

Identifiability and Null Objects in Chamorro

Author(s): Sandra Chung

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potential counterexample to the identification hypothesis turns out to be benign once one recognizes the existence of other elements in the typology of empty categories.

Huang's proposal raises the possibility that one could try to maintain the identification hypothesis by claiming that the apparent counterexamples to it are always variables, never true pronouns. In this paper I examine some evidence from Chamorro, an Austronesian language, which argues against such a possibility. Chamorro allows a variety of NP positions to be occupied by null pronouns. I first point out that richness of agreement seems to be involved in determining the distribution of null versus overt pronouns, so in this respect the language conforms to the identification hypothesis. I then argue that Chamorro null objects, which are not sanctioned by overt agreement, cannot be variables but rather are instances of small pro. The conclusion to emerge from this is that Huang's approach cannot always be used to save the identification hypothesis.¹ Evidently, the correlation between agreement and null pronouns remains as incompletely true as when the traditional grammarians first observed it.

Identifiability

Chamorro is a VSO language. In this language a variety of NP's are sanctioned by person and/or number agreement on a lexical head. For instance, subjects in the realis mood are sanctioned by agreement on the verb:

- (4)a. T-um-angis i neni.
SUBJ(s)-cry the baby
'The baby cried.'
- b. Ha-yuti' si Rebecca si Juan.
SUBJ(3s)-drop Unm Unm
'Rebecca abandoned Juan.'

So are subjects in the irrealis mood (shown in (4c)) and agents of passive (shown in (4d)):

- (4)c. Pära u-fattu i médiku agupa'.
will SUBJ(3s)-arrive the doctor tomorrow
'The doctor will arrive tomorrow.'
- d. Kao ch-in-iku si Maria as Juan?
Q SUBJ(s)-AGT(s)-kiss Unm Obl
'Was Maria kissed by Juan?'

Possessors are sanctioned by agreement on the head noun (see Chung 1982b):

- (4)e. i kumpliaños-ña i Impiradóť
the birthday-POSS(3s) the Emperor
'the Emperor's birthday'

In the morpheme-by-morpheme glosses, parentheses surround the features that are indexed on the head, and capital letters indicate the grammatical function of the sanctioned NP. In (4b), for instance, the verb exhibits third singular agreement with the subject.²

The NP's sanctioned by agreement in (4) may be null rather than overt. I will refer to these empty NP's, symbolized by [e] in the examples below, as null pronouns:

- (5)a. T-um-angis [e].
 SUBJ(s)-cry
 '(She) cried.'
- b. Ha-yuti' [e] si Juan.
 SUBJ(3s)-drop Unm
 '(She) abandoned Juan.'
- c. Pära u-fattu [e] agupa'.
 will SUBJ(3s)-arrive tomorrow
 '(He) will arrive tomorrow.'
- d. Kao ch-in-iku si Maria [e]?
 Q SUBJ(s)-AGT(s)-kiss Unm
 'Was Maria kissed (by him)?'
- e. i kumpliaños-ña [e]
 the birthday-POSS(3s)
 '(his) birthday'

Following the identification hypothesis, one could connect the possibility of null pronouns here to the agreement, which (on this view) supplies enough featural content for the pronouns that they need not be realized overtly. While it is hard to support this conjecture directly, the idea that there is something right about it is suggested by the conditions governing when overt pronouns may appear.

In Chamorro, not all NP positions may be occupied by a phonetically realized pronoun. Overt pronouns may occupy positions which are not sanctioned by any agreement, or which are sanctioned by number agreement only. For instance, the subject position of intransitive clauses in the realis mood is sanctioned by number agreement only; this position may be occupied by an overt pronoun, as (6) shows:

- (6) Man-ma'udai (häm).
 SUBJ(p)-ride we
 '(We) rode.'

But overt pronouns may not occupy positions which are sanctioned by both person and number agreement. Thus, the subject position of transitive clauses in the realis mood is sanctioned by person and number agreement, and this position cannot be occupied by an

overt pronoun:³

- (7)a. Ha-fahan (*gui') i lepblu.
 SUBJ(3s)-buy he the book
 '(He) bought the book.'

The same is true for the subject position of irrealis clauses (see (7b)) and for the possessor position (see (7c)):⁴

- (7)b. Pära bai infan-mattu (*häm) agupa'.
 will SUBJ(1p)-arrive we tomorrow
 '(We) will arrive tomorrow.'
- c. i kumpliaños-su (*yu')
 the birthday-POSS(1s) I
 '(my) birthday'

As the examples suggest, null pronouns are possible in all the positions where overt pronouns are not allowed.

The agent position of passives introduces a complicating factor here, for it is sanctioned by number agreement alone, but may not be occupied by an overt pronoun according to some speakers:

- (8) Kao ch-in-iku si Maria (??nu guiya)?
 Q SUBJ(s)-AGT(s)-kiss Unm Obl him
 'Was Maria kissed (by him)?'

However, passive agents in Chamorro are invariably third person, first or second persons being simply ungrammatical:

- (9)a. *Kao ch-in-iku si Maria nu hagu?
 Q SUBJ(s)-AGT(s)-kiss Unm Obl you
 (Was Maria kissed by you?)
- b. *Ma-bisita i bihu nu hämi.
 SUBJ(s)-AGT(p)-visit the old-man Obl us
 (The old man was visited by us.)

The fact that the person feature for this position is essentially predetermined probably explains why passive agents can pattern with (7), rather than (6), as far as overt pronouns are concerned.

One way of describing these facts would be to suppose that richness of agreement interacts with 'Avoid Pronoun', the GB idea which says that one should never use an overt pronoun where a null one would do (Chomsky 1981: 65). In Chamorro, that is, number agreement by itself is enough to activate the Pro-Drop parameter, thereby allowing null pronouns; the combination of person and number agreement brings the Avoid Pronoun strategy into play. In any event, the facts reveal that completeness of the agreement specification does correlate with the distribution of null versus overt pronouns in Chamorro. In this sense, the language is con-

sistent with the identification hypothesis.

Null Objects

I now turn to the question of null objects.

Chamorro also allows direct objects to be null, as can be seen by comparing (10) with (11). Since direct objects are not sanctioned by agreement, the reference of these null NP's must be recovered from the larger discourse context:

- (10)a. In-bisita gui' gi espitát.
SUBJ(1p)-visit him Loc hospital
'(We) visited him at the hospital.'
- b. Ha-konni' si Dolores i famagu'un gi paingi. Kao
SUBJ(3s)-take Unm the children last-night Q
'Dolores took the children last night. Did
- ha-lalatdi i famagu'un?
SUBJ(3s)-scold the children
(she) scold the children?'
- (11)a. In-bisita [e] gi espitát.
SUBJ(1p)-visit Loc hospital
'(We) visited (him) at the hospital.'
- b. Ha-konni' si Dolores i famagu'un gi paingi. Kao
SUBJ(3s)-take Unm the children last-night Q
'Dolores took the children last night. Did
- ha-lalatdi [e]?
SUBJ(3s)-scold
(she) scold (them)?'

In these and subsequent examples, [e] indicates a null object, null subjects no longer being specifically indicated in the Chamorro material. (Both null subjects and null objects are, however, symbolized via parentheses in the English translations.)

Following Huang (1983), one might propose that the null objects in (11) are not true pronouns, but rather variables bound by an empty operator. And some support for such a view is apparently provided by sentences of the type (12), which --like its Chinese counterpart (see Huang 1983: 10)-- is ungrammatical:

- (12) *Ilek-ña si Antonio_i [na ti ha-tattiyi si
say-SUBJ(3s) Unm that not SUBJ(3s)-follow Unm
(Antonio_i said that Juan didn't
Juan [e]_i guātu gi kareta].
 there Loc car
follow (him_i) to the car.)

If null objects are instances of small pro, it seems unclear why (12) should be ungrammatical. But if null objects were variables, then the ungrammaticality of (12) would be predicted, since the

sentence would violate the general requirement that a variable must be argument-free in the domain of the operator that binds it (Chomsky 1982: 31).⁵ In other words, the badness of (12) would be entirely analogous to that of:

- (13) *Who_i did Antonio_i say that Juan followed t_{-i} to the car?

This clear picture is, however, clouded by further facts which show that the significance of (12) is somewhat different from what one might have originally thought.

To begin with, sentences of type (12) improve dramatically if the embedded subject is not a lexical NP, but rather a (null) pronoun. Consider:

- (14)a. Ha-hähassu ha' si Maria_i [na in-bisita [e]_i
 SUBJ(3s)-remember Emp Unm that SUBJ(1p)-visit
 'Maria_i remembers that (we) visited (her_i)
 gi espitát].
 Loc hospital
 at the hospital.'
- b. Ma'a'ñaο edyu na patgun_i [na bai in-pänak [e]_i
 SUBJ(s)-afraid that L child that SUBJ(1p)-spank
 'That child_i is afraid that (we) will spank (him_i)
 yänggin t-um-angis gu'_i].
 if SUBJ(s)-cry he
 if he_i cries.'

Examples like (14) are grammatical for some speakers. Examples like (15), which differ only in that the embedded clause is an adjunct rather than a complement of the matrix verb, are grammatical for all speakers:

- (15) Man-mäguf i famagu'un_i [sa' hu-fa'nu'i [e]_i
 SUBJ(p)-happy the children because SUBJ(1s)-show
 'The children_i were happy because (I) showed (them_i)
 ni gitala].
 Obl guitar
 the guitar.'

Both sorts of examples occur in narrative texts, as (16) shows:

- (16)a. Pära u-sangani hit_i [na todū i tiempu
 will SUBJ(3s)-tell us_i that all the time
 '(She) would tell us_i that all the time
 ha-hähassu [e]_i].
 SUBJ(3s)-think
 (he) thinks of (us_i).'
 (from Cooreman 1982: 30.89)

- b. Ti siña ha-asägua esti i otru na taotao₁ [sa'
 not can SUBJ(3s)-marry this the other L person₁ because
 '(She) could not marry this other man₁ because
 ti yä-ña [e]₁].
 not love-SUBJ(3s)
 (she) didn't love (him₁). (from Cooreman 1982: 10.14)

Since a matrix NP binds the embedded null object in all of these examples, a problem arises if the null object is taken to be a variable: (14-16) ought to violate the same requirement on operator-variable binding that was violated by (12), but they are unexpectedly grammatical. In short, the facts discussed so far do not unequivocally support the view that the null object is a variable rather than a pronoun.

We can take these observations somewhat further by reopening the question of why (12) is ungrammatical. I will first suggest that (12) is bad for a reason that has nothing to do with binding, and then use this reason to construct an argument that the null object is not a variable.

Notice first that sentences with the structure of the embedded clause in (12) --that is, with a null object and a lexical NP subject-- are ungrammatical regardless of whether there is another NP present in the syntactic structure to bind the null object. In (17a), for instance, i pätgun 'the child' does not bind the null object, because it does not c-command it (see fn. 5); the sentence is nonetheless bad on the intended reading. In (17b-c), there is no overt antecedent for the null object at all:

- (17)a. *[Yänggin t-um-angis tä'lu i pätgun₁], pära
 if SUBJ(s)-cry again the child will
 (If the child₁ cries again, Maria
 u-kastiga si Maria [e]₁.
 SUBJ(3s)-punish Unm
 will punish (him₁).)
- b. *Pära u-patmada i lähi [e].
 will SUBJ(3s)-slap the boy
 (The boy will slap (her).)
- c. *Ha-chaläpun si Maria [e].
 SUBJ(3s)-scatter Unm
 (Maria dispersed (them).)

But, significantly for us, these sentences do have a grammatical interpretation --one in which the null NP is taken to be the subject and the lexical NP, to be the direct object. So (12) is fine in the reading 'Antonio said that he didn't follow Juan to the car', (17a) is fine in the reading 'If the child cries again, he will punish Maria', and (17b) is grammatical when taken to mean 'She will slap the boy.' (Example (17c) has no grammatical read-

ing, given that 'He/They dispersed Mary' is anomalous.) This is shown below:

- (18)a. Ilek-ña si Antonio [na ti ha-tattiyi si
say-SUBJ(3s) Unm that not SUBJ(3s)-follow Unm
'Antonio_i said that (he_i) didn't follow
Juan guātu gi kareta].
there Loc car
Juan to the car.'
- b. [Yänggin t-um-angis tä'lu i pätgun], pära
if SUBJ(s)-cry again the child will
'If the child_i cries again, (he_i)
u-kastiga si Maria.
SUBJ(3s)-punish Unm
will punish Maria.'
- c. Pära u-patmada i lähi.
will SUBJ(3s)-slap the boy
'(She) will slap the boy.'

Subjects and direct objects in Chamorro are both in the morphologically unmarked case. This, plus the facts just described, suggests that Chamorro has a strategy for parsing clauses which contain a transitive verb but just one overt NP in the unmarked case. The strategy forces the overt NP to be interpreted as the direct object, as can be seen from the preliminary statement below:

- (19) In the string V X , where V is transitive and X contains only one NP in the unmarked case, interpret that NP as the direct object of V.

Following Hale, Jeanne, and Platero (1977), who discuss a similar parsing strategy for Navaho, we can assume that (19) takes effect at a point when null subjects and null objects have not yet been located in the string. This means that the NP mentioned in (19) is an overt NP; interpreting it as the direct object has the result that the subject must be null.

We are now ready for the argument. Observe that the parsing strategy rules out examples (12) and (17), which contain null objects, but not the comparable sentences in which the object is a variable bound by a true operator. In (20), for instance, the object is a variable bound by a WH-operator:

- (20) Hayi_i [pära u-patmada i lähi t_{-i}]?
who?_i will SUBJ(3s)-slap the boy
'Who will the boy slap?'

In (21a), the object is a variable in a relative clause. This example contrasts nicely with (21b), in which the empty NP in the

embedded clause is what I have been calling a null object:⁶

- (21)a. Hu-kariñu [i pätgun_i [ni ha-kastiga
 SUBJ(1s)-comfort the child_i COMP SUBJ(3s)-punish
 '(I) comforted the child who my aunt
 i tia-hu t_i]].
 the aunt-POSS(1s) punished.'
- b. *Hu-kariñu i pätgun_i [änai ha-kastiga
 SUBJ(1s)-comfort the child_i when SUBJ(3s)-punish
 ((I) comforted the child_i when my aunt
 i tia-hu [e]_i).
 the aunt-POSS(1s) punished (him_i).

There are several imaginable ways of describing this situation: for example, one might suppose that the parser establishes the gap-filler relations in so-called unbounded dependencies first, so that by the time (19) takes effect, the variables in (20) and (21a) have been located and count as overt NP's.⁷ No matter how this is done, though, it is evident that the null objects in (12) and (17) do not act like variables for the purposes of the parsing strategy. The full range of facts connected with (12) thus argues that null objects are not variables in Chamorro.

This conclusion is supported by three further arguments which show null objects patterning differently from variables in some way.

First, null objects do not trigger WH-Agreement, the Chamorro effect whereby a verb comes to agree in grammatical function with a variable dependent on it (see Chung 1982a). In (22a), for instance, the verb displays WH-Agreement with a variable produced by WH-Movement; the morphological realization of the agreement signals that, in this case, the variable is a direct object. Compare (22b), which shows the ordinary form of the verb:

- (22)a. Hafa_i [f-in-ahan-ña si Antonio t_i]?
 what? WH(obj)-buy-SUBJ(3s) Unm
 'What did Antonio buy?'
- b. Ha-fahan si Antonio i äga'.
 SUBJ(3s)-buy Unm the bananas
 'Antonio bought the bananas.'

WH-Agreement is triggered by all S-structure variables in Chamorro. These include the variables in relative clauses, some of which I have argued elsewhere (Chung 1982a) are the result of a coindexing transformation separate from WH-Movement:

- (23)a. Manngi' [i äga'_i [ni f-in-ahan-ña
 SUBJ(s)-delicious the bananas COMP WH(obj)-buy-SUBJ(3s)
 'The bananas that Antonio bought
 si Antonio t_i]].
 Unm
 were delicious.'

the variables in cleft constructions:

- (23)b. Esti na äga'_i [f-in-ahan-ña si Antonio t_i].
 this L bananas WH(obj)-buy-SUBJ(3s) Unm
 'These bananas, Antonio bought.'

and the variables in existential constructions, which are bound by an empty operator (symbolized 0 below):

- (23)c. Guäha [0_i [f-in-ahan-ña si Antonio t_i]].
 SUBJ(s)-exist WH(obj)-buy-SUBJ(3s) Unm
 'There's something that Antonio bought/Antonio bought something.'

The fact that the null object in (24a) fails to trigger this effect argues that it is not a variable. Compare (24b), which shows the ordinary form of the verb:

- (24)a. *Kao ni-lalatde-nña [e]?
 Q WH(obj)-scold-SUBJ(3s)
 (Did (she) scold (them)?)
 b. Kao ha-lalatdi [e]?
 Q SUBJ(3s)-scold
 'Did (she) scold (them)?'

Second, null objects can occur inside islands. The examples in (25) show a null object appearing inside an island while the syntactic antecedent that binds it appears outside. In (25a), the island is a relative clause:

- (25)a. Ha-tattiyi si Rosa i lähi_i guätu gi [gima' [ni
 SUBJ(3s)-follow Unm the boy_i there Loc house COMP
 'Rosa followed the boy_i to the house that
 ha-fa'nu'i [e]_i gi mä'pus na Huebis]].
 SUBJ(3s)-show Loc past L Thursday
 (she) had shown (him_i) last Thursday.'

In (25b), the island is a free relative:

- (25)b. Hu-hässu si Carmen_i na [maseha manu guätu
 SUBJ(1s)-remember Unm that whenever then
 '(I) recall about Carmen_i that whenever

[hu-1fli'i' [e]_i]] na gófy-a-ña manaitai.
 SUBJ(1s)-see that like-SUBJ(3s) to-pray
 (I) saw (her_i), (she_i) very much liked to pray.' (from
 Cooreman 1982: 172.6)

In (25c), the island is an indirect question:

(25)c. Ha-faisin i ma'estra i lāhi_i [hafa pära
 SUBJ(3s)-ask the teacher the boy how? will
 'The teacher asked the boy_i how she
 kastigu-ña [e]_i puṭ i atrasáo].
 WH(obl)-punish-SUBJ(3s) because SUBJ(s)-late
 should punish (him_i) because (he_i) was late.'

While some speakers find these sentences somewhat better when the island is an adjunct rather than a complement of the matrix verb, examples of both sorts are found in narrative texts. The contrast between adjuncts and complements here is similar to that noted earlier for sentences (14) and (15).

I have shown elsewhere (Chung 1982a, 1983a) that island constraints --specifically, the Complex NP Constraint and the WH-Island Constraint-- are obeyed by the binding relation that holds between variables and their operators in Chamorro, whether this relation is produced by WH-Movement or by the coindexing transformation that applies in relative clauses. Insensitivity to islands, then, provides another reason for believing that the null objects in (25) are not variables.

Third, null objects do not exhibit strong crossover effects. To see this, consider (26), which contains a relative clause structure like one discussed by Huang (1983: 37) for Chinese:

(26) Guiya [esti na patgun_i [i ma'a'ñao [e]_i [na
 he this L child COMP SUBJ(s)-afraid that
 'Here is the child_i that [e]_i is afraid that
 bai in-na'puti [e]_i]]].
 SUBJ(1p)-hurt
 we will hurt [e]_i.'

The relative clause in this example contains two coindexed empty categories, one an embedded object and the other a higher subject; one of these categories is presumably a variable, while the other is presumably a pronoun. Now if null objects in Chamorro were variables, then the embedded object in (26) would have to be interpreted as the variable, and the higher subject as the pronoun. The sentence would then exhibit strong crossover, and as such should be ungrammatical. However, if null objects are true pronouns, then it should be possible to construe the higher subject as the variable and the embedded object as the pronoun. The sentence should then be okay, since strong crossover would

not be involved.

In fact, (26) is grammatical, and has the translation given below:

- (27) 'Here is the child_i who_i is afraid that we will hurt (him_i).'

This strongly suggests that null objects are pronouns rather than variables.

To sum up, Chamorro null objects are ruled out in certain cases by a parsing strategy; they do not trigger WH-Agreement; they occur within islands; and they do not exhibit strong cross-over. In all these respects they contrast not only with variables produced by WH-Movement but also with variables in relative clauses, which are base-generated as empty categories and coindexed later with their head NP's. The fact that null objects differ from the latter type of variable makes a particularly compelling case that they are not variables which are base-generated in place and coindexed later with an empty topic operator, as is suggested by Huang for Chinese. But if this is so, then the functional definition of empty categories (Chomsky 1982) dictates that they must be instances of small pro, because they (i) are governed and (ii) need not have an antecedent which binds them. In other words, null objects in Chamorro are true pronouns.

Conclusion

Chamorro thus poses a rather difficult problem for the identification hypothesis, since it conforms to it as far as null subjects (and some other null NP's) are concerned, but nonetheless displays null object pronouns which are not sanctioned by any agreement. I will not attempt to 'resolve' this problem, for I believe that the ultimate resolution consists of abandoning the identification hypothesis and detaching the Pro-Drop parameter from the notion of rich agreement. While this move may seem to leave some descriptive generalizations unexplained (such as the Chamorro one described in the first part of this paper), it is not clear to me that generalizations of this partial sort can or should be handled within GB. I will therefore conclude, instead, with two remarks of a rather different sort.

First, it has been assumed by virtually everyone that the identification hypothesis constrains null pronouns, but no other empty categories. However, in recent work, Carol Georgopoulos (1983) has observed that there appear to be some languages in which the identification hypothesis constrains variables. These are languages in which variables are realized as null NP's if they are sanctioned by agreement, and as resumptive pronouns otherwise. If Georgopoulos is right, then the identification hypothesis evidently extends to all nonanaphors (that is, small pro and variables), although it is incompletely true for both. This in turn may point out a deeper reason why Huang's approach

is unsuccessful at saving the identification hypothesis for null pronouns. Namely, Huang's approach assumes that variables do not fall under the identification hypothesis --an assumption that is called into question by Georgopoulos' work.

Second, I noted earlier that embedded null objects in Chamorro may be bound by a matrix NP, but the result is better when the clause containing the null object is an adjunct, rather than a complement, of the higher verb.⁸ What is interesting is that a similar contrast between adjuncts and complements seems to be involved in determining the distribution of null objects in Chinese and Japanese. (These facts are noted by Huang (1983), who attributes the original observation about Japanese to Kuroda (1965).) The appearance of this contrast in Chamorro, Chinese, and Japanese is extremely suggestive. Specifically, if it is indeed true that null objects are variables in some languages (e.g. Portuguese, perhaps Chinese --see footnote 1) but pronouns in others (e.g. Chamorro), then it may be that the real generalizations holding universally over these NP's have not to do with their place in the typology of empty categories, but rather with the conditions that dictate the range of larger syntactic structures in which they can occur.

Footnotes

*This is a third progress report on anaphora in Chamorro. Thanks to Priscilla Anderson-Cruz, Agnes C. Tabor, and the other Chamorro speakers who contributed to this work. Thanks also to Ann Cooreman for permission to quote from her unpublished Chamorro texts.

1. Huang's claims about Chinese are evidently controversial, and it has also been argued (see Kameyama 1983) that his proposal does not extend directly to Japanese in the way that he suggests. However, work by Raposo (1984) reveals that there is at least one language --European Portuguese-- in which null objects have all the earmarks of variables produced by WH-Movement. I therefore take it for granted that a version of Huang's proposal is viable for some languages, though (as I will argue) it is not viable for Chamorro.

2. Agreement in (4a-c) is indicated by an INFlectional morpheme which also signals mood (see Chung 1983a); agreement with the passive agent in (4d) is indicated by a morpheme which also marks the verb as passive.

3. This is a more complete (and accurate) description of facts alluded to in Chung 1982b. There I said that overt pronouns could not occur in positions sanctioned by a phonetically overt 'AGReement', where the term 'AGReement' was limited rather arbitrarily to morphemes signalling both person and number. When the notion of agreement is expanded to include morphemes signalling number alone, the picture emerges as it is described here.

It should be noted that overt pronouns are not allowed in (7) even if they would have an emphatic or contrastive sense; in this

respect Chamorro differs from languages like Latin and Spanish.

4. Exceptionally, some speakers allow an overt first singular or third singular pronoun to occupy the subject position of *irrealis* intransitive S's to disambiguate the first singular and third singular agreement morphemes, both of which are u-.

5. By 'argument-free' I mean not bound by a NP in an argument position, where 'bound' is defined as follows: B is bound by A if B is coindexed with A and c-commanded by A.

Because Chamorro is VSO, the question arises of what sort of structures are relevant for defining c-command relations in this language. Here I assume without supporting evidence that c-command is defined on a hierarchically elaborate structure that includes a VP constituent; see Chung 1983a, 1983b for more discussion.

6. Although sentences of the type (20) and (21a) are both grammatical, (20) is free of certain curious restrictions that seem to hold for (21a): WH-questions of the type (20) occur freely for all speakers, whereas some speakers find some relative clauses of the type (21a) less preferred than the corresponding passives (e.g. 'the child who was punished by my aunt'). I do not understand the restrictions involved here. Note, though, that all speakers find some relative clauses like (21a) grammatical, whereas no speakers accept sentences like (12), (17), or (21b).

7. Perhaps a similar tack might be taken to deal with null inanimate pronouns. Chamorro has no overt pronouns for inanimate entities, inanimate 'it, them' being represented instead by an empty category. As (a) shows, a null NP of this sort may routinely be the direct object of a clause containing a lexical NP subject:

- (a) Pära u-tatmi si nana-hu [e].
 will SUBJ(3s)-plant Unm mother-my
 'My mother is going to plant (it).'

Evidently, some extra statement must be made to describe the fact that sentences like (a) escape the parsing strategy.

The contrast between (17b) and (a) might lead one to think that the strategy was basically 'semantic' rather than 'syntactic' in character, in that it operated just in case the single overt NP in a clause could satisfy the selectional restrictions of either the subject or the object. On this view, (a) would be allowed exactly because '(He/it) is going to plant my mother' is deviant. Such a view cannot be right, however, as shown by (17c). In that example 'Maria' can only be understood as the subject of 'disperse', not as the direct object, yet the sentence is still ungrammatical.

Note also that the null inanimate pronouns in Chamorro are not variables, since they pattern like true pronouns for the purposes of the other tests described below in the text.

8. Strikingly, this observation also holds true of subjects of intransitive clauses in the *realis* mood, which are sanctioned

by number agreement alone (see (6)).

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