RESTRUCTURING 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

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 2000, Pearson 2000, Rackowski & Travis 2000, and Aldridge 2002). Drawing 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]

(1) *Finite clauses*
   a. Ha-taitai   i   pätgun   esti   na   lepblu.
       3SG.RL.TR-read   the   child   this   L   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. S*um*aga   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'a'ñao   i   pätgun   [t*um*aitai   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   [d*um*ipendi   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   [mang-anta].
       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*

	Realis	Irrealis
1SG	hu-	(bai) u-
2SG	un-	un-
3SG	ha-	u-
1 incl. DU or PL	ta-	(u)ta-
1 excl. DU or PL	in-	(bai) in-
2DU or PL	in-	in-
3DU or PL	ma-	uma-

  b.   *For intransitive verbs or adjectives*

	Realis
SG or DU	-um-/—
PL	man-

	Irrealis
1SG	(bai) u-
2SG	un-
3SG	u-
1 incl. DU	(u)ta-
1 excl. DU	(bai) in-
2DU	in-
3DU	u-
1 incl. PL	(u)tafan-
1 excl. PL	(bai) infan-
2PL	infan-
3PL	ufan-

(4)   *Subject-verb agreement in infinitive clauses*
  a.   *For transitive verbs*
       [invariant]   -um-
  b.   *For intransitive verbs or adjectives*
       SG or DU   -um-/—
       PL   man-

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'a'ñao   i   pätgun   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'   pära   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'; *saina* 'parent', *mañaina* '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   famalao'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. Pära tafan-ma-chägi   ma-na'fanätuk   ni   lalahi siha.
        FUT   1PL.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. T*in*ituhun   esta   si Dolores k*in*ässi
        NPL.RL.IN.PASS.begin already Dolores   NPL.RL.IN.PASS.tease
        as   Antonio.
        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*
    *Pära tafan-ma-chägi   mu-na'fanätuk ni   lalahi siha.
     FUT   1PL.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-ispiha   *i   chi'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-ispiha   *i   chi'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 *pära* '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'a'ñao   si Maria [ti   b*um*isita   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'a'ñao   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. *H*in*ähassu   ti   man-s*in*angani   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. P*um*ara   si Miguel [ha-pänak   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-yíluluk   i   mata-nñiha] 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   k*um*ákati   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.   B*um*oka.
        NPL.RL.IN.eat
        'He ate.'

Recall that the embedded verb of the clauselet is inflected for finite (realis) 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.

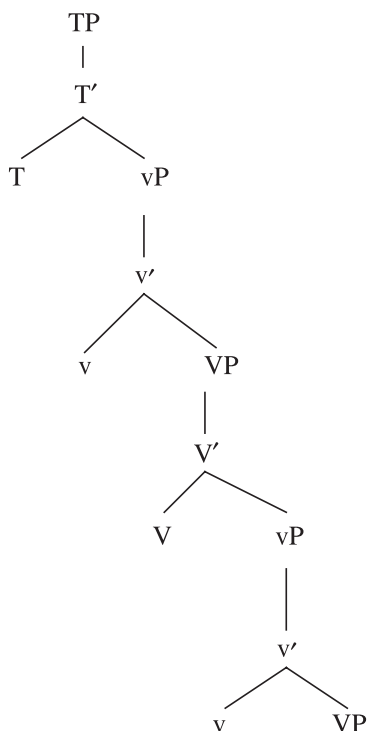(15)   *Subject-verb agreement in the clauselet of restructuring*
    a.   Munhayan   si Carmen   ha-na'chotchu   i   famagu'un.
        NPL.RL.IN.done   Carmen   3SG.RL.TR-feed   the   children
        'Carmen's finished feeding the children.'
    b.   Munhayan   b*um*oka.
        NPL.RL.IN.done   INF.NPL.IN.eat
        '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).[3] 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)*

```
TP
 |
 T′
 ╱ ╲
T    vP
      |
      v′
     ╱ ╲
    v   VP
         |
         V′
        ╱ ╲
       V   vP
            |
            v′
           ╱ ╲
          v   VP
```

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 φ-features of the matrix T covaluate the φ-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 φ-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.
         3PL.RL.TR-begin 3PL.RL.TR-help-L self   them the teacher
         'The teachers began to help themselves.'
    b.   Ma-tutuhun   man-mahalang i   famalao'an as   Dolores.
         3PL.RL.TR-begin PL.RL.IN-lonely the women   OBL   Dolores
         'The women began to feel lonely for Dolores.'
    c.   Ti   malägu'   ha-é'kunguk   si nana-ña
         not   NPL.RL.IN.want 3SG.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-tätmi   i   sini.
         NPL.RL.IN.done 1PL.RL.TR-plant the   taro
         'We finished planting the taro.'
    e.   Yänggin munhayan   hao un-cho'gui   esti siha.
         if   NPL.RL.IN.done you 2SG.RL.TR-do 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   häm.
       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 ɸ-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-ipi'   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'-ñiha   ni   niyuk   siha?
        what WH[OBL].split-3PL OBL coconut PL
        'What did they split the coconuts with?'
    c.   *Hafa ma-ipi'   i   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 ɸ-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 *tum*utuhun   um-istotba
        who PL   L   children   WH[NOM].begin WH[NOM]-bother
        si Miguel?
        Miguel
        'Which children began to bother Miguel?'

b.   Todu siha h*um*ähassu   k*um*onni'   i   amigu-nñiha
     all   PL   WH[NOM].think.PROG WH[NOM].take the friend-3PL
     pära i   gima'-ñiha.
     to   the   house-3PL
     'It's all of them who are thinking of taking their friends home.'

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

d.   *Todu siha h*um*ähassu   ma-konni'   i   amigu-nñiha
     all   PL   WH[NOM].think.PROG 3PL.RL.TR-take the friend-3PL
     pära 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 g*um*oddi   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'ñao   si Antonio t*um*aitai   ädyu 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'ñao* 'make afraid', a causative verb formed productively from *ma'a'ñao* '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-goddi   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'ñao   si Antonio ha-taitai   (nu)
          1PL.RL.TR-make.afraid   Antonio   3SG.RL.TR-read   OBL
          ädyu   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'ñao* '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 φ-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 ufan-in-ayuda   man-in-arekla
      Q   the   children   FUT   3PL.IR.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.'

b. I mañainä-hu man-o'sun man-man-nängga nu guahu.
  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'yu'us.
    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 espität.
    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*
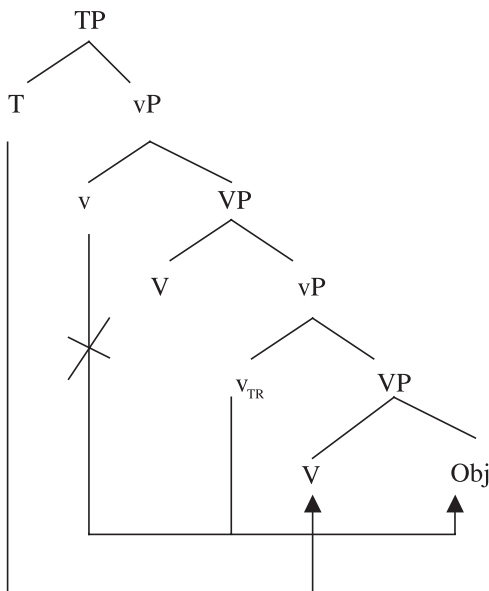
6. Evidence for Long-Distance Agree

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 *-in-* if the internalized external argument is singular but with the prefix *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.   B*in*isita   i   haga-nmami   as   Manuel.
         NPL.RL.IN.PASS.visit the   daughter-1PL   OBL   Manuel
         'Our daughter was visited by Manuel.'
    b.   Ma-bisita   si Juan   ni   kime'-hu   siha.
         NPL.RL.IN.PASS-visit Juan   OBL   pal-1SG   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).

(28) *The distribution of negative concord items*
    a.   Ti ha-li'i'   ni   unu na biha.
          not 3SG.RL.TR-see not   one   L   old.woman
          'He didn't see any old woman.'
    b. *Ti ha-li'i'   i   aksidenti käna   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.

(29) *Negative concord items in passive clauses*
    a. *Ti y*in*ilang   ni un guma' patdit   ni   taifun.
          not NPL.RL.IN.PASS.destroy not a   house concrete OBL typhoon
          ('No concrete house was destroyed by the typhoon.')
    b. *Ti   ma-fa'nä'an   Fred ni unu, t*in*ingo'-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 φ-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.

(30) *Subject-verb agreement in passive clauses*
    Man-b*in*isita   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 φ-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.

(31) *Long passive in restructuring*

    a. Chi*n*ägi   di*n*ispensa   si Carmen gias Maria.
        NPL.RL.IN.PASS.try NPL.RL.IN.PASS.forgive Carmen   OBL Maria
        'Maria tried to forgive Carmen.'
        (Lit. 'Carmen was tried to be forgiven by Maria.')

    b. Hagu   pära   un-ti*n*ituhun   in-änña   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-hässu   ma-na'nä'lu   i   lepblu ni
        NPL.RL.IN.PASS-think NPL.RL.IN.PASS-return the   book   OBL
        ma'estra 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.

(32) *Some failed long passives*

    a. *Ti*n*ituhun   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. *Ti*n*ituhun   k*um*ati   i   pätgun.
        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 pätgun* '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-hässu   mu-na'nä'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 φ-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.

(34) *Long passives with a passive verb in the matrix*
    a. Gui*n*aiya   b*in*isita   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   nuebu 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
        manatungo'-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-b*in*isita   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. Malägu'   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'a'ñao   ku*in*entusi   si Mr. Sablan ni   lähi.
        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-yäyas   ma-konni'   i   famagu'un pära 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 minimality 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   b*in*isita   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 b*in*isita
        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-s*in*edda'   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*
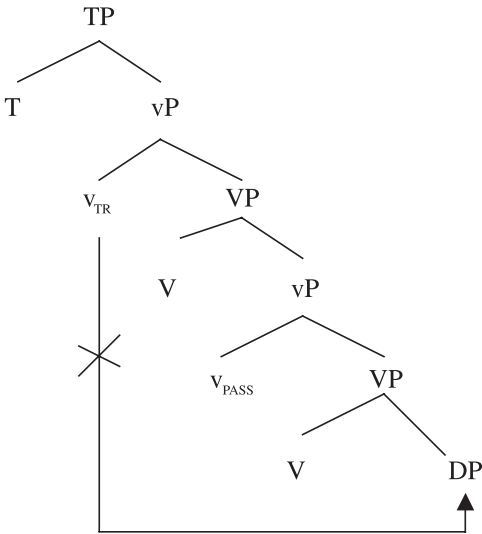
The external argument in the matrix could then be Case-licensed by *the matrix* T, with the result that the derivation ought to be unproblematic. Nonetheless, the long passives in (37) are ill formed.

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-ñiha   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 φ-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 occur post-Spell-Out, Chomsky 2001:19–25).

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 l, 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 φ-features, and its *wh*-feature, directly from the matrix predicate. 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 φ-features, and for the *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   rispetu.
         more   respect
         'The students need to show themselves more respect.'
     b. Ma-tutuhun   *i*   *päpit* ma-korék
         NPL.RL.IN.PASS-begin the paper NPL.RL.IN.PASS-correct
         ni   ma'estru.
         OBL   teacher
         'The teachers began to correct the papers.'
     c. Ma-tutuhun   man-mang-orék   papit siha *i*   *ma'estru*.
         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-chägi   man-ä'ayuda   *i*   *mañe'lu-hu*
         3PL.RL.TR-try NPL.RL.IN-help.each.other.PROG the siblings-1SG
         famalao'an   ni   che'chu'-ñiha   iskuela.
         female   OBL   work-3PL   school
         'My sisters tried to help each other with their schoolwork.'
   b. Man-ma'a'ñao   ma-arekla   *i*   *famalao'an* i
         PL.RL.IN-afraid 3PL.RL.TR-arrange the   women   the
         famagu'un-ñiha na   pära ufan-maolik.
         children-3PL   COMP   FUT 3PL.IR.IN-good
         'The women are afraid to discipline their (own) children.'
     c. Ha-tutuhun   esta   mang-ässi   *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*
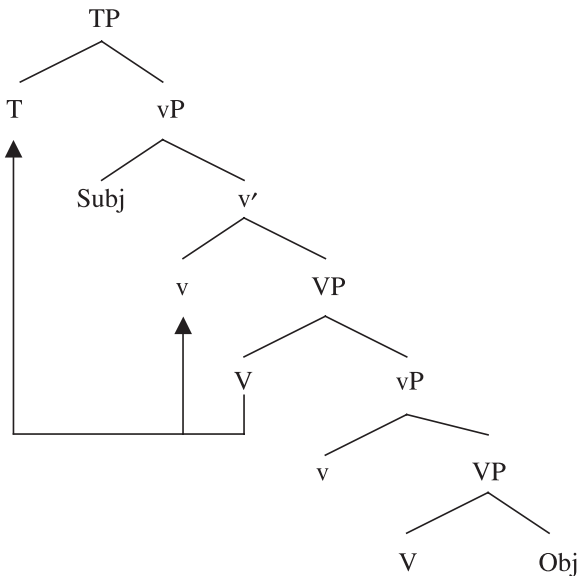
However, V raising alone would not suffice to derive sentences like (41) and (40c), because there the matrix subject surfaces farther to the right, following the embedded verb. The task would then be to motivate other movements that, in combination with V raising, could produce the word orders of these 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-ässi   si Antonio
        3SG.RL.TR-begin already NPL.RL.IN.AP-tease Antonio
        as   Dolores.
        OBL   Dolores
        'Antonio began to tease Dolores.'
    b. P*um*ara   esta   g*in*aluti   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-hähassu   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*
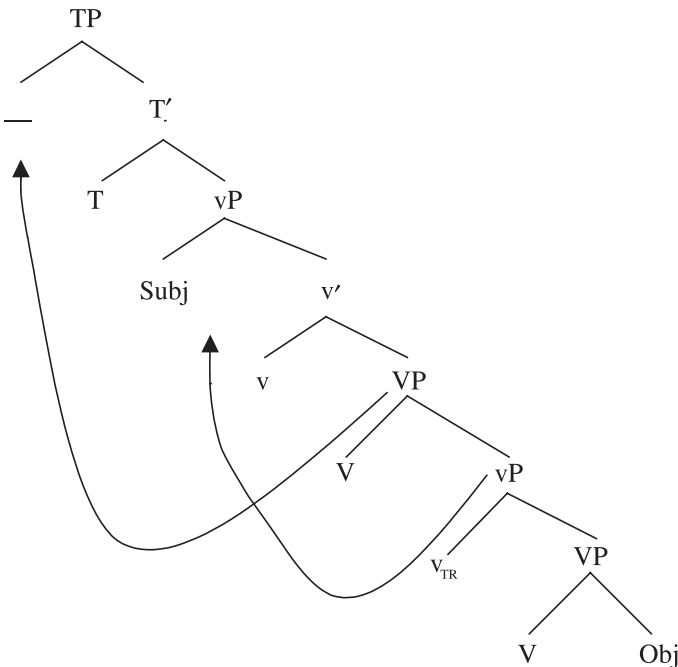
If the embedded DP complement were to raise out of the matrix VP, remnant VP raising would lead to sentences like (41), in which the matrix subject surfaces immediately after the embedded verb:

(46)   *Another option for (remnant) VP raising in restructuring*

TP
T′
T   vP
Subj   v′
v   VP
V   vP
v_{TR} VP
V   Obj
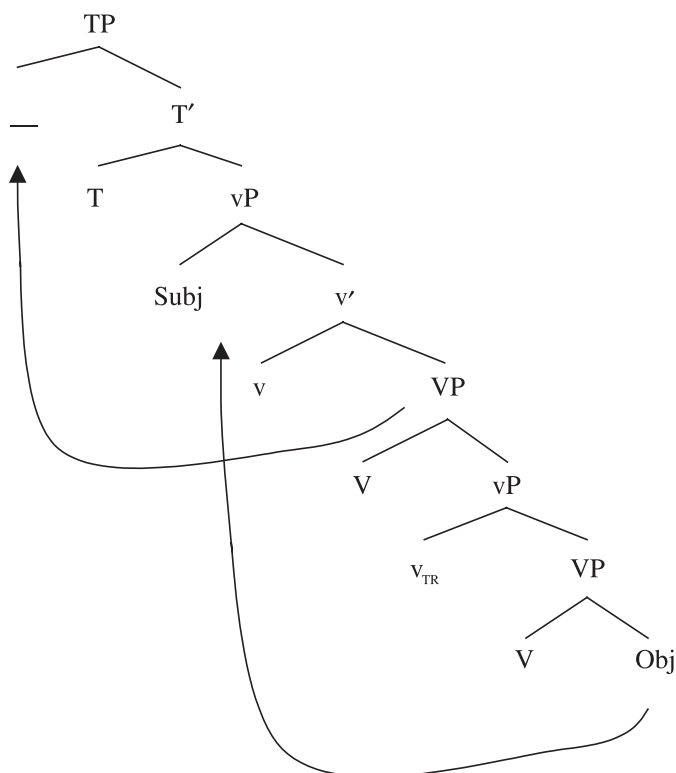
However, a dilemma now arises. The motivation for the movement of the clauselet shown in (45) is not at all clear, and the most plausible motivations for the movement of the embedded DP complement shown in (46) can be shown to be unworkable. Let me concentrate on the last point.

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-ispiha   *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

AISSEN, J. & D. PERLMUTTER 1983 [1976]. Clause reduction in Spanish. In *Studies in relational grammar 1*, ed. D. M. Perlmutter, 360–403. Chicago: University of Chicago Press.

ALDRIDGE, E. 2002. Nominalization and *wh*-movement in Seediq and Tagalog. *Language and Linguistics* 3:393–426.

ANDERSON, S. 1992. *A-morphous morphology*. Cambridge: Cambridge University Press.

AOUN, J. 1986. *Generalized binding: The syntax and logical form of wh*-interrogatives. Dordrecht: Foris.

BAKER, M. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.

BHATT, R. 2002. Long distance agreement in Hindi-Urdu. Ms., University of Texas, Austin. To appear in *Natural Language & Linguistic Theory.*

CHOMSKY, N. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. M. Kenstowicz, 1–52. Cambridge, Mass.: MIT Press.

CHUNG, S. 1998. *The design of agreement: Evidence from Chamorro*. Chicago: University of Chicago Press.

CHUNG, S. & C. GEORGOPOULOS 1988. Agreement with gaps in Chamorro and Palauan. In *Agreement in natural language: Approaches, theories, and descriptions*, ed. M. Barlow & C. A. Ferguson, 251–267. Stanford, Calif.: CSLI Publications.

COOREMAN, A. 1982. Chamorro texts. Ms., University of Oregon, Eugene.

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

DUKES, M. 1992. On the status of Chamorro *wh*-agreement. In *Proceedings of the West Coast Conference on Formal Linguistics 11*, ed. J. Mead, 177–190. Stanford, Calif.: CSLI Publications.

EMBICK, D. & R. NOYER 2001. Movement operations after syntax. *Linguistic Inquiry* 32:555–595.

EMONDS, J. 1976. *A transformational approach to English syntax: Root, structure-preserving, and local transformations*. New York: Academic Press.

EMONDS, J. 1980. Word order in generative grammar. *Journal of Linguistic Research* 1:33–54.

GREWENDORF, G. & W. STERNEFELD eds, 1990. *Scrambling and barriers*. Amsterdam: John Benjamins.

GUILFOYLE, E., H. HUNG & L. TRAVIS 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages. *Natural Language & Linguistic Theory* 10:375–414.

KARIMI, S., ed. 2003. *Word order and scrambling*. Oxford: Blackwell.

KEENAN, E. 1979. On surface form and logical form. *Studies in the Linguistic Sciences* 8(2):163–204.

KOOPMAN, H. 1984. *The syntax of verbs: From verb movement rules in the Kru languages to Universal Grammar*. Dordrecht: Foris.

KOOPMAN, H. & A. SZABOLCSI 2000. *Verbal complexes*. Cambridge, Mass.: MIT Press.

KRATZER, A. 1996. Severing the external argument from its verb. In *Phrase structure and the lexicon*, ed. J. Rooryck & L. Zaring, 109–137. Dordrecht: Kluwer.

LEE, F. 2000. VP remnant movement and VSO in Quiavini Zapotec. In *The syntax of verb initial languages*, ed. A. Carnie & E. Guilfoyle, 143–162. Oxford: Oxford University Press.

MASSAM, D. 2000. VSO and VOS: Aspects of Niuean word order. In *The syntax of verb initial languages*, ed. A. Carnie & E. Guilfoyle, 97–116. Oxford: Oxford University Press.

MOORE, J. 1991. Reduced constructions in Spanish. Ph.D. dissertation, University of California, Santa Cruz.

PEARSON, M. 2000. The clause structure of Malagasy: A minimalist approach. Ph.D. dissertation, University of California, Los Angeles.

POLINSKY, M. & E. POTSDAM 2001. Long-distance agreement and topic in Tsez. *Natural Language & Linguistic Theory* 19:583–646.

RACKOWSKI, A. & L. TRAVIS 2000. V-initial languages: X or XP movement and adverbial placement. In *The syntax of verb initial languages*, ed. A. Carnie & E. Guilfoyle, 117–141. Oxford: Oxford University Press.

RIZZI, L. 1978. A restructuring rule in Italian syntax. In *Recent transformational studies in European languages*, ed. S. J. Keyser, 113–158. Cambridge, Mass.: MIT Press.

RIZZI, L. 1982. *Issues in Italian syntax*. Dordrecht: Foris.

SPROAT, R. 1985. Welsh syntax and VSO structure. *Natural Language & Linguistic Theory* 3:173–216.

TRAVIS, L. 1984. Parameters and effects of word order variation. Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge.

WURMBRAND, S. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.

Sandra Chung
University of California, Santa Cruz
Cowell Academic Services
Santa Cruz, CA 95064
USA

schung@ucsc.edu