# Agreement in Chamorro<sup>1</sup>

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**Sandra Chung,** The design of agreement: evidence from Chamorro. Chicago: University of Chicago Press, 1998. Pp. xii + 423.

Sandra Chung's leading contribution to the development of generative analyses of the morphosyntax of Austronesian languages is widely known. This book is the culmination of some two decades of research on Chamorro and is also, as the title suggests, an attempt to embed that body of research within a particular theory of agreement – one which has an explicitly syntactic flavour and which emphasizes the separation of morphology and syntax. Quite apart from the treatment of agreement itself, Chung also discusses a host of fascinating issues surrounding the analysis of Chamorro that have important ramifications for the analysis of languages that are typologically and genetically related to it, including the issue of configurationality and the nature of VSO word order. Additionally, there is extensive discussion of the treatment of wh-movement and the relationship of the Chamorro phenomenon of Wh-Agreement to the constraints on extraction observed in numerous other Austronesian languages and elsewhere. This book, along with the research program it represents, is an important addition to the literature on the less well-studied languages of the world and is obligatory reading for any syntactician with an interest in the cross-linguistic viability of syntactic theory.

A central thesis of the book is the claim that agreement, conceived of in a somewhat broader way than usual, must be thought of as involving two distinct but sometimes overlapping relations, which Chung labels FEATURE COMPATIBILITY and the ASSOCIATE RELATION. The former relation is intended to correspond fairly closely to a traditional notion of morphological agreement, while the latter is a phrase-structural concept that extends the

<sup>[</sup>I] I thank Peter Sells, Maggie Tallerman and Arnold Zwicky for comments, criticism and advice on various aspects of this paper and especially Sandy Chung for generously reading and commenting on an earlier draft. Note the following abbreviations in numbered examples: AGR = agreement affix, DAT = dative shift suffix, LOC = locative preposition, OBL = oblique preposition, PN = proper name marker.

SPECIFIER-HEAD RELATION found in much recent movement-based work (Chomsky 1986 and much subsequent work). Section 4 of this review discusses the extent to which the postulation of the Associate Relation is theoretically motivated and empirically supported in the grammar of Chamorro and elsewhere.

Because this book has both theoretical and language-particular descriptive goals it is not surprising that a certain amount of tension arises between the two. The boundary between theory-based illumination of a set of data and theory-induced blindness is not always easy to detect, particularly in the case of languages for which there is only a minimal pre-existing literature. Section 3 examines the hypothesised role of subject-lowering in the analysis of Chamorro grammar and section 5 considers the extent to which the analysis of Wh-Agreement presented here correlates with the observable properties of such phenomena in Chamorro. In both cases it is argued that unwarranted theoretical assumptions to some extent obscure the possibility of better motivated analyses of the data.

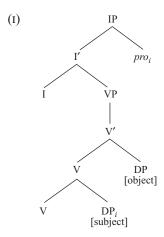
## I. Brief outline

The book consists of ten chapters. After an introductory first chapter, chapter 2 ('The surface design of Chamorro') provides an overview of the general properties of Chamorro phrase structure and morphosyntax, while chapter 3 ('Configurationality') argues convincingly that Chamorro is neither a nonconfigurational language in the sense of Jelinek 1984 nor exhibits any great degree of syntactic ergativity. Nevertheless, it must be pointed out that the evidence provided for ruling out a flat nonconfigurational analysis (Hale 1983, Kroeger 1993) is largely theory internal and thus only supports the claim of phrase-structural configurationality to the extent that one is willing to commit to a tree-based definition of grammatical functions.

The data adduced to support the grammatical hierarchy of subject over object (69–87) largely revolve around facts involving pronominal binding, which are amenable to a tree-free reanalysis within any theory that employs a non-phrase-structural account of binding phenomena (Pollard & Sag 1992, Bresnan 1994). Data showing coordination of VPs that exclude the subject provide a stronger basis for the claimed phrase structural hierarchy. But as evidence for the higher position of the subject, specifically, the specifier of I°, they must be weighed against examples which Chung provides in chapter 4 illustrating the fact that the subject may surface BETWEEN the verb and the object in any conjunct of a coordinated VP. At issue is the relationship between these two possibilities.

The discussion in chapter 4 ('On deriving VSO') extends the material in chapter 3 and addresses in more detail the question of how to account for the word order properties of Chamorro clauses. Chung defends the controversial

idea, first advanced in an earlier paper (Chung 1990), that the 'flexible VSO' order observed in Chamorro arises from lowering of the subject from the specifier position of I<sup>o</sup> to an adjoined position inside the verb phrase. The structure proposed for VSO sentences is given in (1) below (Chung's example (89), 169).



The lowering analysis involves the adjunction of the subject DP to some projection of V (typically, the head itself) that is coindexed with a null expletive in the specifier of I<sup>0</sup>. The commonly observed VOS alternative is thus a natural result of the subject remaining in situ in the higher specifier position.

Chapter 4 also provides a comprehensive discussion of the inadequacy of the verb-raising analysis of Chamorro word order and provides various pieces of evidence against this approach that extend naturally to many other verb-initial languages in the Austronesian family. Not surprisingly, Chung defends the view more generally that VSO order in at least some Austronesian languages is more plausibly related to an underlying subject-final order than to underlying SVO. A more detailed discussion of the subject lowering proposal is taken up in section 3 below.

Chapter 5 ('A syntactic agreement relation') lays out the details of the main new theoretical proposal made in the book, namely the role of the Associate Relation in the grammar of natural languages. Chung takes the position that syntactic agreement configurations must be sharply distinguished from strictly morphological agreement, whilst noting that they nevertheless often overlap. Contrary to the position taken in the vast majority of recent work in the Principles and Parameters framework (Pollock 1989 and much subsequent work; though see Chomsky (1995: chapter 4) for a recent position more in accord with Chung's approach), the proposal is set within an analysis that denies any role for Agreement Phrases.

The Associate Relation (AR) is defined in (2).

- (2) The Associate Relation (Chung's example (7), 181)
  A category X and a category Y are Associates if and only if
  - a. X and Y are Direct Associates; or else
  - b. There is a category Z such that X and Z are Associates and Z and Y are Associates.

This definition in turn depends on the definition of DIRECT ASSOCIATE given in (3).

- (3) The Direct Associate Relation (Chung's example (5), 180)
  A category X and a category Y are Direct Associates if and only if
  - a. X is a functional head and Y is the specifier of X; or
  - b. X is a head and Y is a projection of X; or
  - c. X and Y are adjacent links in a chain.

As can be seen from the latter definition, the AR is fundamentally disjunctive. In plainer language, a functional head and its specifier are Associates, a head and all its projections are Associates and any two adjacent links in a movement chain are Associates. Finally, a further disjunction in the definition of the AR provides for Associates to be related by transitivity. It is not clear to the naive observer why these categories should be expected to form a natural class and thus attention turns in this chapter and subsequent ones to the illustration of the hypothesised role of the AR in Chamorro grammar.

Chung takes the position that being Associates is not a precondition on the appearance of agreement between two grammatical elements. A particularly clear case of this mismatch is illustrated by cases of object agreement. The object of a verb and the verb itself are not Associates according to Chung's definition. Yet in many languages objects may trigger agreement on a verb or on an auxiliary element in a manner that appears remarkably parallel to subjects. Thus either the definition of the AR must be revised in order to account for these data or it must be acknowledged that the AR does not account for all agreement configurations, even those which appear to be syntactically determined.<sup>2</sup> Chung proposes to take the latter route, leaving the (substantial) residue of non-AR determined cases to be treated by morphological rules of agreement, adopting an Andersonian approach to such cases of inflection (Anderson 1992). The resulting picture of the syntactic input to agreement is one that is rather disjointed. Fuller discussion of this and other issues regarding the Associate Relation can be found in section 4.

<sup>[2]</sup> A defender of Agreement Phrases might legitimately argue here that cases of object agreement, along with other cases that Chung accounts for via the AR, could be uniformly subsumed under the standard Spec-Head relation, assuming movement of arguments to the specifier positions of Agreement Phrases. The plausibility of such an approach would depend on the extent to which one can justify the existence of such projections in a given language.

Chapter 6 ('The morphology of extraction') examines the behaviour of wh-dependencies in Chamorro and in particular the treatment of the phenomena of Wh-Agreement. Somewhat paradoxically, having just outlined the functioning of the Associate Relation in the preceding chapter, Chung demonstrates that it plays no role in the analysis of Wh-Agreement in Chamorro. This is taken as evidence for the fundamental split between agreement types determined by the AR and those determined by Feature Compatibility. Given that Wh-Agreement is one of the most widely discussed phenomena in the grammar of Chamorro, one might have expected that the AR would play some role in explicating the syntactically determined appearance of morphology in Chamorro wh-dependencies. Chung argues however that Wh-Agreement is a non-canonical type of Feature Compatibility that must be treated by Chamorro-specific agreement rules. By contrast, the behaviour of a recently identified process of agreement operating between complementizers and their specifiers is claimed to be governed by the AR.

Part of the discussion in this chapter focuses on the issue of the morphosyntactic relevance of Chamorro Wh-Agreement, in particular, seeking to lay to rest some suggestions made in Dukes 1993 to the effect that overt Wh-Agreement is not really agreement with wh-traces but a decaying morphological remnant of the Austronesian voice system. Chung convincingly refutes the idea that overt object Wh-Agreement is passive morphology and hence the claim that object Wh-Agreement involves the promotion of the object to subject. But the remainder of the argumentation against the nonagreement view seems to me less than overwhelming. In particular, one of the main methodological points at issue – that cases of overt Wh-Agreement are structurally parallel to cases of hypothesised 'nonovert' Wh-Agreement – is not well-supported. I return to this point in section 5 below.

Chapter 7 ('Topic and focus') describes two construction types in Chamorro that involve the appearance of an argument in a putatively non-argument position. Chung argues that topics in Chamorro are adjoined preverbally to IP in an 'internal' topic position distinct from the landing site for wh-movement (specifier of C°). Such topics are analysed as being coindexed with a null resumptive pronoun in the standard argument position and as functioning pragmatically to 'introduce, or reintroduce, a character that is in the spotlight' (263). Convincing evidence for this analysis comes from the fact that topics appear inside complementizers in both main and embedded clauses and because they do not participate in Wh-Agreement.

In contrast to the topic construction, the Chamorro focus construction has all the hallmarks of prototypical wh-movement. Chung demonstrates that it triggers Wh-Agreement of the familiar sort, though the data available indicate that such constructions may be analysed in two distinct ways, in some cases involving direct movement of the focus to the specifier of  $C^0$  while

in other cases originating from a cleft structure in which the focus is the main predicate taking a nominal subject that contains a null head modified by a relative clause.

Chapter 8 ('Syntactic agreement and locality') provides a detailed account of constraints on wh-movement in Chamorro from the more general perspective of licensing conditions such as the requirements for head government and minimality (Rizzi 1990). The chapter illustrates the role of the AR in determining the possibility of head government of traces in Chamorro. More specifically, while the lexical categories V<sup>0</sup> and A<sup>0</sup> can straightforwardly license the trace of their complements, it is claimed that functional heads, including I<sup>0</sup> and C<sup>0</sup>, can only license the traces of categories that are their Associates. As was noted earlier with respect to agreement patterns, this distinction between phenomena mediated by the AR and phenomena which are not leads to a disjunctive account of the range of data at hand. Traces may be licensed by the AR or by the standard government relation between a head and its complements (though, as in many languages, P<sup>0</sup> fails to head govern the trace of its complement). As noted earlier with respect to agreement, the analysis sets up a contrast between the properties of subjects and objects. But in this case it is not directly reflected in the data since both subjects and objects freely extract in Chamorro. One might argue that the parallel extractability of these two arguments follows from some more obvious grammatical similarity between them, a point I return to in section 3.

Chapter 8 concludes with a sketch of a possible approach to the 'subjectsonly' extraction constraint in Western Austronesian languages utilizing the idea that in such languages only traces licensed by the AR may extract.

Chapter 9 ('Adjunct extraction') provides a valuable analysis of the properties of adjunct extraction in Chamorro, illustrating the variable characteristics that such elements exhibit. Chung employs the distinction between the licensing properties of functional and lexical heads to account for variation in the properties of adverbials with respect to extraction. In particular, she argues that extracted VP adverbials satisfy the head government requirement, while sentence-level adverbials do not. This difference in behaviour is correlated with a parameterization of the definition of m-command in Chamorro. Chung argues that adjuncts to lexical projections are m-commanded by the head of the projection while adjuncts to functional projections are not m-commanded by the head of the projection, despite the fact that the structural configurations are the same.

The Chamorro adverbial data adds to the growing body of evidence pointing to a much more complex typology of modifiers than the standard phrase structural argument/adjunct distinction leads us to expect. VP adverbials in Chamorro behave like arguments with respect to licensing for extraction, providing analogous domains for pronominal binding and for the triggering of Wh-Agreement. Taken together with the great flexibility in

ordering of posthead elements exhibited in the data throughout the book, the standard argument/adjunct contrast appears to provide an insufficiently stable basis for an account of Chamorro clause structure.

The final chapter ('On the design of agreement') provides the briefest of conclusions to the book, suggesting future extensions of the role of the AR in grammatical analysis.

# 2. Overall assessment

Chung has provided one of the few detailed formal analyses of the syntax of an Austronesian language, thus helping to broaden the coverage of grammatical theory in a vitally important way. Furthermore, the material presented raises a number of significant but difficult issues that most current grammatical frameworks will struggle to account for in any principled way; most especially the interaction of morphology and syntax, the impact of animacy hierarchies on grammatical expression and the treatment of word order and constituency. In the following sections I will review what I see as some of the outstanding issues that Chung's analysis raises or leaves unanswered and make some suggestions about ways in which these issues may be approached in future research. While the content of this discussion is unavoidably somewhat critical I hope it will not divert attention from the value of this book in its illumination of the workings of Chamorro grammar.

# 3. The subject lowering analysis

Perhaps one of the most immediately striking aspects of Chung's analysis of Chamorro clause structure is the claim developed in chapters 3 and 4 that VSO word order is derived via lowering of the subject to adjoin to a projection of the verb. Within recent versions of movement-based grammar there has been a strong tendency to avoid appeal to downward movement due to its apparent rarity and because of the apparent violations of binding and locality constraints involved in such derived structures. Furthermore, no morphological or syntactic rationale for lowering is in evidence of the sort that is employed to explain the raising of verbs or their arguments. Problems of this kind probably explain the lack of widespread adoption of the lowering approach to VSO within movement-based theory and I think it is fair to say that the discussion presented in the book will not change too many people's minds on the issue.3 However, whether one agrees with the details of the mechanism proposed, the key insight of Chung's analysis is that it recognises the fundamental fact that the subject cannot be uniquely associated with relatively high specifier positions and that it must be allowed to appear

<sup>[3]</sup> Within some other frameworks, such as Categorial Grammar, the proposed lowering rule is not so unfamiliar and is simply a variant of the well known 'Wrap' rule (Bach 1979). Chung also notes the analogy (128).

within V'. Arguably, the problem is not so much with Chung's analysis but with the strictures of the framework in which it is presented.

Quite apart from the problems raised by subject lowering from a movement-based perspective there are a number of more straightforwardly empirical problems that the approach raises. The analysis entails that the verb and incorporated subject together form a kind of complex verb. But no evidence is presented to indicate that this is the case. Indeed there is no evidence to suggest that the verb and subject form a constituent of any sort. Given the rather free positioning of the subject, quite the opposite conclusion seems justified. It is also left unexplained why the lowering process leaves a coindexed null pronominal in the specifier of I<sup>o</sup> rather than a trace; an unusual result in the case of a highly local dependency and one which is normally taken to indicate something other than a movement-based relation.

A further important issue with respect to subject lowering that is introduced early on but not discussed further is the striking parallel between subject positioning in the clause and possessor positioning in the DP/NP. Chung notes in chapter 2 (43) that possessors, despite being analysed analogously to the subject of the clause as underlyingly phrase-final specifiers of D<sup>0</sup>, *obligatorily* occur between the head noun and any complements or adverbials modifying the noun, thus providing minimal pairs of the following sort:

- (4) (a) i gima' Maria gi hälum tanu' the house Maria Loc inside land 'Maria's house in the forest.'
  - (b) \*i gima'-ña gi hälum tanu' si Maria the house-AGR LOC inside land PN Maria (Maria's house in the forest)

(adapted from Chung's examples (42b) & (43), 43)

Thus, under Chung's approach, possessors must necessarily undergo lowering to adjoin to the head noun (or alternatively, all non-possessor modifiers of the head must extrapose to the right). The movement is analogous to that observed in IP with the additional condition that the movement within DP/NP is obligatory whenever a complement or adverbial modifier of the noun is present. The latter condition seems a rather unusual one. It is hard to see how the presence of a complement or adverbial inside NP could force the lowering of the possessor from the specifier of D<sup>0</sup>. The datum casts doubt on the idea that the possessor originates high in DP and suggests instead that the presence of the complement or adverbial somehow blocks movement of the possessor OUT of its underlying head-adjacent position. The natural extension of this hypothesis to the sentence-level domain suggests that the subject originates adjacent to V and optionally extraposes to the right. The analysis of Chamorro subjects as V'-internal was also suggested in Woolford 1991 and is in line with the kind of flat VP

analysis that Chung rejects in chapter 3. It is also reconcilable with the word order facts of Maori, another flexible VSO language, discussed in chapter 4. Treating the subject as an underlying sister of the verb also suggests an explanation for the generally parallel extractability of subjects and complements; both are plausibly licensed as complements of the head that selects them.

It seems clear in fact that most of the problems that accrue to Chung's analysis of Chamorro clause structure arise largely from enforcing the requirement that the subject must appear in the specifier of I<sup>o</sup> in 'overt syntax' and the subsequent gymnastics required to shift the subject to its observable position in the clause. It is not clear why one need assume that this position must always be filled, if it even exists. Certainly other analyses of Austronesian languages have not assumed so. Sells (1998), for example, has recently presented an analysis of subjecthood in the Philippines languages which in many respects bears a striking resemblance to Chung's treatment of Chamorro, in particular by proposing that the subject grammatical function is fulfilled by an unexpressed pronominal. The unnecessary complications induced by a phrase structural definition of grammatical functions are avoided by treating the overt nominative argument as a coindexed adjunct. Much of this analysis would extend naturally to the case of Chamorro at the arguably small price of delinking phrase structure and grammatical functions.

## 4. The associate relation

It is widely believed that the factors constraining the realization of agreement in any given language may come from a range of sources; morphological, syntactic, pragmatic and lexical (see e.g. Pollard & Sag 1994). It is therefore not unreasonable to propose, as Chung does, that the formal characterization of agreement involves distinct, potentially independent, but frequently overlapping subsystems. However, the Associate Relation appears to bite off too small and too idiosyncratic a piece of the domain of agreement and grammatical licensing to justify its postulation. Rather than dividing up the phenomenon of agreement according to distinct grammatical domains, it creates a rather arbitrary split within the syntactic interface to agreement. The large majority of agreement phenomena must apparently be governed by machinery distinct from the AR. But since no theory-independent diagnostics are provided for determining whether some agreement process involves the AR or not, it is unclear whether there is much reason to invoke the AR as a distinct syntactic constraint on agreement.

All cases of concord between nouns, determiners and adjectives for example are excluded from the purview of the AR because these elements are not related to each other as Associates. And the same is true of all cases of

<sup>[4]</sup> Exactly what is intended by the term 'overt syntax' is not spelled out. Since the subject does not need to appear overtly in the specifier of I<sup>0</sup>, it cannot be the standard definition of 'overt'

agreement between a head and its complement, despite the fact that these seem to be crosslinguistically common, syntactically determined patterns of agreement. On the other hand, a head with a specifier is an Associate of its specifier's specifier and of the specifier contained within that specifier, ad infinitum. Yet there seems to be little morphological or syntactic motivation for assuming that these categories have any privileged grammatical relationship to one another, particularly in comparison to a crosslinguistically robust phenomenon like concord.

An additional problem with the AR, as it applies to Chamorro, is that most of its empirical coverage is nondistinct from a much more straightforward generalization based simply on Spec-Head agreement (Chomsky 1986). All the agreement generalizations stated in chapters 5 and 6 that invoke the Associate Relation require the stipulation that the trigger of agreement on the head is an Associate which is the Head's specifier. Thus what is crucial to the agreement generalizations is not Associatehood but specifierhood, since it is only specifiers that can control the agreement described in such cases rather than the larger class of Associates.

The idea that agreement splits along the lines proposed under the Associate Relation seems to underestimate the diversity of agreement phenomena in the world's languages and entails that superficially similar processes, such as object and subject agreement, are fundamentally distinct. More motivation is required to show that the AR has a significant and distinctive role to play in the grammar of natural languages and some objective diagnostics are required to identify those cases of agreement that actually involve the AR.

## 5. Wh-agreement and case theory

As I noted briefly above, the evidence for a process of true Wh-Agreement in Chamorro still remains rather unconvincing in my view. It is beyond dispute that certain kinds of overt morphology are strongly associated with the contexts created by wh-extraction in Chamorro and that this morphology demands a formal explanation of the kind that Chung seeks to develop. Thus the appearance of the Wh-Agreement morphology on the verb in (5b) is required purely as a consequence of the extraction of the wh-phrase (note that the infix -um- is 'subject Wh-Agreement'), in contrast to the parallel nonextraction case in (5a), which displays regular subject agreement.

- (5) (a) Ha-fa'gasi si Juan i kareta AGR-wash PN Juan the car 'Juan washed the car.'
  - (b) Hayi f-um-a'gasi i kareta? who um-wash the car 'Who washed the car?'

(adapted from Chung's examples (52) & (53b), 236)

This is also true of the obviously cognate voice morphology that shows up in many Philippines languages, often obligatorily in the context of extraction (Kroeger 1993). However, in many cases of extraction in Chamorro, the appearance of distinct morphology is optional or prohibited. The examples in (6) illustrate that the appearance of object Wh-Agreement is optional for some kinds of object extraction and impossible for others (note that the infix -in- is 'object Wh-Agreement').

- (6) (a) Hafa si Maria s-in-angane-nña as Joaquin? what PN Maria in-say.to-AGR OBL Joaquin 'What did Maria tell Joaquin?'
  - (b) Hafa si Maria ha-sangani si Joaquin? what PN Maria AGR-say.to PN Joaquin 'What did Maria tell Joaquin?'

(adapted from Chung's examples (72a-b), 242)

(c) \*Hayi t-in-igi'-i-nñiha (ni katta)? who *in*-write-DAT-AGR OBL letter 'Who did they write (the letter) to?'

(adapted from Gibson 1990, 253)

The sentence in (6a) illustrates regular overt Wh-Agreement, while (6b) is its null counterpart. Sentence (6c) illustrates the fact that certain derived objects may not extract via Wh-Agreement.

Chung takes the position that the cases of 'null' Wh-Agreement should be classed together with the cases that are overt. However, rather than seeking an explanation for the Chamorro Wh-Agreement morphology by trying to formally unify the cases of overt morphology with the cases of 'nonovert' morphology, it seems more plausible to adopt an approach in which they are sharply distinguished. More specifically, the overt Wh-Agreement is best viewed as part of an eroding morphological system that is gradually being replaced by 'plain' wh-movement. Indeed, Chung herself (Chung 1978: 369–375) documents a parallel process in Bahasa Indonesian, where the informal register of the language violates the subjects-only restriction on extraction still observed in the formal register. The 'non-overt' morphology, by contrast, is best viewed as simply non-existent – that is, not part of the grammatical system of Chamorro. This view is supported by the clear grammatical contrasts observable in the behaviour of overt Wh-Agreement as opposed to 'non-overt' Wh-Agreement.

There are several reasons for preferring a strategy of eliminating the cases of non-overt Wh-Agreement, which I have discussed elsewhere (Dukes 1993). Some of the evidence is briefly reviewed below as it relates to points discussed in chapter 6 of the book under review.

A central plank of Chung's claim that overt and null Wh-Agreement are

grammatically parallel is the claim that all Wh-Agreement is syntactically inert. Despite the fact that the two overt Wh-Agreement morphemes (subject Wh-Agreement -um- and object Wh-Agreement -in-) are homophonous with other grammatical morphemes (infinitival -um- and nominalizing -in-), Chung maintains the position that it is homophony and nothing else. While the evidence presented in the book does firmly establish that the object Wh-Agreement morpheme is inert with respect to grammatical relations (though not with respect to grammatical category; the head is clearly nominalized and behaves in other respects like the object focus nominalizations found for example in non-extraction contexts (Topping 1973, Gibson 1992)), the evidence in the case of the subject Wh-Agreement morpheme -um- clearly demonstrates that it is the SAME grammatical morpheme as appears in so-called infinitival constructions (a point also noted in Aoun 1986).

Chung (1983: 234) notes that Wh-Agreement -um- and infinitival -um-display identical agreement patterns, only occurring in contexts in which the verb is transitive realis and has a missing subject argument. Furthermore, as one would expect from an infinitival marker, subject Wh-Agreement cannot cooccur with a finite complementizer (Chung & Georgopoulos 1988: 261). This fact is completely unexpected under the view that subject Wh-Agreement is syntactically inert. 'Non-overt' subject Wh-Agreement, by contrast, is syntactically inert. Clauses in which it is said to occur display all the hallmarks of finiteness, including cooccurrence with the finite complementizer. Indeed, there is simply no evidence of any grammatical effect induced by Wh-Agreement in such cases whatsoever. Occam's Razor suggests that there is no Wh-Agreement in such cases.

Similar problems arise with the other species of 'null' Wh-Agreement. Non-overt object Wh-Agreement is not simply an optional variant of overt wh-agreement. Overt object Wh-Agreement induces nominalization (while the non-overt cases do not) and thus triggers case-marking changes on other arguments of the nominalized predicate as shown in (7b) below, where the object of the verb is rendered oblique when -in- nominalization applies (see also (6) above). Non-overt object Wh-Agreement triggers no such changes, as shown in (7a), where the object receives the usual unmarked case found on subjects and objects.

- (7) (a) Hafa un-tugi'-i i che'lu-mu? what AGR-write-DAT the sibling-your 'What did you write to your brother?'
  - (b) Hafa t-in-igi'-i-nñiha ni che'lu-mu? what *in*-write-DAT-AGR OBL sibling-your 'What did they write to your brother?'

(examples adapted from Gibson 1990: 252)

Apart from the fact that -in- nominalization has syntactic effects that nonovert Wh-Agreement lacks, the distribution of the two kinds of Wh-Agreement is far from parallel. The distribution of -in- Wh-Agreement is much more restricted and its description appears to require appeal to a notion of underlying grammatical functions, as analysed within Relational Grammar in Gibson (1990). This raises serious problems for Chung's proposal that the distribution of Wh-Agreement is determined by the sharing of abstract Case features (which must also be treated as non-overt for the most part, since Chamorro displays no distinction between the Subjective and Objective Cases that Chung proposes). For example, as Gibson points out (1990: 252-253), an underlying direct object that has been demoted to oblique by the rule of Dative Shift can extract via -in- nominalization even though it presumably does not bear Objective Case at S-structure (as can be seen in (7b)). On the other hand, a surface direct object derived via Dative Shift CANNOT undergo extraction via -in- nominalization, despite the fact that it presumably does bear Objective Case (as exemplified in (6c)). Additional paradoxes for a Case-based analysis arise with object extraction out of clauses that involve antipassivization and causativization (Gibson 1990).

A final problem with the parallelism of overt and non-overt Wh-Agreement is the fact that overt Wh-Agreement blocks all other regular subject agreement, while non-overt Wh-Agreement never does. If the morphosyntactic configurations involved in determining the realization of both kinds of Wh-Agreement are parallel, there is no obvious explanation for why this should be. The complete lack of grammatical effects induced by null Wh-Agreement suggests that it simply doesn't exist. So even if one wants to maintain that the overt morphology observed in Chamorro extraction contexts is agreement with wh-traces, it makes sense to abandon such an analysis of the null Wh-Agreement.

The appeal to null morphemes is actually a theme which pops up in several chapters of this book. While zero-morphology should not be ruled out altogether as a tool in grammatical analysis, it seems reasonable to insist that it should be justified by evidence of strongly parallel behaviour between overt and non-overt instances of the categories involved. As observed above, this parallelism appears to be lacking in the case of Wh-Agreement and it is also lacking in the other cases of null morphemes found in the book. In all such cases, Chung takes the position that the null tokens violate conditions that are strictly imposed on overt ones. For example, while overt determiners are uniformly treated as intervenors that block movement out of DP, the null indefinite determiner does not (chapter 8, 286-289). Similarly, while DPs may not extract out of a PP with an overt head, they may extract out of a PP with a hypothesised null head (289–290). In the end, the explanation for the constraints on such phenomena is consigned to phonology rather than to the structural configurations with which they are associated. As in the case of the null Wh-Agreement, a plausible alternative approach would be to

consider the possibility that the proposed null heads are simply not there at all.

## REFERENCES

Anderson, Stephen R. (1992). A-morphous morphology. Cambridge: Cambridge University Press

Aoun, Joseph. (1986). Generalized binding: The syntax and logical form of wh-interrogatives. Dordrecht: Foris.

Bach, Emmon. (1979). Control in Montague Grammar. Linguistic Inquiry 10. 515-531.

Bresnan, Joan. (1994). Linear order vs. syntactic rank: evidence from weak crossover. In Beals, K. et al. (eds.), *Proceedings of the 30th Regional Meeting of the Chicago Linguistic Society*. Chicago: Chicago Linguistic Society. 57–89.

Chomsky, Noam. (1986). Barriers. Cambridge, MA: MIT Press.

Chomsky, Noam. (1995). The Minimalist Program. Cambridge, MA: MIT Press.

Chung, Sandra. (1978). Case marking and grammatical relations in Polynesian. Austin: University of Texas Press.

Chung, Sandra. (1983). The ECP and government in Chamorro. Natural Language and Linguistic Theory 1. 207–244.

Chung, Sandra. (1990). VP's and verb movement in Chamorro. Natural Language and Linguistic Theory 8, 559–619.

Chung, Sandra & Georgopoulos, Carol. (1988). Agreement with gaps in Chamorro and Palauan. In Barlow, Michael & Ferguson, Charles A. (eds.), *Agreement in natural language:* approaches, theories and descriptions. Stanford: CSLI. 251–267.

Dukes, Michael. (1993). On the status of Chamorro wh-agreement. In Mead, Jonathan, Kural, Murat & Moritz, Luc (eds.), Proceedings of the Eleventh West Coast Conference on Formal Linguistics. Stanford: CSLI. 177–190.

Gibson, Jeanne D. (1990). Categorial grammatical relations: the Chamorro evidence. In Postal, Paul M. & Joseph, Brian D. (eds.), *Studies in Relational Grammar 3*. Chicago: University of Chicago Press. 247–260.

Gibson, Jeanne D. (1992). Clause union in Chamorro and in universal grammar. New York: Garland Publishing.

Hale, Ken. (1983). Warlpiri and the grammar of non-configurational languages. *Natural Language and Linguistic Theory* 1. 5–47.

Jelinek, Eloise. (1984). Empty categories, Case and configurationality. Natural Language and Linguistic Theory 2. 39–76.

Kroeger, Paul. (1993). Phrase structure and grammatical relations in Tagalog. Stanford: CSLI.Pollard, Carl & Sag, Ivan. (1992). Anaphors in English and the scope of binding theory.Linguistic Inquiry 23. 261–303.

Pollard, Carl & Sag, Ivan. (1994). *Head-driven Phrase Structure Grammar*. Chicago: University of Chicago Press.

Pollock, Jean-Yves. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry* 20. 365–424.

Rizzi, Luigi. (1990). Relativized minimality. Cambridge, MA: MIT Press.

Sells, Peter. (1998). The function of voice markers in the Philippines languages. In Lapointe, Stephen G., Brentari, Diane K. & Farrell, Patrick M. (eds.), *Morphology and its relation to phonology and syntax*. Stanford: CSLI. 111–137.

Topping, Donald M. with the assistance of Bernadita C. Dungca. (1973). *Chamorro reference grammar*. Honolulu: University of Hawaii Press.

Woolford, Ellen. (1991). VP-internal subjects in VSO and nonconfigurational languages. Linguistic Inquiry 15, 103–129.

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