of Chomsky (2001), I first establish that the clauselet in Chamorro restructuring is vP. I then show that some intricate patterns of morphological agreement and voice are handled elegantly by an analysis in the style of Bhatt 2002, in which restructuring exhibits long-distance agreement but does not permit long-distance licensing of Case. The analysis, I contend, conforms to key tenets of minimalist syntax, including the Phase Impenetrability Condition (PIC), once it is recognized that the term “agreement” conflates two notions that are conceptually and empirically independent: morphological agreement on the one hand, and the syntactic relation Agree on the other. Although the Agree relation can be spelled out via morphological agreement, not all morphological agreement phenomena instantiate Agree or, for that matter, any other

* I am indebted to the many speakers of Chamorro who contributed to this study, especially Priscilla Anderson, Antonio Atalig, Manuel F. Borja, Teresina Garrido, Ray P. Lujan, Maria P. Mafnas, Maria T. Quinata, Lucy Sablan, Agnes C. Tabor, Anicia Q. Tomokane, and Francisco Tomokane. Thanks also to Judith Aissen, James McCloskey, and two anonymous reviewers, all of whose comments greatly improved this article. They are not responsible for any remaining defects. This work was supported in part by the National Science Foundation through projects BNS78-13018, BNS84-05596, and BNS86-17274, and by research funds from the Academic Senate of the University of California, Santa Cruz.

© Blackwell Publishing Ltd, 2004. Published by Blackwell Publishing, 9600 Garsington Road, Oxford OX4 2DQ, UK and 350 Main Street, Malden, MA 02148, USA
exclusively syntactic operation. (For precedents for drawing such a
 distinction, see, e.g., Keenan 1979, Anderson 1992, Baker 1996, Chung
 1998, and Embick & Noyer 2001). Once this is recognized, the long-
 distance Agree that characterizes Chamorro restructuring falls neatly into
 place.

The second aim of this article is to bring Chamorro restructuring to bear on
the larger issue of how verb-initial order is derived. Generative syntacticians
since Emonds (1976, 1980) have attempted to circumscribe the pathways by
which verb-initial clauses can arise from the hierarchical structure posited for
the clause. The dominant view has been that there is exactly one route,
identified by some as raising of V (see, e.g., Koopman 1984, Travis 1984,
Sproat 1985, and Guilfoyle, Hung & Travis 1992) and by others as raising of
(a remnant) VP (see, e.g., Koopman & Szabolcsi 2000, Lee 2000, Massam
on the surface word orders exhibited by restructuring, I argue that the full
range of verb-initial clauses in Chamorro cannot be derived by V raising or
(remnant) VP raising, either alone or in combination. This is evidence that,
contrary to the dominant view, there is more than one pathway to verb-initial
order.

Section 2 of this paper supplies some background on word order and
agreement in Chamorro. Section 3 introduces the Chamorro construction
that is the focus of this study and gives some initial reasons for treating it
as a version of restructuring. Section 4 establishes that the clauselet in
Chamorro restructuring is vP, a maximal projection larger than VP but
smaller than the clause. The discussion reveals that it is v, the abstract
verbal head of this projection, that licenses the Case of the embedded
direct object. In sections 5 and 6, following Bhatt (2002), I present two
sorts of evidence for long-distance agreement in restructuring: (a) the
embedded verb’s morphological agreement is parasitic on the matrix T,
and (b) the matrix T can enter into the syntactic Agree relation with the
embedded direct object. Further, just as Bhatt proposed for Hindi-Urdu,
restructuring exhibits long-distance agreement but does not permit long-
distance licensing of objective Case. Section 7 demonstrates that the long-
distance Agree found in restructuring conforms to minimalist expectations.
Finally, section 8 returns to the word order of restructuring and
investigates its consequences for the derivation of Chamorro’s verb-initial
clauses.

2. Word Order and Agreement in Chamorro

Chamorro is a null argument language in which finite clauses can have
predicates of any major category type. It is also a verb-initial language. In
clauses whose predicates are verbs or adjectives—the main focus of interest
here—the [+V] predicate occurs at the left, followed by arguments and
adjuncts. Although the relative order of arguments and adjuncts is flexible, the
unmarked and most frequent surface order is [+V] Subject Object Other. Consider the following:

(1) Finite clauses

a. Ha-taitai i pätgun esti na lepblu.
   3SG.RL.TR-read the child this book
   ‘The child read this book.’

b. Ha-taitai i papet-hu i ma’estro-kku.
   3SG.RL.TR-read the paper-1SG the teacher-1SG
   ‘My teacher read my paper.’

c. Ha-dipendi gui’ i patgon-hu gias Juan.
   3SG.RL.TR-depend himself the child-1SG LOC Juan
   ‘My child depends on Juan.’

d. Sumaga i peskadót ya ha-ätan
   NPL.RL.IN.stay the fisherman and.then 3SG.RL.TR-watch
   i kändit tä’lu.
   the light again
   ‘The fisherman stayed and watched the lights again.’ (Cooreman 1982:23)

Predicates that are verbs or adjectives exhibit morphological agreement with the subject. This subject-verb agreement, which signals person (in some environments) and number, is realized via affixes that also encode finiteness, mood, and transitivity. In (1), for instance, the prefix ha- on the verbs taitai ‘read’, dipendi ‘depend’, and ätan ‘watch’ indicates that the subject is third-person singular (abbreviated 3SG) and, moreover, the clause is finite, the mood is realis (RL), and the predicate is a transitive verb (TR). In (1d), the infix -um- on the verb saga ‘stay’ indicates that the subject is singular or dual (NPL), the clause finite, the mood realis, and the predicate intransitive (IN).

Chamorro also has infinitive clauses. The subject of an infinitive clause is (always) covert, presumably because the clausal head, nonfinite T, is not a Case licenser. The predicate exhibits a reduced form of subject-verb agreement that is either invariant (for transitive verbs) or else signals number alone. Consider these infinitive clauses:

---

1 The following abbreviations are used in the morpheme-by-morpheme glosses: 1, 2, 3 = first, second, third person; AP = antipassive; COMP = complementizer; EMP = emphatic; FUT = future; IN = intransitive; INF = infinitive; IR = irrealis; L = linker (joins certain modifiers to heads); LOC = locative; NOM = nominative; NPL = nonplural (or ‘number-neutral’); OBJ = objective; OBL = oblique; PASS = passive; PL = plural; PROG = progressive; Q = question; RL = realis; SG = singular; TR = transitive; WH = wh-agreement.

In the glosses of the agreement affixes, (person and) number is given first (e.g., 3SG “third-person singular”), followed by mood (e.g., RL “realis”), and then transitivity (e.g., TR “transitive”). In the Chamorro examples, prefixes and suffixes are separated from the rest of word by dashes; infixes are italicized.
(2) **Infinitive clauses**

a. Ma’añao i pætgun [tmañaitai esti na lepblu].
   NPL.RL.IN.afraid the child INF.TR.read this L book
   ‘The child is afraid to read this book.’

b. Esta o’sun [duæipendi gui’ gias Juan] si Rita.
   already NPL.RL.IN.bored INF.TR.depend herself LOC Juan Rita
   ‘Rita is already tired of depending on Juan.’

c. In-tutuhun [mæŋ-ænta].
   1PL.RL.TR-begin INF.PL.IN-sing
   ‘We began to sing.’

The agreement paradigms for finite and infinitive clauses are cited in (3)
(see Chung 1998:26–27, 64).

(3) **Subject-verb agreement in finite clauses**

a. **For transitive verbs**

<table>
<thead>
<tr>
<th></th>
<th>Realis</th>
<th>Irrealis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>hu-</td>
<td>(bai) u-</td>
</tr>
<tr>
<td>2SG</td>
<td>un-</td>
<td>un-</td>
</tr>
<tr>
<td>3SG</td>
<td>ha-</td>
<td>u-</td>
</tr>
<tr>
<td>1 incl. DU or PL</td>
<td>ta-</td>
<td>(u)ta-</td>
</tr>
<tr>
<td>1 excl. DU or PL</td>
<td>in-</td>
<td>(bai) in-</td>
</tr>
<tr>
<td>2DU or PL</td>
<td>in-</td>
<td>in-</td>
</tr>
<tr>
<td>3DU or PL</td>
<td>ma-</td>
<td>uma-</td>
</tr>
</tbody>
</table>

b. **For intransitive verbs or adjectives**

<table>
<thead>
<tr>
<th></th>
<th>Realis</th>
<th>Irrealis</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG or DU</td>
<td>-um-/—</td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>man-</td>
<td>(bai) un-</td>
</tr>
<tr>
<td>1SG</td>
<td>(bai) u-</td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>un-</td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>u-</td>
<td></td>
</tr>
<tr>
<td>1 incl. DU</td>
<td>(u)ta-</td>
<td></td>
</tr>
<tr>
<td>1 excl. DU</td>
<td>(bai) in-</td>
<td></td>
</tr>
<tr>
<td>2DU</td>
<td>in-</td>
<td></td>
</tr>
<tr>
<td>3DU</td>
<td>in-</td>
<td></td>
</tr>
<tr>
<td>1 incl. PL</td>
<td>(u)tafan-</td>
<td></td>
</tr>
<tr>
<td>1 excl. PL</td>
<td>(bai) infan-</td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>infan-</td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>ufan-</td>
<td></td>
</tr>
</tbody>
</table>

(4) **Subject-verb agreement in infinitive clauses**

a. **For transitive verbs**

   [invariant] -um-

b. **For intransitive verbs or adjectives**

<table>
<thead>
<tr>
<th></th>
<th>-um-/—</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG or DU</td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>man-</td>
</tr>
</tbody>
</table>
These paradigms mask a complication that might be noticed by the alert reader in some of the examples cited below: the realization of number agreement with a plural subject is less than fully automatic when the agreement affix does not also signal person (i.e., when the predicate is an intransitive verb or adjective; see (3b) and (4b)). For instance, when a realis verb such as mattu ‘arrive’ has a plural subject, it is typically inflected with the plural agreement affix man- (producing, e.g., man-mattu). But the verb occasionally surfaces without any overt agreement affix at all (as, e.g., mattu), in which case it looks exactly as if it was inflected for agreement with a singular or dual subject. So as not to complicate the paradigms further, I have chosen to gloss such “number-neutral” verb forms as exhibiting nonplural agreement, although this might well not be the favored analysis.2

I return later to the observation that there are separate agreement paradigms for transitive verbs, on the one hand, and intransitive [+V] predicates, on the other.

3. The Phenomenon of Restructuring

Alongside sentences with infinitive clauses, Chamorro has another sentence type that evidently is an instance of restructuring. In this construction, the matrix predicate selects a small, clauselike embedded constituent that never exhibits an overt subject (=the clauselet). The embedded verb or adjective differs from an infinitive in that it displays the subject-verb agreement appropriate for finite (realis) clauses. Compare (2) with (5).

(5) Restructuring

a. Ma’añaø i pàtgun ha-taitai esti na lepblu.  
NPL.RL.IN.afraid the child 3SG.RL.TR-read this  L book.  
‘The child is afraid to read this book.’

b. Man-o’sun i famalao’an ma-dipendi siha  
PL.RL.IN-bored the women 3PL.RL.TR-depend themselves  
gias Juan.  
LOC Juan  
‘The women are tired of depending on Juan.’

c. Um-o’sun ha-suguni yu’ pàra i iskuela  
NPL.RL.IN-bored 3SG.RL.TR-drive me to the school  
i ma’estra.  
the teacher  
‘The teacher became tired of driving me to school.’

2 On the other hand, it would be wrong to claim that “number-neutral” verb forms are simply not inflected for subject-verb agreement. This can be seen from the patterning of realis verbs such as saga ‘live, stay’, which are inflected for agreement with a singular or dual subject via the infix -um-. When such verbs have a plural subject, they must exhibit an overt agreement affix; they cannot surface uninflected.

Note further that only a handful of Chamorro nouns show overt inflection for number (e.g., palao’an ‘woman’, famalao’an ‘women’; sina ‘parent’, mahaina ‘parents’). The vast majority of nouns are not morphologically inflected for number. Within NP, plurality can be signaled by the postnominal clitic siha, but this is entirely optional.
d. Ma-tutuhun man-mahalang i famala’o’an as Dolores.
   3PL.RL.TR-begin PL.RL.IN-lonely the women OBL Dolores
   ‘The women began to feel lonely for Dolores.’

How does the distribution of restructuring compare to that of infinitival constructions? Impressionistically, the range of higher verbs that select infinitive complements is narrower in Chamorro than in English. On the other hand, every Chamorro verb that selects an infinitive complement and participates in raising or subject control evidently permits restructuring as well. In this respect, restructuring seems more freely available in Chamorro than in Spanish or Italian (see, e.g., Aissen & Perlmutter 1983 [1976] and Rizzi 1978).

As mentioned earlier, the fact that the clauselet has the morphology of a finite realis clause gives Chamorro restructuring quite a different surface appearance from restructuring constructions in German, Hindi-Urdu, Spanish, and Italian, all of which display embedded infinitives. Nonetheless, closer scrutiny reveals some reasons for believing that the Chamorro construction is indeed a version of restructuring.

To begin with, the boundary separating the clauselet from the matrix clause is transparent for syntactic processes (see, e.g., Wurmbrand 2001). Thus, a version of “long passive” is possible: a DP complement can raise out of the clauselet to the specifier of the matrix T, leading to passives that are natural and unexceptional in Chamorro but cannot be easily translated into English. In better studied versions of restructuring, the DP complement raises out of an embedded infinitive, which does not show passive morphology (see, e.g., Wurmbrand 2001:19 on German). In Chamorro, perhaps because the clauselet is finite, the situation is different: the embedded verb of the clauselet must be passive. Consider:

(6) Long passive in restructuring
   a. Pāra tafan-ma-chāgi ma-na’nātuk ni lalahi siha.
      fut 1PL.R.IR.IN-PASS-try NPL.RL.IN-PASS-hide OBL men pl
      ‘The men will try to hide all of us.’
      (Lit. ‘We will be tried to be hidden by the men.’)
   b. Tinituhun esta si Dolores kīnāssé
      npl.rl.in.pass.begin already Dolores npl.rl.in.pass.tease
      OBL Antonio
      ‘Antonio began to tease Dolores.’
      (Lit. ‘Dolores was begun to be teased by Antonio.’)

Importantly, long passive is not possible out of infinitive clauses.

(7) Long passive is ungrammatical in infinitives
   *Pāra tafan-ma-chāgi mu-na’nātuk ni lalahi siha.
   fut 1PL.R.IR.IN-PASS-try inf.tr-hide OBL men pl
   (‘The men will try to hide all of us.’)
Similarly, whatever processes are responsible for the word-order options of arguments within the clause permit the matrix subject (italicized in (8)) to surface inside the clauselet (which is surrounded by brackets). The precise identity of these processes is controversial. For convenience, I refer to the phenomenon illustrated in (8) as “scrambling,” without committing myself—for the time being—to any particular analysis.

(8) “Scrambling” in restructuring
   a. Man-o’sun [ma-dipendi siha i famalao’an]
      PL.RL.IN-bored 3PL.RL.TR-depend themselves the women
gias Juan].
      LOC Juan
      ‘The women are tired of depending on Juan.’
   b. Kao man-ayuda [man-ispia i ch’lu-hu]
      Q NPL.RL.IN.AP-help NPL.RL.IN.AP-look.for the sibling-1SG
      lahi ni famagu’un]? male OBL children
      ‘Did my brother help look for the children?’

In contrast, the matrix subject cannot surface inside an infinitive clause, as (9) shows.

(9) “Scrambling” is ungrammatical in infinitives
   *Kao man-ayuda [um-ispia i ch’lu-hu lahi]
   Q NPL.RL.IN.AP-help INF.TR-look.for the sibling-1SG male
   i famagu’un]? the children
   (‘Did my brother help look for the children?’)

These phenomena, which will be analyzed shortly, offer prima facie evidence that the construction in (5) is indeed a version of restructuring. The claim that the long passives in (6) involve movement that occurs “in one fell swoop” is investigated in section 6. The question of how the word orders in (8) are derived is taken up in section 8.

4. The Size of the Clauselet

One widely accepted approach to restructuring takes the clauselet to be a maximal projection smaller than the clause but large enough for the verb’s arguments to be represented syntactically. On this view, if the clauselet does not include the external argument, it is VP (see, e.g., Wurmbrand 2001); if it does include the external argument, as PRO or trace, it is vP (see Moore 1991) or a defective TP (see, e.g., Bhatt, 2002).

Some Chamorro evidence that the clauselet is smaller than TP is provided by negation. Sentential negation is most commonly realized by
the proclitic ti, which occurs at the left edge of the clause, immediately preceding T, which itself precedes the predicate. (In many cases, T has no phonetic content; its most common overt realization is pāra ‘uncertain future’.) Suppose for the sake of argument that ti surfaces as (part of) the content of T or some comparable head in the functional layer of the clause.

Now, ti routinely occurs in infinitive clauses, as (10) shows.

(10) Negation in infinitive clauses
Ma’añao si Maria [ti būmisita si nana-ña].
NPL.RL.IN.afraid Maria not INF.TR.visit mother-3SG
‘Maria is afraid not to visit her mother.’

But in at least some cases, ti cannot occur in the clauselet of restructuring.

(11) Negation is ungrammatical in the clauselet of restructuring
a. *Ma’añao si Maria ti ha-bisita si nana-ña.
NPL.RL.IN.afraid Maria not 3SG.RL.TR-visit mother-3SG
(‘Maria is afraid not to visit her mother.’)
b. *Hināhassu ti man-sinangani siha ni
NPL.RL.IN.pass.think.PROG not PL.RL.IN-PASS.tell they OBL
minagahit ni doktu.
truth OBL doctor
(‘The doctor is thinking of not telling them the truth.’)

For unclear reasons, speakers’ judgments on examples in which ti occurs in the clauselet of restructuring are not always as clear-cut as the judgments in (11). Nonetheless, if the pattern in (11) proves to be general, it argues that the clauselet is not a full-blown TP, but instead is smaller than the clause-level maximal projection(s) in which negation is realized.

On the other hand, the clauselet is at least as large as VP, since it can contain VPs that are conjoined. Consider the following examples, in which the VP conjuncts are bracketed.

(12) Conjoined VPs in the clauselet of restructuring
a. Pumara si Miguel [ha-pānak si Juan] yan
NPL.RL.IN.stop Miguel 3SG.RL.TR-hit Juan and
[ha-patmada si Carmen].
3SG.RL.TR-slap Carmen
‘Miguel stopped hitting Juan and slapping Carmen.’
b. Ma-tutuhun [ma-yiluluk i mata-nihi] yan
3PL.RL.TR-begin 3PL.RL.TR-rub the eye-3PL and
[man-haha] i famagu’un.
PL.RL.IN-yawn the children
‘The children began to rub their eyes and yawn.’
Finally, and significantly, there is evidence from subject-verb agreement that the clauselet is at least as large as vP. I observed in section 2 that Chamorro has separate agreement paradigms for intransitive [+V] predicates and transitive verbs, where by “transitive verb” I mean a verb whose complement must be licensed by objective Case. These paradigms are illustrated for clauses whose subjects are second-person singular in (13) and third-person singular in (14).

(13) **Transitive versus intransitive paradigms of subject-verb agreement**

a. Kao un-na’chotchu i ga’lagu?
   Q 2SG.RL.TR-feed the dog
   ‘Did you feed the dog?’

b. Kao kumáktaki hao?
   Q NPL.RL.IN.cry.PROG you
   ‘Are you crying?’

(14) a. Ha-na’chotchu si Miguel i ga’lagu.
   3SG.RL.TR-feed Miguel the dog
   ‘Miguel fed the dog.’

b. Bumoka.
   NPL.RL.IN.eat
   ‘He ate.’

Recall that the embedded verb of the clauselet is inflected for finite (reals) subject-verb agreement. This agreement is chosen from the transitive paradigm when the embedded verb’s complement must be licensed by objective Case, and from the intransitive paradigm otherwise, as (15) shows.

(15) **Subject-verb agreement in the clauselet of restructuring**

a. Munhayan si Carmen ha-na’chotchu i famagu’un.
   NPL.RL.IN.done Carmen 3SG.RL.TR-feed the children
   ‘Carmen’s finished feeding the children.’

b. Munhayan bumoka.
   NPL.RL.IN.done INF.NPL.IN.eat
   ‘He’s finished eating.’

In current thinking, one flavor of the abstract verbal head v both selects the external argument and has the ability to license objective Case (e.g., Kratzer 1996:123; Chomsky 2001:6, 43). If we accept this, then the embedded subject-verb agreement in (15) evidently signals the presence of v within the clauselet. More precisely, the form of the agreement suggests that some verbal head within the clauselet licenses the Case of the embedded direct object in (15a) but performs no Case licensing in (15b). This verbal head is plausibly v, given that v is independently believed to be able to license objective Case (cf. Bhatt 2002 and, for a different view, Wurmbrand 2001).

The proposal that v within the clauselet licenses the Case of the embedded direct object has ramifications that will be explored in due course.
In short, the clauselet is at least as large as vP and probably smaller than TP. I claim that the clauselet is simply vP. Further, I claim that if the v of the clauselet selects an external argument, the DP instantiating that argument is necessarily covert, because there is no head to serve as its Case licenser. Following the spirit of, for example, Moore (1991), let us suppose that any external argument selected by the v of the clauselet is represented as PRO (in control cases) or trace (in raising cases). If we ignore the location of arguments for the moment and focus exclusively on the hierarchical structure of verbal and clausal projections, the phrase structure of restructuring looks schematically like (16).

(16) The phrase structure of restructuring (with arguments omitted)

\[
\begin{align*}
& \text{TP} \\
& \quad \downarrow \\
& \quad \text{T}' \\
& \quad \downarrow \\
& \quad \text{T} \quad \text{vP} \\
& \quad \downarrow \\
& \quad \text{v}' \\
& \quad \downarrow \\
& \quad \text{v} \quad \text{VP} \\
& \quad \downarrow \\
& \quad \text{V}' \\
& \quad \downarrow \\
& \quad \text{V} \quad \text{vP} \\
& \quad \downarrow \\
& \quad \text{v}' \\
& \quad \downarrow \\
& \quad \text{v} \quad \text{VP}
\end{align*}
\]

Notice that there is only one T in this construction. Nonetheless, to emphasize that this T is immediately above the matrix v as opposed to the v of the clauselet, I will often refer to it as the matrix T.

3 Specifically, I assume that when the v of the clauselet has the ability to license objective Case, it must Case-license the direct object rather than the external argument that it selects. I further assume that no matrix verb can Case-license the external argument of the clauselet, given that Chamorro completely lacks ECM verbs. For further discussion, see section 6.

Note that the raising cases of restructuring involve higher aspectual verbs such as tutuhun ‘begin’ and para ‘stop’; see Chung 1998 (pp. 316–317). The control cases involve higher verbs of all other types.
5. Evidence for Long-Distance Morphological Agreement

In his discussion of restructuring in Hindi-Urdu, Bhatt (2002) proposes that infinitival agreement in this construction is parasitic on the agreement of the matrix (finite) T: a dependency is created between the matrix T and the infinitival head, such that whatever features set the values of the \( \phi \)-features of the matrix T covaluate the \( \phi \)-features of the infinitival head.

Something similar appears to be happening in restructuring in Chamorro: the embedded predicate’s morphological agreement is parasitic on the matrix T, in the sense that it takes its values for person and number from the matrix T, and therefore ultimately from the matrix subject. This is what I refer to as long-distance morphological agreement.

Among the evidence for the parasitic character of this agreement is the following.

5.1 Subject-Verb Agreement

Most obviously, the person and number registered by subject-verb agreement in the clauselet of restructuring covary with the person and number registered by subject-verb agreement in the matrix. This is expected if both instances of agreement take their values for \( \phi \)-features from the matrix T. Consider:

(17) *Subject-verb agreement in the clauselet versus the matrix*

a. Ma-tutuhun ma-ayuda-n maisa siha i ma’estru.
   \( 3\text{pl.rl.tr-begin} 3\text{pl.rl.tr-help-L} \) self them the teacher
   ‘The teachers began to help themselves.’

b. Ma-tutuhun man-mahalang i famalao’an as Dolores.
   \( 3\text{pl.rl.tr-begin} \text{pl.rl.in-lonely} \) the women OBL Dolores
   ‘The women began to feel lonely for Dolores.’

c. Ti malagú’ ha-é’kunguk si nana-ña
   not \( \text{npl.rl.in.want} 3\text{sg.rl.tr-listen.to} \) mother-3SG
   yan si tata-ña.
   and father-3SG
   ‘He didn’t want to listen to his mother and his father.’
   (Cooreman 1983:124)

d. Munhayan in-tátmi i sini.
   \( \text{npl.rl.in.done} 1\text{pl.rl.tr-plant} \) the taro
   ‘We finished planting the taro.’

e. Yänggin munhayan hao un-cho’gui esti siha.
   if \( \text{npl.rl.in.done} \text{you} 2\text{sg.rl.tr-do} \text{this PL} \)
   ‘When you are finished doing these things…’
   (Cooreman 1983:83)

The covariation in person and number is transparent in (17a), given that the matrix and embedded verbs exhibit the same agreement prefix—one that registers third person and dual or plural number. Covariation also occurs in the other examples in (17) but is made less straightforward by the fact that the
matrix and embedded predicates differ in transitivity and therefore select their agreement from different paradigms. For instance, in (17b)—a restructuring sentence in which the matrix subject has “scrambled” into the clauselet—the matrix verb *tutuhun* ‘begin’ is transitive, so its agreement prefix—chosen from the transitive paradigm—registers third person and dual or plural number; the embedded adjective *mahalang* ‘be lonely for’ is intransitive, so its agreement prefix—chosen from the intransitive paradigm—registers plural number. Both forms of agreement, I claim, reflect the matrix T’s values for person and number, namely, third person plural. The situation is similar in (17c–e), but there the transitivity of the predicates is reversed: the matrix predicate is intransitive and the verb of the clauselet, transitive. (The transitivity alternations in (17c–e) are discussed further in 5.4.)

This morphological intricacy is instructive. It reveals that subject-verb agreement in the clauselet is not just a copy of subject-verb agreement in the matrix, given that the two can have different phonological realizations and even register different distinctions. Rather, what lies behind the covariation in person and number illustrated in (17) is that both instances of agreement take their values for φ-features from the same source: the matrix T.

### 5.2 Wh-Agreement

Further evidence that the embedded predicate’s agreement is parasitic on the matrix T is provided by *wh*-agreement, the special agreement characteristic of *wh*-dependencies in Chamorro (see Chung 1998).

In Chamorro, the overt realizations of *wh*-agreement supersede the normal forms of subject-verb agreement (see Chung & Georgopoulos 1988). For instance, when the subject of a realis transitive clause has undergone *wh*-movement, the verb exhibits an overt realization of *wh*-agreement that happens to be homophonous with the reduced agreement of transitive infinitives (see (4a) and, for commentary, Aoun 1986 and Dukes 1992). This *wh*-agreement occurs instead of the expected subject-verb agreement. Compare the realis transitive clause in (18a) with the constituent questions in (18b,c), which show that *wh*-agreement must occur and, when it does, ordinary subject-verb agreement does not.

(18) **Subject-verb agreement versus wh-agreement**

a. Ha-istotba hām.
   3SG.RL.TR-bother us
   ‘It bothers us.’

b. Hafa um-istotba si Juan?
   what WH[NOM]-bother Juan
   ‘What bothers Juan?’

c. *Hafa ha-istotba si Juan?
   what 3SG.RL.TR-bother Juan
   (‘What bothers Juan?’)
When an instrument or other oblique has undergone wh-movement, the realization of wh-agreement “nominalizes” the predicate, causing it to surface with the morphological trappings of a noun. When that happens, the Φ-features of the subject are spelled out not by the expected subject-verb agreement but rather by possessor agreement. Compare the clause in (19a) with the constituent questions in (19b,c).

(19) More examples of subject-verb agreement versus wh-agreement
   a. Ma-mpi’i niyuk siha ni machetti-n Pedro.  
      3pl.rl.tr-split the coconut pl obl machete-l Pedro  
      ‘They split the coconuts with Pedro’s machets.’
   b. Hafa ipi’-niha ni niyuk siha?  
      what wh[obl].split-3pl obl coconut pl  
      ‘What did they split the coconuts with?’
   c. *Hafa ma-mpi’i ni niyuk siha?  
      what 3pl.rl.tr-split the coconut pl  
      (‘What did they split the coconuts with?’)

Elsewhere I have analyzed wh-agreement as holding between T and a wh-trace in its (m-command) domain (see Chung 1998): the wh-trace registers its Case on T, and this and T’s Φ-features are spelled out on the predicate by forms that override the ordinary subject-verb agreement. It is important that the Case registered by wh-agreement on T has nothing to do with T’s ability to Case-license the subject. To underline this point, I assume that wh-traces have a feature [wh] whose value—nominative, objective, or oblique—is set by their Case licenser and then shared with T via wh-agreement.

With this much in place, let us now examine the pattern of wh-agreement in restructuring. Specifically, consider restructuring sentences in which the matrix subject has been moved leftward by wh-movement and the clauselet happens to be (realis) transitive. If the embedded predicate’s agreement is indeed parasitic on the matrix T, then in such configurations the agreement expected in the clauselet should be superseded by wh-agreement. This prediction is borne out. In restructuring sentences in which the matrix subject has undergone wh-movement, such as the constituent question and the focus construction below, a transitive verb in the clauselet cannot surface with the expected subject-verb agreement (see (20c,d)). It must show wh-agreement (see (20a,b)).

(20) Subject-verb agreement versus wh-agreement in restructuring
   a. Hayi siha na famagu’un tumutuhun um-istotba  
      who pl l children wh[nom].begin wh[nom]-bother  
      si Miguel?  
      Miguel  
      ‘Which children began to bother Miguel?’
b. Todu siha humāhassu kumonni’ i amigu-nñiha all PL WH[NOM].think.PROG WH[NOM].take the friend-3PL pāra i gima’-ñiha. to the house-3PL
‘It’s all of them who are thinking of taking their friends home.’

c. *Hayi siha tumututun ma-istotba si Miguel? who PL WH[NOM].begin 3PL.RL.TR-bother Miguel
(‘Who [pl.] began to bother Miguel?’)

d. *Todu siha humāhassu ma-konni’ i amigu-nñiha all PL WH[NOM].think.PROG 3PL.RL.TR-take the friend-3PL pāra i gima’-ñiha. to the house-3PL
(‘It’s all of them who are thinking of taking their friends home.’)

The pattern argues that the embedded verb takes not only its values for person and number, but also its *wh*-feature, from the matrix T.

At the same time, the agreement pattern in (20) eliminates one conceivable alternative to the analysis under investigation here. One might be tempted to hypothesize that the embedded predicate’s agreement was not parasitic on the matrix T but instead directly signaled the features of the PRO or trace that serves as the external argument of the clauselet. If so, this agreement would not be determined long-distance after all, but locally, in a familiar way. Although such an alternative could describe the covariation in person and number discussed in section 5.1, it could not account for the pattern of *wh*-agreement in (20), especially in control cases such as (20b,d). The reason is this. In control cases, the PRO that is the external argument of the clauselet does not itself bear the feature [wh]; only the matrix subject, a *wh*-phrase, bears this feature. Local determination of the embedded predicate’s agreement, by PRO, should therefore lead to the ordinary form of subject-verb agreement in the clauselet, not to *wh*-agreement. In fact, what happens is the reverse: the embedded predicate must exhibit *wh*-agreement, as was just shown. This is strong evidence that the phenomenon under investigation is indeed long-distance agreement: the embedded predicate must take its *wh*-feature, at least, from some category outside the clauselet.4

4 Thanks to a reviewer for clarifying the significance of these facts.

The characterization of *wh*-agreement in the text makes a further prediction. In restructuring sentences in which a *wh*-phrase has been moved out of the clauselet, *wh*-agreement should be realized on both the embedded and the matrix predicates. The reason is that the *wh*-trace should register its Case feature on the matrix T, there being no closer T, and both matrix and embedded predicates take their values for φ-features from that T. This prediction is borne out, as (i) shows.

(i) Hafa tutuhun-ñiha ipi’-ñiha ni niyuk?
what WH[OBL].begin-3PL WH[OBL].split-3PL OBL coconut
‘What did they start to split the coconuts with?’
5.3 The Ban on Nonsubject Control

Finally, the claim that the embedded predicate’s agreement is parasitic on the matrix T is interestingly consistent with the workings of control.

In all the examples of restructuring presented so far that have involved control (see fn. 3), the covert external argument of the clauselet has been controlled by the matrix subject. This is no accident. When this PRO would have instead been controlled by a matrix argument other than the subject, restructuring is blocked. To see this, compare the infinitive constructions in (21) with the restructuring sentences in (22).

(21) Infinitives whose PRO is controlled by a matrix nonsubject
   a. Si Rita ha-ayuda i lalahi gumoddi i chiba
      Rita 3SG.RL.TR-help the boys INF.TR.tie the goat
      ni esti na tali.
      OBL this L rope
      ‘Rita helped the boys tie up the goat with this rope.’
   b. In-na’ma’a’ñaño si Antonio tumaitai ãdyu na lepblu.
      1PL.RL.TR-make.afraid Antonio INF.TR.read that L book
      ‘We made Antonio afraid to read that book.’

In (21a), the covert subject of the infinitive is controlled by the direct object of ayuda ‘help’; in (21b), the covert subject of the infinitive is controlled by the direct object of na’ma’a’ñaño ‘make afraid’, a causative verb formed productively from ma’a’ñaño ‘afraid’.

The point of interest is that in Chamorro, the restructuring sentences corresponding to these examples are ill formed. In this respect, Chamorro restructuring differs from some better studied versions of restructuring (e.g., Spanish; see Aissen & Perlmutter 1983 [1976]).

(22) Restructuring blocked when PRO is controlled by a nonsubject
   a. *Si Rita ha-ayuda i lalahi ma-godd i chiba
      Rita 3SG.RL.TR-help the boys 3PL.RL.TR-tie the goat
      ni esti na tali.
      OBL this L rope
      (‘Rita helped the boys tie up the goat with this rope.’)
   b. *In-na’ma’a’ñaño si Antonio ha-taitai (nu)
      1PL.RL.TR-make.afraid Antonio 3SG.RL.TR-read OBL
      ãdyu na lepblu.
      that L book
      (‘We made Antonio afraid to read that book.’)

Notice especially (22b), which is ungrammatical despite the fact that ma’a’ñaño ‘afraid’, the adjective from which the matrix verb is formed, is known to permit restructuring (see (5a)). The observation suggests that the
ban on nonsubject control in restructuring does not flow from idiosyncrasies of the matrix predicate but rather from some other property of this construction.

What could that property be? I suggest that it is the form of morphological agreement in the clauselet, which—recall—is finite realis agreement.

In the analysis under investigation here, the v of the clauselet can select a covert external argument, but the embedded predicate’s morphological agreement is parasitic on the matrix T. This amounts to saying that the embedded agreement ignores the PRO of the clauselet. Suppose we follow Bhatt (2002:13) in assuming that the PRO of the clauselet does have φ-features, but these features are, for some reason or other, inaccessible. Then a certain tension is created between the way in which the embedded agreement is determined and the implicit promise made by its finite realis form.

Since Rizzi 1982, the idea has been widely held that finite agreement that is “rich” enough can serve to identify a covert argument (typically, a subject pro). Now, Chamorro is a null argument language, a fact that suggests that its subject-verb agreement is “rich” enough to serve this identification function (see also Chung 1998:29–31).5 But in restructuring, the embedded predicate’s agreement does not, in fact, identify the covert external argument of the clauselet, to which it is insensitive. Rather, because it is parasitic on the matrix T, it takes its values for person and number ultimately from the matrix subject.

The embedded agreement nonetheless succeeds in fulfilling its expected identification function, as long as the PRO of the clauselet is controlled by the matrix subject. In such cases, thanks to the control relation, the argument in the local domain that the embedded agreement ought to be identifying (=PRO) is indistinguishable in person, number, and intended reference from the argument whose values for φ-features the agreement actually records (=the matrix subject). Matters would be different if the PRO of the clauselet could be controlled by a matrix nonsubject, as in (22). Then there would be no sense in which the embedded agreement could be said to systematically identify PRO, because any overlap between PRO’s φ-features and those of the matrix subject would be accidental.6 It is for this reason, I suggest, that restructuring is blocked in cases of nonsubject control: the embedded agreement should be able to identify the external

---

5 The claim here is that when “rich” agreement is present, it can serve to identify a null argument in the local domain, not that every null argument must be identified by “rich” agreement.

6 The account in the text leads one to wonder if restructuring would be permitted in cases of nonsubject control in which the controller itself was bound by the matrix subject (e.g., in the Chamorro equivalent of “The children made themselves afraid to read that book”). I do not know the answer to this question.

James McCloskey suggests that the reason why the embedded agreement ignores the PRO of the clauselet is that (morphological) agreement requires c-command, but neither the embedded verb nor the embedded v c-commands PRO, which is located in v’s specifier. This would work for the case at hand but not for the Hindi-Urdu data discussed by Bhatt (2002).
argument of the clauselet, but—exactly because its values are parasitic on
the matrix T—it cannot.

Although these remarks are speculative, they do not seem unreasonable.
Notice that they rely crucially on the observation that morphological
agreement in the clauselet is finite, plus the claim that this agreement is
parasitic on the matrix T.

5.4 The Limits of Parasitic Agreement

In sum, the evidence argues that in Chamorro restructuring, the embedded
predicate’s morphological agreement takes its values for $\phi$-features, and its
$wh$-feature, from the matrix T.

It is important to observe that there are limits to this parasitic behavior. Not
all features registered by subject-verb agreement in the clauselet have their
values set by the matrix T. For instance, whatever the mood of the matrix
clause, the mood registered by agreement in the clauselet is always realis—the
default mood. Consider (23), a restructuring sentence that involves long
passive. Here the matrix clause is irrealis, a fact revealed both by the content
of T (pära ‘uncertain future’) and by the form of matrix subject-verb
agreement. Nonetheless, the mood signaled by the embedded subject-verb
agreement is realis.

(23) The mood of embedded versus matrix predicates in restructuring

Kao i famagu’un pära ufān-in-ayuda man-in-arekla
Q the children FUT 3PL.RL.IN-PASS-help PL.RL.IN-PASS-arrange
as pali’?
OBL priest
‘Is it the children who the priest will help to get ready?’

Further, whatever the transitivity of the matrix predicate, subject-verb
agreement in the clauselet always signals the transitivity of the embedded
predicate. More precisely, the embedded agreement does not covary in
transitivity with the matrix agreement but instead indicates whether the $v$
of the clauselet licenses objective Case (see section 4). This generalization,
illustrated earlier in (17), can also be seen in the following examples. In (24),
the agreement in the matrix signals that the adjective o’sun ‘tired, bored’ is
intransitive (=the $v$ immediately above it does not license objective Case).
The agreement in the clauselet does not record this fact; instead, its form
varies depending on whether the embedded verb is transitive (24a) or
intransitive (24b).

(24) Case licensing by embedded versus matrix $v$’s in restructuring

a. O’sun yu’ hu-bisita i ma’estra-kku.
NPL.RL.IN.bored I 1SG.RL.TR-visit the teacher-1SG
‘I’m tired of visiting my teachers.’

© Blackwell Publishing Ltd, 2004
the parents-1SG PL.RL.IN-bored PL.RL.IN-AP-wait OBL me
‘My parents are tired of waiting for me.’

Similarly, in (25), the agreement in the matrix reveals that tutuhun ‘begin’ is transitive (=the v immediately above it licenses objective Case). Once again, the agreement in the clauselet does not record this fact but instead signals whether the embedded verb is transitive (25a) or not (25b).

(25) More examples of Case licensing by embedded versus matrix v’s
a. Ma-tutuhun ma-na’besti i halum gima’yus.
3pl.rl.tr-begin 3pl.rl.tr-decorate the inside church
‘They started to decorate the inside of the church.’ (I Dibota 6)
b. Ma-tutuhun man-huyung i taotao gi espitát.
3pl.rl.tr-begin pl.rl.in-go.out the person loc hospital
‘The people started to go out from the hospital.’

Examples (24)–(25) also show that the reverse holds true: morphological agreement in the matrix never signals the presence or absence of a direct object in the clauselet (see also (17c–e) and the accompanying discussion). This point is crucial.

Suppose we continue to view the transitivity signaled by subject-verb agreement as a morphological flag of v’s ability (or inability) to license objective Case (see section 4). Then the fact that agreement in the matrix of restructuring never signals the transitivity of the embedded predicate suggests that Case licensing of the direct object respects the locality imposed by the definition of Agree (see Chomsky 2001:4). Because the v of the clauselet is the closest (potential) Case licenser for the embedded direct object, it not only Case-licenses this DP but also intervenes to prevent the matrix v from doing so. (More precisely, Case licensing by the embedded v renders this DP inactive with respect to a higher Case-licensing head.) The bottom line is that even in restructuring, objective Case is licensed locally, within the embedded vP.

In contrast, morphological agreement in the clauselet of restructuring always signals the φ-features, and the wh-feature, of the matrix subject. This long-distance character makes a kind of sense as well. Assuming that the embedded predicate’s agreement must take its φ-features from some T or other, the fact that the clauselet is merely vP makes the matrix T the closest (potential) source. I return in section 7 to the issue of whether this agreement respects the locality imposed by the definition of Agree and the PIC.

Restructuring in Chamorro, then, exhibits long-distance morphological agreement but local licensing of objective Case. The situation, represented schematically in (26) (with some intermediate projections omitted), falls completely in line with Bhatt’s (2002) analysis of restructuring in Hindi-Urdu.
(26) Parasitic agreement with \( T \), but no long-distance Case licensing

\[
\text{TP} \\
T \quad \text{vP} \\
\quad \text{v} \quad \text{VP} \\
\quad \text{V} \quad \text{vP} \\
\quad \text{v}_{\text{TR}} \quad \text{VP} \\
\quad \quad \text{V} \quad \text{Obj}
\]

6. Evidence for Long-Distance Agree

The long-distance character of morphological agreement in restructuring raises the issue of whether the syntactic relation Agree can also hold across a distance in this construction. To resolve this issue, I turn to the Chamorro version of long passive.

In Chamorro, passive verbs are formed with the infix -\text{in}- if the internalized external argument is singular but with the prefix \text{ma}- if this argument is unspecified or plural. The internalized external argument need not be expressed; if overt, it surfaces in the oblique morphological case. Consider:

(27) Passive clauses

a. \text{Binisita} \quad \text{i} \quad \text{haga-nmami as} \quad \text{Manuel.} \\
\text{NPL.RL.IN.PASS.visit} \quad \text{the} \quad \text{daughter-1PL} \quad \text{OBL} \quad \text{Manuel} \\
‘Our daughter was visited by Manuel.’

b. \text{Ma-bisita} \quad \text{si} \quad \text{Juan} \quad \text{ni} \quad \text{kime’-hu} \quad \text{siha.} \\
\text{NPL.RL.IN.PASS-visit} \quad \text{Juan} \quad \text{OBL} \quad \text{pal-1SG} \quad \text{PL} \\
‘Juan was visited by my friends.’

Passive clauses involve syntactic movement: the DP complement of the passive verb raises to the specifier of \( T \). Evidence for this displacement is supplied by the distribution of negative concord items (see Chung 1998:92–99). As in other languages, negative concord items in Chamorro must be licensed by a c-commanding negation. These items can surface in any position within vP (see (28a)) but not in the specifier of \( T \) (28b,c).
The distribution of negative concord items

a. Ti ha-li’i’ ni unu na biha.
   not 3SG.RL.TR-see not one old.woman
   ‘He didn’t see any old woman.’

b. *Ti ha-li’i’ i aksidenti ka ¨na ha’ ni unu.
   not 3SG.RL.TR-see the accident almost EMP not one
   (‘Almost no one saw the accident.’)

c. *Trabiha ti malálangu ni un patgun.
   still not NPL.RL.IN.sick.PROG not a child
   (‘No child has gotten sick yet.’)

Significantly, negative concord items cannot normally surface as the DP complement of a passive verb. This argues that this DP cannot remain in its original complement position but instead must raise out of vP to the specifier of T.

Negative concord items in passive clauses

a. *Ti yinilang ni un guma’ patdit ni taifun.
   not NPL.RL.IN.PASS.destroy not a concrete obl typhoon
   (‘No concrete house was destroyed by the typhoon.’)

b. *Ti ma-fa’nä’an Fred ni unu, tiningo’hu.
   not NPL.RL.IN.PASS-name Fred not one WH[OBJ].know-1SG
   (‘No one is named Fred, as far as I know.’)

Consistent with this, subject-verb agreement in passive clauses registers the $\phi$-features of the moved DP and is chosen from the intransitive paradigm. This last point reveals that it is T, rather than the v immediately above the passive verb, that serves as the Case licenser of this DP.

Subject-verb agreement in passive clauses

Man-binisita hämyu?
PL.RL.IN-PASS.visit you.PL
‘Were you (plural) visited (by him)?’

In minimalist syntax (e.g., Chomsky 2001), in order for one category—the goal—to move to the vicinity of another—the probe—the two must stand in the Agree relation: the probe must c-command the goal, the relation between the two must respect minimality, and each category must have unvalued uninterpretable features whose values can be set by the corresponding features of the other. In passive, for instance, T (the probe) and the DP complement (the goal) are assumed to Agree, as follows: T c-commands DP; this relation respects minimality, because no external argument intervenes; T’s unvalued $\phi$-features can have their values set by DP; and DP’s unvalued Case feature can have its value set by T.

If we adopt this view, then a natural place to look for long-distance Agree is in the phenomenon of long passive.
Long passive in restructuring

(a) *Chināgi dispensa si Carmen gias Maria.
NPL.RL.IN.PASS.stry NPL.RL.IN.PASS.forgive Carmen OBL Maria
‘Maria tried to forgive Carmen.’
(Lit. ‘Carmen was tried to be forgiven by Maria.’)

(b) Hagu pāra un-tinituhun in-ānña ni
you FUT 2SG.IR.IN-PASS.begin NPL.RL.IN.PASS-beat OBL
nana-n Joaquin.
mother-L Joaquin
‘Joaquin’s mother is going to begin to punish you.’
(Lit. ‘You are going to be begun to be punished by Joaquin’s
mother.’)

(c) Ma-hāssu ma-na’nā’lu i lepblu ni
NPL.RL.IN.PASS-think NPL.RL.IN.PASS-return the book OBL
ma’extra siha.
teacher PL
‘The teachers remembered to return the books.’
(Lit. ‘The books were remembered to be returned by the teachers.’)

Suppose that long passive is formed by moving the DP complement of the clauselet in one fell swoop to the specifier of the matrix T. Within a minimalist syntax, this could happen only if T and DP stand in the Agree relation, and this relation is long distance.

What are the reasons for believing that the DP complement of the clauselet moves in one fell swoop to the specifier of the matrix T? To begin with, the embedded DP complement clearly does move. This is revealed by the fact that the matrix subject-verb agreement registers its φ-features (see especially (31b)).

Further, failed long passives like those shown below strongly suggest that when the DP complement of the clauselet moves, it cannot pause in the specifier of the embedded v.

Some failed long passives

(a) *Tinituhun ha-lalatdi si Dolores i famagu’un.
NPL.RL.IN.PASS.begin 3SG.RL.TR-scold Dolores the children
(‘Dolores began to scold the children.’)

(b) *Tinituhun kumati i pātgun.
NPL.RL.IN.PASS.begin NPL.RL.IN.cry the child
(‘The child began to cry.’)

The failed long passives in (32) resemble the grammatical long passive in (31b) in that they are raising cases of restructuring in which the matrix verb, tutuhun ‘begin’ is passive. The difference is that in (32), the v of the clauselet selects an external argument, si Dolores in (32a) and i pātgun ‘the child’ in (32b), which is merged initially in v’s specifier. Recall that this DP has no Case licenser within the clauselet, so it should in principle be able to establish an Agree relation with the matrix T and move out of the embedded
vP to T’s specifier, thereby satisfying its licensing needs. What (32) shows is that, for whatever reason, this movement is prohibited. But if the external argument of the clauselet cannot move into the matrix from the embedded v’s specifier, there is no reason to think that the embedded DP complement in, for instance, (31b) would be allowed to move into the matrix from exactly the same position.7 I conclude from this that in long passive, the embedded DP complement cannot have the embedded v’s specifier as an intermediate landing site but must instead raise into the matrix in one fell swoop.

The claim that long passive involves long-distance Agree is supported by three additional pieces of evidence, which I now describe.

6.1 The Embedded Predicate

For long passive to occur, the embedded predicate must be a passive verb. It cannot be any predicate whose v would select an external argument and license objective Case—for instance, a transitive infinitive. See (7) above as well as (33).

(33) Long passive is ungrammatical with embedded transitive verbs

\*Ma-hássu mu-na’ná’lu i lepblu ni ma’estra siha.

NPL.RL.IN.PASS-think INF.TR-return the book OBL teacher PL

(‘The teachers remembered to return the books.’)

This pattern argues that long passive involves long-distance Agree. For the embedded DP complement to Agree with the matrix T, this DP must have an unvalued Case feature, and its relation to T must respect minimality; there must be no intervening DP—for instance, no embedded external argument. Both requirements are met within the clauselet when the embedded verb is passive, because the v immediately above a passive verb neither selects an external argument nor licenses objective Case. Neither requirement is met when the embedded verb is transitive; hence, long passives of the type (33) are ill formed.

6.2 The Matrix Predicate

For long passive to occur, the matrix predicate must be either passive or unaccusative—a predicate whose v does not select an external argument or license objective Case. Long passives with a passive verb in the matrix were illustrated earlier in (6), (23), and (31); some more examples are cited here.

7 Notice that it does not matter exactly what prevents the external argument from moving out of the clauselet in (32). As long as the relevant property (e.g., inaccessibility of $\phi$-features) is associated with the embedded v’s specifier, it will prevent a DP complement that has raised to this intermediate position from undergoing further movement.
Long passives with a passive verb in the matrix

a. Guinaiya binisita i doktu as Carmen.
NPL.RL.IN.PASS.love NPL.RL.IN.PASS.visit the doctor OBL Carmen
‘Carmen loves to visit the doctor.’

b. Ma-na’funayan ma-hatsa i nueue na
NPL.RL.IN.PASS-finish NPL.RL.IN.PASS-raise the new L
iskuela ni manma’estru.
school OBL teachers
‘The teachers finished building the new school.’

c. Ma-disidi ma-fahan i kareta ni
NPL.RL.IN.PASS-decide NPL.RL.IN.PASS-buy the car OBL
manatung’-hu siha.
friends-1SG PL
‘My friends decided to buy the car.’

Long passives also occur with an unaccusative predicate in the matrix, as can be seen from (35). In sentences of this type, the highest argument of the unaccusative—which is typically an experiencer—patterns exactly as if it were the internalized external argument of passive (=the by-phrase): it is either covert or else realized in the oblique morphological case.

(35) Long passives with an unaccusative predicate in the matrix

a. O’sun man-binisita i mañe’lu-hu famalao’an
NPL.RL.IN.bored PL.RL.IN-PASS.visit the siblings-1SG female
ni médiku.
OBL doctor
‘The doctor is tired of visiting my sisters.’

b. Malágu’ ni-risibi katta-nña as Juan.
NPL.RL.IN.want NPL.RL.IN.PASS-receive letter-3SG OBL Juan
‘Juan wants to receive her letter.’

c. Ma’añao kuinentusi si Mr. Sablan ni láhi.
NPL.RL.IN.afraid NPL.RL.IN.PASS.speak.to Mr. Sablan OBL boy
‘The boy is afraid to talk to Mr. Sablan.’

d. Man-yáyas ma-konni’ i famagu’un pàra i
PL.RL.IN-tired NPL.RL.IN.PASS-take the children to the
iskuela ni lalahi.
school OBL men
‘The men are tired of taking the children to school.’

These patterns are expected if long passive involves long-distance Agree. For the embedded DP complement to Agree with the matrix T, the twin requirements of unvalued features and minimalism must be satisfied within the matrix as well as within the clauselet. This amounts to saying that both the matrix v and the v of the clauselet must lack an external argument and be unable to license objective Case—exactly what we find in (34)–(35).
6.3 *The Ban on External Arguments in the Matrix*

Finally, when the matrix predicate is a verb whose \( v \) *would* select an external argument, long passive is blocked. Consider the examples in (36), in which the matrix verb is antipassive—a detransitivized verb form whose \( v \) selects an external argument but does not license objective Case. These long passives are ungrammatical. This holds true whether the external argument selected by the matrix \( v \) is realized in the unmarked morphological case, which is the normal case of subjects (see (36a)), or in the oblique morphological case, like a passive by-phrase (36b).

(36) **Long passive blocked when the matrix verb is antipassive**
   a. *Man-hähassu binisita si Carmen NPL.RL.IN.AP-think.PROG NPL.RL.IN.PASS.visit Carmen i famagu’un. the children (‘Carmen is thinking of visiting the children.’)
   b. *Man-man-guaiya ma-kässi si Juan ni famalao’an. PL.RL.IN-AP-love NPL.RL.IN.PASS-tease Juan OBL women (‘The women love to tease Juan.’)

Long passive is also blocked when the matrix verb is transitive—when the \( v \) immediately above it licenses objective Case.

(37) **Long passive blocked when the matrix verb is transitive**
   a. *Ha-hähassu si Carmen binisita 3SG.RL.TR-think.PROG Carmen NPL.RL.IN.PASS.visit i biha. the old.lady (‘Carmen is thinking of visiting the old lady.’)
   b. *Kao ha-ayuda man-sinedda’ i famagu’un Q 3SG.RL.TR-help PL.RL.IN-PASS.find the children ni chi’lu-hu? OBL sibling-1SG (‘Did my brother help find the children?’)

The contrast between the ungrammatical long passives in (36)–(37) and the grammatical (34)–(35) strengthens the case that long passive involves long-distance Agree. What has gone wrong in (36)–(37) is that the external argument selected by the matrix \( v \) has intervened to block an Agree relation between \( T \) and the embedded DP. The embedded DP, which is the complement of a passive verb, is therefore left without a Case licenser—an unacceptable outcome.

In short, these distributional patterns point to the conclusion that long passive *requires* long-distance Agree.

The long passives in (37) are significant for a further reason. Were it possible for the \( v \) immediately above the matrix verb to license objective Case across a distance, one might expect these examples to be grammatical.
Because the embedded verb is passive and so there is no embedded external argument, the embedded DP complement could in principle be Case-licensed by the matrix v, as shown in (38).

(38) Impossible long-distance licensing of objective Case in long passive

The external argument in the matrix could then be Case-licensed by the matrix T, with the result that the derivation ought to be unproblematic. Nonetheless, the long passives in (37) are ill formed.

The ungrammaticality of (37) supports the claim, made earlier in section 5.4, that restructuring does not permit long-distance licensing of objective Case. I return to this in section 8.

7. Agree versus Morphological Agreement

We are now in a position to step back and ask to what extent the analysis just constructed is compatible with minimalist expectations. Earlier I suggested that long-distance morphological agreement is local in some sense (see section 5.4), and I have just shown that the long-distance Agree involved in long passive respects minimality. How do these two types of long-distance agreement fare with respect to the other locality condition of minimalist syntax, the PIC?

The PIC requires syntactic operations to respect the boundaries of the so-called strong phases, CP and v*P, where v*P is the vP projected by the flavor of v that selects an external argument and can license objective Case (see Chomsky 2001:6, 12–13, 43). Operations occurring outside a strong phase XP cannot access any elements of XP except its head and its edge (=its specifiers or adjuncts). Further, once the derivation has proceeded past the next strong phase YP, all access to elements of XP is blocked.
Notice now that in the phrase structure established for restructuring in section 4, the matrix T is separated from the embedded verb and its DP complement (if any) by two vPs: the vP that constitutes the clauselet and the matrix vP. This means that both the long-distance morphological agreement of section 5 and the long-distance Agree of section 6 could potentially be in violation of the PIC.

In fact, it takes only a moment to realize that the long-distance Agree involved in long passive, which was discussed in section 6, satisfies the PIC after all. Long passives are not well formed unless the embedded verb is passive and the matrix predicate is passive or unaccusative. In such cases, neither the matrix v nor the embedded v is the right flavor to select an external argument or license objective Case, so neither projects a strong phase. The result is that when long-distance Agree is established between the matrix T and the embedded DP complement, this relation crosses no strong phases.

Matters are different for the long-distance morphological agreement discussed in section 5, as can be seen from restructuring sentences like (20b) above and (39).

(39) **Long-distance morphological agreement**

Ma-kéke’chagi ma-po’lu i toys-níha tatti
3PL.RL.TR-try.PROG 3PL.RL.TR-put the toys-3PL back
i famagu’un.
the children
‘The children are trying to put their toys away.’

In sentences like these, the matrix verb and the embedded verb are both transitive, so the v’s immediately above them will each select an external argument, license objective Case, and project a strong phase. The result is that when the embedded verb takes its values for φ-features from the matrix T, this long-distance morphological agreement crosses two strong phases, violating the PIC.

One could conclude from this that the analysis of Chamorro restructuring that we have arrived at has serious drawbacks. My own opinion is that it would be more profitable to accept that the long-distance morphological agreement of section 5 is incompatible with the PIC and ask why that might be.

Like other tenets of minimalist syntax, the PIC is intended to constrain only “narrow syntax”—the portion of the derivation that progresses through overt syntax and then covert syntax to produce an LF. But it is not obvious that the operation responsible for long-distance morphological agreement is one that occurs in narrow syntax. To begin with, this operation—call it Z—is not reducible to the syntactic relation Agree.8 The matrix T and the

---

8 Bhatt (2002) makes exactly this observation for long-distance agreement in Hindi-Urdu. This leads him to propose a new operation, AGREE, which differs in certain key respects from the Agree relation.
embedded verb do have some properties of the probe and goal of Agree: 
T c-commands the embedded verb, and the embedded verb has \( \phi \)-features 
whose values can be set by T. But the relation between T and the embedded 
verb does not respect minimality, given that the matrix verb counts as an 
intervener. Nor does T have uninterpretable features whose values can be set 
by the embedded verb. Moreover, Z seems not to have any syntactic 
consequences. It does not lead to visible movement nor does it have 
interpretive effects that could be attributed to covert movement. As a matter 
of fact, its only consequence appears to be the agreement morphology 
described in section 2.

These observations are consistent with the hypothesis that Z is not a 
syntactic operation. Rather, it is a morphological operation that occurs post-
Spell-Out, among the lexical and morphological operations that annotate the 
syntactic structure before it enters the phonological component and is 
converted to prosodic structure (see, e.g., Anderson 1992, Chung 1998, 
Embick & Noyer 2001, and for the idea that certain stylistic movements might 

For this hypothesis to be workable, it must be the case that the 
morphological operations responsible for (morphological) agreement observe 
a locality less strict than that imposed by the PIC.\(^9\) Space limitations prevent 
me from pursuing this idea here, but see, for example, Polinsky and Potsdam 
2001 for a highly relevant investigation of long-distance agreement in Tsez. 
The point is that there simply is no reason to think that the long-distance 
morphological agreement of section 5 violates the PIC in any interesting 
sense, because no evidence suggests that the operation responsible for it 
occurs in narrow syntax.

Once morphological agreement is set aside, it is easier to see the syntactic 
import of the long-distance agreement found in Chamorro restructuring: the 
long-distance Agree involved in long passive conforms fully to a minimalist 
design.

8. Verb-Initial Order

Let me now return to the word order of Chamorro restructuring and bring it to 
bear on the larger issue of how verb-initial clauses are derived.

As mentioned in section 1, the dominant view of verb-initial clauses is that 
they arise from the hierarchical structure posited for the clause via a single, 
universally fixed route. This route is sometimes identified as raising of V, other 
times as raising of (a remnant) VP. My aim here is to show that the dominant 

\(^9\) Alternatively, one could suppose that long-distance morphological agreement arises when the 
embedded verb takes its values for \( \phi \)-features, and its \( \text{wh} \)-feature, directly from the matrix pre-
dicate. If so, the morphological operation responsible for it would respect a locality like that 
imposed by the PIC. However, morphological operations would have to be able to be counter-
cyclic, given that the operation responsible for this agreement could occur only after the matrix 
predicate’s values for \( \phi \)-features, and for the \( \text{wh} \)-feature, had been fixed by the matrix T.
view encounters some empirical challenges from restructuring; specifically, from the word-order options of the matrix subject. These word-order options have been amply illustrated in the examples presented so far. The matrix subject can—unsurprisingly—surface within the matrix, either to the immediate right of the matrix predicate (see (40a,b)) or at the right edge of the entire construction (40c).

(40) Matrix subject surfaces in the matrix

a. Ma-nisisita i istudiantis ma-fanu’i-n maisa siha
   3PL.RL.TR-need the students 3PL.RL.TR-show-L selves them
   más más rispetu.
   more respect
   ‘The students need to show themselves more respect.’

b. Ma-tutuhun i pāpit ma-korek
   NPL.RL.IN-PASS-begin the paper NPL.RL.IN-PASS-correct
   ni ma’estrutu.
   OBL teacher
   ‘The teachers began to correct the papers.’

c. Ma-tutuhun man-mang-orēk papit siha i ma’estrutu.
   3PL.RL.TR-begin PL.RL.IN AP-correct paper PL the teacher
   ‘The teachers began to correct the papers.’

The matrix subject can also surface within the clauselet, to the immediate right of the embedded verb. This is the phenomenon referred to earlier as “scrambling.”

(41) Matrix subject surfaces within the clauselet

a. Ma-chāgi man-ā’ayuda i mañe’lu-hu
   3PL.RL.TR-try NPL.RL.IN-help.each other.PROG the siblings-1SG
   famalao’an ni che’chu’-niha iskuela.
   female OBL work-3PL school
   ‘My sisters tried to help each other with their schoolwork.’

b. Man-ma’añao ma-arekla i famalao’an i
   PL.RL.IN-afraid 3PL.RL.TR-arrange the women the
   famagu’un-ñiha na pāra ufan-maolik.
   children-3PL COMP FUT 3PL.RL.IN-good
   ‘The women are afraid to discipline their (own) children.’

c. Ha-tutuhun esta mang-āssi si Antonio
   3SG.RL.TR-begin already NPL.RL.IN.AP-tease Antonio
   as Dolores.
   OBL Dolores
   ‘Antonio began to tease Dolores.’

How should these patterns be accounted for? Within the dominant view, there are just two scenarios to consider.
In the first, all verb-initial clauses would be derived from an SVO structure via head raising of V to T. Such a scenario could straightforwardly produce sentences like (40a,b) from the phrase structure motivated for restructuring in section 4. The matrix V would raise (through v) to the matrix T; the verb of the clauselet would not raise, there being no T for it to raise to. The result, shown in (42), would be that the matrix subject would surface immediately after the matrix predicate.

(42) Verb raising in restructuring

However, V raising alone would not suffice to derive sentences like (41) and (40c), because there the matrix subject surfaces farther to the right, following the embedded verb. The task would then be to motivate other movements that, in combination with V raising, could produce the word orders of these examples.

Perhaps the most obvious strategy would be to posit that additional head movement was involved. If the embedded verb in restructuring could optionally raise to adjoin to the matrix verb, creating a complex predicate, then V-raising of the complex predicate would lead to the word order of sentences like (41). But such an appeal to complex predicate formation encounters an empirical problem. If, following Chomsky (2001:13), we assume that excorporation is disallowed on general grounds, the prediction is made that the matrix and embedded verbs should form a complex head whenever the matrix subject occurs to their right. This prediction is not borne out. In the
restructuring sentences in (43), for instance, the matrix and embedded verbs are separated by the matrix adverb *esta* ‘already’.

(43) *Matrix and embedded verbs separated by an adverb*

a. Ha-tutuhun esta mang-assi si Antonio
   3SG.RL.TR-begin already NPL.RL.IN.AP-tease Antonio
   OBL Dolores
   ‘Antonio began to tease Dolores.’

b. Pumara esta ginaluti i ga’lagu
   NPL.RL.IN.stop already NPL.RL.IN.PASS.hit the dog
   as Maria.
   OBL Maria
   ‘Maria stopped hitting the dog.’

In the sentences in (44), both of which are long passives, the matrix and embedded verbs are separated by the (matrix) internalized external argument.10

(44) *Matrix and embedded verbs separated by a matrix argument*

a. Ma-hãhassu ni istudianti ma-bisita
   NPL.RL.IN.PASS-think.PROG OBL student NPL.RL.IN.PASS-visit
   i ma’estra.
   the teacher
   ‘The students are thinking of visiting the teacher.’

b. Ma-kéke’chagi ni famagu’un
   NPL.RL.IN.PASS-start.to.try.PROG OBL children
   ma-na’haohao i ga’lagu.
   NPL.RL.IN.PASS-make.bark the dog
   ‘The children are trying to make the dog bark.’

Notice that one could not claim that the intervening category in (44) had itself been integrated into the complex predicate by head-to-head adjunction, given that this category is a phrase rather than a head.11 But if complex predicate formation must be rejected, then it is not clear how the V raising scenario would derive sentences like (41)—or, for that matter, (40c), in which the subject surfaces at the far right.

---

10 For syntactic purposes, the internalized external argument in (44) could just as well be associated with the embedded verb. But the interpretation, and the parallel with long passives with unaccusative matrix predicates, lead me to associate this argument with the matrix verb.

11 Additionally, further reordering operations would have to be posited to account for the word order of sentences like (40c). See below in the text for a discussion of one possible candidate for such an operation.
What about the second scenario? In that alternative, all verb-initial clauses would be derived from an SVO structure via raising of VP to T’s specifier. Such a scenario would have no trouble producing sentences like (40c): the entire matrix VP, including the clauselet, would simply raise to T’s specifier, stranding the subject at the far right. But, as before, additional mechanisms would have to be invoked to derive sentences like (40a,b) and (41), in which some or all of the clauselet surfaces farther to the right, following the subject.

The obvious strategy within this scenario would be to claim that in these sentences, the material following the subject must have exited from the matrix VP. Once these exits had occurred, the remnant of the matrix VP would raise to T’s specifier, producing the desired word order. For instance, if the clauselet were to raise out of the matrix VP, remnant VP raising would lead to sentences like (40a,b), in which the matrix subject surfaces immediately after the matrix predicate, as shown in (45).

(45) *One option for (remnant) VP raising in restructuring*

If the embedded DP complement were to raise out of the matrix VP, remnant VP raising would lead to sentences like (41), in which the matrix subject surfaces immediately after the embedded verb:
However, a dilemma now arises. The motivation for the movement of the clauselet shown in (45) is not at all clear, and the most plausible motivations for the movement of the embedded DP complement shown in (46) can be shown to be unworkable. Let me concentrate on the last point.

To begin with, the movement of the embedded DP complement in (46) cannot occur for Case-licensing purposes. Case licensing is obligatory. But the movement in (46) cannot be obligatory; for if it were, sentences like (40c) could not be derived. More importantly, I showed in sections 5.4 and 6.3 that Chamorro restructuring does not permit long-distance licensing of objective Case. Specifically, a DP complement embedded within the clauselet must be Case-licensed locally, by the v of the clauselet, not by the matrix v. This means that if this DP were to move for Case-licensing purposes, it would have to land somewhere in the vicinity of the embedded v—not high enough for it to exit from the matrix VP.

Nor can the movement in (46) be a scrambling operation that affects the embedded DP complement after Case licensing, raising it to the edge of the matrix vP. The reason is that the embedded DP complement in sentences like (41) does not have the profile of a scrambled constituent. In the best-studied
cases of scrambling, DPs that have been scrambled are either specific or focused (see, e.g., Grewendorf & Sternefeld 1990, Karimi 2003). However, it is possible to have a restructuring sentence of type (41) in which the embedded DP complement is neither specific nor accessible to syntactic focus. Consider the restructuring sentence in (47), in which the matrix subject surfaces between the embedded verb, which is antipassive, and its DP complement, which is headed by the null indefinite article.

(47) “Scrambling” when the verb of the clauselet is antipassive

Ma-nisisita man-man-ispilha i famagu’un nuebu
3PL.RL.TR-need PL.RL.IN-AP-look.for the children new
na ma’estra.
l teacher

‘The children need to look for a new teacher.’

Now, DPs that are headed by the null indefinite article are necessarily nonspecific—they must have narrow scope. (The narrow-scope reading of the embedded DP complement emerges clearly in (47), given that the matrix verb is intensional.) Further, DP complements of antipassive verbs are inaccessible to syntactic focus. This can be seen from their inability to undergo wh-movement in the constituent question and the focus construction below.

(48) Complements of antipassive verbs cannot undergo wh-movement
a. *Hafa mam-ahan si Maria gi tenda?
what NPL.RL.IN.AP-buy Maria LOC store
(‘What did Maria buy at the store?’)

b. *I tia-hu man-man-bisita i famagu’un nigap.
the aunt-1SG PL.RL.IN-AP-visit the children yesterday
(‘It was my aunt that the children visited yesterday.’)

Nonetheless, embedded DP complements fitting exactly this description can surface immediately after the matrix subject in restructuring, as (47) shows. This is compelling evidence that they have not arrived in this position via any scrambling operation.

The upshot seems to be that the motivation for the movement of the embedded DP complement in (41) remains a mystery. More generally, neither the V-raising scenario nor the VP-raising scenario can derive the word order of (41) in an independently motivated fashion. This in turn suggests that, contrary to the dominant view, there is more than one pathway to verb-initial clauses.

If there are multiple pathways to verb-initial order, what forms can they take? Given the strict limits imposed by minimalism, one might speculate that at least some of these pathways are language-specific pathways that lie outside the syntax proper. Interestingly, there are precedents for such an idea. Chomsky (2001:19–26) has claimed that the operation responsible for the word order of English presentationals like There arrived in the mail a strange package occurs post-Spell-Out, in what he calls the phonological component.
Among the evidence for his claim is the fact that the output of this operation evidently cannot be accessed by (known) syntactic operations.

In earlier work, I proposed an analysis of Chamorro word order that treats its verb-initial clauses as analogous to the English presentationals analyzed by Chomsky (see Chung 1998:126–128). If it can be shown that this analysis generalizes to the word orders exhibited by restructuring—and I believe it can—then the door is open to an account that derives Chamorro’s verb-initial clauses post-Spell-Out, in a way compatible with a minimalist design.

Meanwhile, we have arrived at a very interesting point: the distinctive characteristics of Chamorro restructuring are not determined exclusively in the syntax but instead parceled out among the syntax on the one hand and post-Spell-Out operations on the other. The phrase structure of restructuring and the possibility of long passive are produced by syntactic operations; long-distance morphological agreement and surface word order evidently are not. The overall analysis is reminiscent of analyses in some earlier frameworks (e.g., Relational Grammar). Although the result might be surprising to some, the strength of minimalism’s commitment to the universality of syntactic computation makes it not unexpected.

References


COOREMAN, A. 1983. Chamorro texts. Ms., Saipan, CNMI.


© Blackwell Publishing Ltd, 2004
Restructuring and Verb-Initial Order in Chamorro


Sandra Chung
University of California, Santa Cruz
Cowell Academic Services
Santa Cruz, CA 95064
USA
schung@ucsc.edu

© Blackwell Publishing Ltd, 2004