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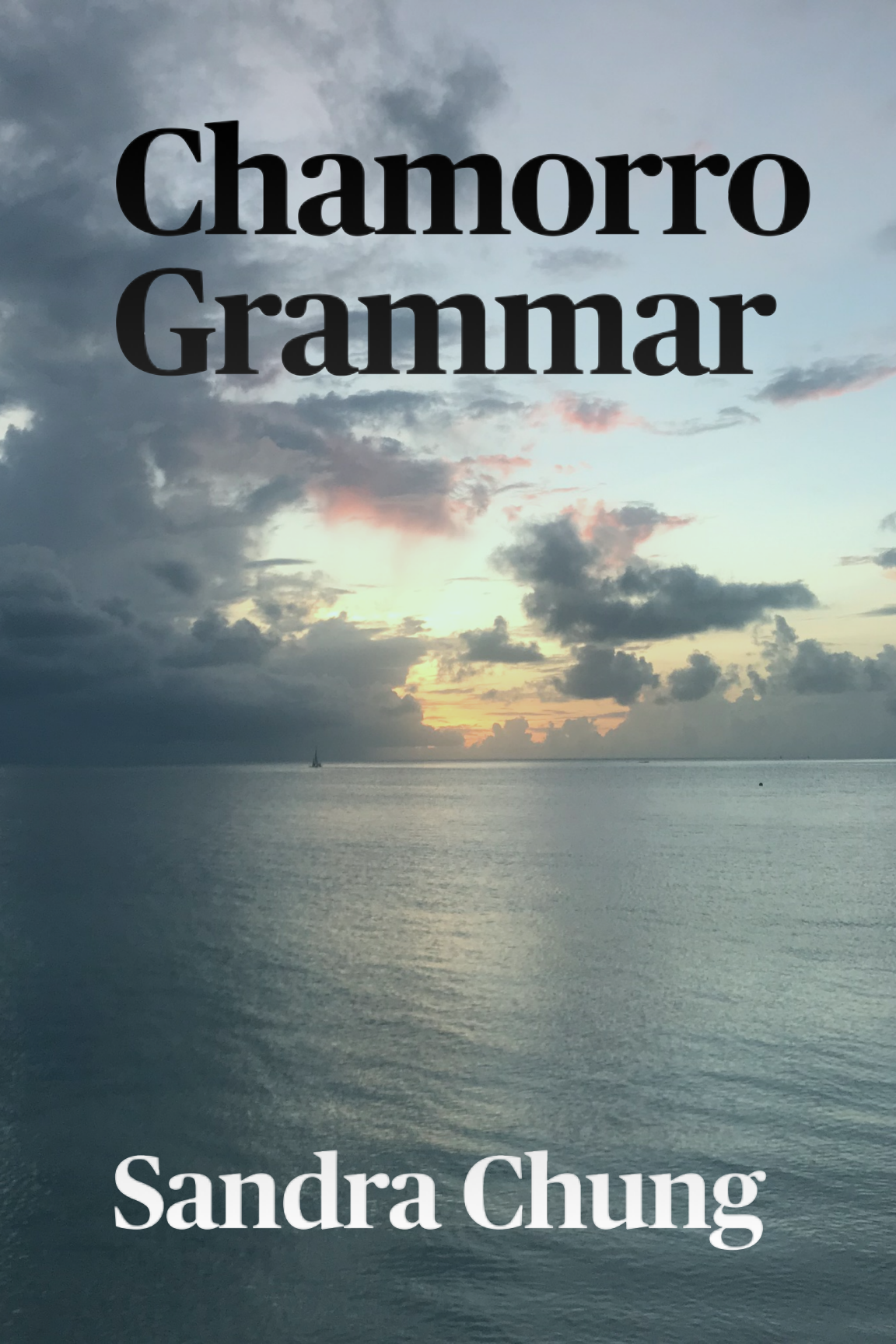
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The background of the cover is a photograph of a sunset over the ocean. The sky is filled with large, dark, textured clouds that are illuminated from below by the setting sun, creating a warm orange and yellow glow. The sun is partially obscured by the clouds near the horizon. The ocean is a deep blue-grey color with gentle ripples. A small, dark silhouette of a sailboat is visible on the horizon line to the left of the center.

Chamorro Grammar

Sandra Chung

CHAMORRO GRAMMAR



View of Saipan from Mañagaha, 1979

CHAMORRO GRAMMAR

Sandra Chung

Santa Cruz, California
2020

SANDRA CHUNG is Distinguished Professor *emerita*
at the University of California, Santa Cruz.

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PREFACE

This book has taken a long time to complete. That it exists at all is due to the generosity of many people.

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Work on this grammar has been facilitated from the beginning by the Chamorro-Carolinian Language Policy Commission of the CNMI and the

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Finally, all love to Jim, my daughter Anicia, and her partner Steve for their constant support, patience, and enthusiasm. This book, which is for the next generations of speakers of Chamorro, is also for them.

June 19, 2020

ABBREVIATIONS

The abbreviations used in the glosses in the examples are, when possible, taken from the list of standard abbreviations used in the Leipzig glossing rules. Some abbreviations have been added. A complete list is given here:

1	first person
2	second person
3	third person
AGR	agreement
ANTIP	antipassive
COMP	complementizer
COMPAR	comparative
DIR	directional
DJ	adjunct
DU	dual
EMP	emphatic particle
EXCL	exclusive
F	feminine
FUT	future
IMPERF	imperfect
IN	-in- in exclamatives
INCL	inclusive
INF	infinitive
INTR	intransitive
IRR	irrealis
L	linker
LCL	local case
M	masculine
NMLZ	nominalization
OBJ	object
OBL	oblique
PASS	passive
PL	plural

PROG	progressive
PRT	particle (used for <i>di</i> and <i>ki</i>)
Q	question complementizer
RECP	reciprocal
SBJ	subject
SG	singular
TR	transitive
UNM	unmarked case
WH	wh-agreement

In the Chamorro examples from published sources or from the CD database, the source is cited using the abbreviations below. See the References for the full citation of published sources; see 1.6 on the CD database.

<i>Alamagan</i>	Ayuyu 2007
<i>Anakko</i>	Iguel 1979
CD	database for the <i>Revised Chamorro-English dictionary</i> (unedited version)
<i>Dibota</i>	Mafnas-Rosario 1981b
EM	Borja, Borja, and Chung 2006
<i>Estoria-hu</i>	Sanchez 2009
<i>Fafa'ñague</i>	Onedera 1994
<i>Familia</i>	Mafnas-Rosario 1981a
<i>Ginen I Obispo</i>	Camacho 2000-2013
<i>Igu</i>	Hocog-Inos 1981
LSS	Borja and Roppul 2009
<i>Mangadada</i>	Santiago 1974
<i>Mannge'</i>	Marciano 1981a
MM	Michael and Mundo, Sr., eds. 2019
NT	<i>Nuebu testamento</i>
<i>Pito</i>	Camacho 1974
<i>Saipan Tribune</i>	del Rosario, Jr. 1998-2000
<i>Tres</i>	Marciano 1981b
<i>Tronko</i>	Lizama 1974

1

INTRODUCTION

1.1 The Chamorro language and its speakers

Chamorro is an Austronesian language indigenous to the Mariana Islands, an archipelago of fifteen islands located just west of the Mariana Trench, in the Western Pacific Ocean (northwest Micronesia). It is the language of the Chamorros, the indigenous people of the Mariana Islands, and a language spoken by many Carolinians (Refaluwasch) whose ancestors settled in the Mariana Islands during the nineteenth century.

The Mariana Islands consist of two political entities, both of which are part of the United States. The southernmost island, Guam (Guåhan), is an unincorporated U.S. territory. The remaining fourteen islands constitute the U.S. Commonwealth of the Northern Mariana Islands (CNMI). The CNMI has three inhabited islands, Rota (Luta), Tinian, and Saipan, which are located in the southern half of the archipelago, less than 150 miles from Guam. Several of the islands farther to the north (Anatahan, Pagan, and Agrihan) formerly had small populations, but are now officially uninhabited.

Both the CNMI and Guam are multiethnic, multicultural, multilingual societies in which the majority of the population is not Chamorro and the dominant language is English. Data from the U.S. census indicates that in 2010, 91.6% of the 12,902 Chamorros in the CNMI, but just 43.5% of the 59,381 Chamorros in Guam, spoke the Chamorro language at home (see Pagel 2019: 265). These figures are one sign of a language decline that began immediately after World War II in Guam and somewhat later in the CNMI (see 1.2). In Guam and the CNMI today, Chamorro is considered an endangered language.

The language has several dialects, which are mutually intelligible and correspond to the three islands with the largest populations: Guam, Saipan, and Rota. The Rota dialect has a distinctive sound structure (see 29.5.3). Otherwise, the dialects differ from one another in minor ways; for instance, in the realizations of certain case markers (see 5.1.1.1). Some indigenous Chamorro words that occur frequently in the Saipan dialect are viewed as archaic in the Guam dialect. Certain Spanish loanwords in the Guam and Rota dialects do not occur in the Saipan dialect, and many of the Japanese loanwords in the Saipan dialect do not occur in the Guam or Rota dialects.

1.2 Language vitality

To appreciate the current situation of the Chamorro language, one must know something about the history of the Mariana Islands.

The Mariana Islands have been controlled by foreign powers for more than three hundred and fifty years. During the Spanish colonial period (1668-1898), Chamorro material culture was largely replaced by the material culture of the Hispanic colonies, and many traditional Chamorro cultural practices disappeared or were suppressed (see Spoehr 1954: 31-36, Farrell 1991: 182-183, and Russell 1998: 317-319). But the Chamorro language survived—a potent symbol of the resilience of the Chamorro people.

At the end of the Spanish-American War (1898), Spain ceded Guam to the United States, and then sold the rest of the Mariana Islands (i.e. the Northern Mariana Islands) to Germany. Guam and the Northern Mariana Islands have had separate histories ever since.

From 1899 to 1941 and 1946 to 1950, Guam fell under the jurisdiction of the U.S. Navy; its appointed governor served simultaneously as the commandant of the U.S. Naval station on Guam (see Sanchez 1987). In 1950, a U.S. federal law known as the Organic Act designated Guam as an unincorporated U.S. territory.

The Northern Mariana Islands were held by Germany from 1899 until 1914. They were next administered by Japan from 1919 until 1944, as part of the South Seas Mandate of the League of Nations. In 1947, most of the islands of Micronesia, including the Northern Mariana Islands, were designated by the United Nations as the Trust Territory of the Pacific Islands, and placed under the administration of the United States (see Farrell 1991). The Northern Mariana Islands transitioned from U.N. trusteeship to status as a U.S. Commonwealth (henceforth, the CNMI) in a lengthy formal process that began in 1975 and concluded in 1986.

These separate histories have had separate impacts on the vitality of the Chamorro language. In Guam, the Naval government's sustained efforts to promote English as the primary language used by Chamorros were largely unsuccessful (Underwood 1987: 149-153). But during the immediate post-war period, which brought civilian government, economic growth, and a sense of modernity to Guam (Underwood 1987: 96-98), the use of the Chamorro language began to decline. Underwood (1987: 303) reports that in the early 1970's, "English monolingualism among young children on Guam was on the increase, although most children were bilingual". He goes on to say (1987: 364), "The reality of the 1980s is that the Chamorro language is an adult language among the Chamorro people."

In the Northern Mariana Islands in the late 1970's, Chamorro was still the primary language used by the vast majority of Chamorros, and the first language of most Chamorro children. But the economic growth that accompanied the establishment of the commonwealth led to an abrupt shift in language transmission, from Chamorro to English, first in Saipan in the 1980's, and some years later in Rota. By 2010, the situation of the Chamorro language in the CNMI was perhaps comparable to what Underwood describes for Guam in the 1980's.

Chamorro was recognized as an official language of Guam in 1972 and as an official language of the CNMI in 1985. Language maintenance and revival efforts are ongoing throughout the Mariana Islands, especially in Guam (see Rechebei and Chung 2018).

1.3 Linguistic history

Chamorro is an isolate within the Austronesian language family: its exact relationship to other Austronesian languages is unknown. It most likely belongs to the Western Malayo-Polynesian subfamily or is most closely related to that subfamily (see Reid 2002 and Blust 2013: 31); however, even this minimal classification has been controversial. The development of the Chamorro sound system from Proto-Austronesian has received some attention in Austronesian historical linguistics (see e.g. Costenoble 1940, Dahl 1976, and Blust 2000).

The language borrowed extensively from Spanish during the Spanish colonial period. The borrowings include numerals, kin terms, and words for certain aspects of the natural environment (see e.g. Borja, Borja, and Chung 2006: 113-120 and Rodríguez-Ponga 2009). The large number of Spanish loanwords in the Chamorro lexicon has led some to speculate that the language might be a creole or even a 'mixed language'. These speculations are off the mark: Chamorro has an intricate linguistic structure that is clearly Austronesian (see e.g. Stolz 2003 and Pagel 2019). In other words, it is an Austronesian language that happens to have acquired many words from Spanish, much as English is a Germanic language that happens to have acquired many words from French and Latin.

1.4 Previous descriptions

Several Chamorro grammars and dictionaries that were written before 1920 were intended to facilitate the education of Chamorro students in the colonial language (Spanish or English) or the colonial religion (Catholicism). These are discussed in detail by Stolz (2011a; 2011b), Zimmermann

(2011), and Winkler (2016), and much more briefly by Topping and Dungca (1973: 4-6) and Rechebei and Chung (2018: 84). They will not be surveyed here.

From a linguistic perspective, the most important previous descriptions of Chamorro are William Edwin Safford's 'The Chamorro language of Guam' (1903; 1904; 1905), H. Costenoble's *Die Chamoro Sprache* (1940), Donald M. Topping and Bernadita C. Dungca's *Chamorro reference grammar* (1973), and Topping, Ogo, and Dungca's *Chamorro-English dictionary* (1975).

Safford was a Navy lieutenant who was, in effect, the acting governor during Richard P. Leary's tenure as the first Naval Governor of Guam. During his time on Guam (1899-1900), Safford studied the Chamorro language, learned to speak it, and offered free English classes (Sanchez 1987: 88). His grammar of Chamorro was first published in five parts in the journal *American Anthropologist*, and then republished in 1909 in book form. The grammar, which he hoped would "be of service to students of comparative philology" (1903: 289), offers a clearly written, perceptive analysis of the language in traditional grammar terms. It is still a valuable work.

Costenoble, who was a member of the first German family to settle in the Mariana Islands, is now known to be Hermann Costenoble, Jr., the family's eldest child (see Salazar 2009: 23 and Stolz et al. 2011: 228-234). Costenoble acquired near-native fluency in Chamorro as an adolescent on Guam (1905-1913). Later, as an agricultural adviser in the Philippines, he became interested in Philippine languages and was introduced to comparative Austronesian linguistics by the Philippine linguist Cecilio Lopez (Salazar 2009: 24-25). Costenoble's grammar of Chamorro is a substantial, insightful work that gives an in-depth account of phonology (including the development of the Chamorro sound system from Proto-Austronesian), morphology, and syntax. However, its usefulness is limited by a lack of clarity concerning the extent to which it is a description of Costenoble's own childhood knowledge of the language. Consequently, when the Chamorro data it reports diverge from data found in other sources, it is unclear whether to attribute the differences to language variation and change, or to Costenoble's (perhaps incomplete) control of the language (see Stolz et al. 2011: 237).

Topping, who taught for many years at the University of Hawaii, was the first academically trained linguist to author a grammar and dictionary of Chamorro, and the first to do so with Chamorro native speakers as co-authors. From 1970 to 1974, he was Principal Investigator of the Pacific Languages Development Project, which created grammars, dictionaries, and

standard orthographies for all the major languages of Micronesia, including Chamorro (Rehg 2004). Topping was the consulting linguist on the 1971 Marianas Orthography Committee, which developed the first standard orthography of Chamorro. That orthography evolved into the two official orthographies described in Chapter 29. The 2010 CNMI orthography is used throughout this book.

The grammar co-authored by Topping and Bernadita C. Dungca is an accessible work that aims to teach speakers of Chamorro about the structure of their language. The dictionary co-authored by Topping, Dungca, and Pedro M. Ogo is more accurate, systematic, and linguistically sophisticated than any previous Chamorro dictionary. Both works attempt to describe the Chamorro language in its own terms, rather than in terms appropriate for other languages or for human language more generally. These two works have been the standard reference works on Chamorro for almost fifty years. (*The official Chamorro-English dictionary* (Aguon, Flores, and Leon Guerrero, eds. 2009), published recently in Guam, is a community effort that complements Topping, Ogo, and Dungca 1975 to some extent, but does not replace it.)

1.5 Aims of this book

The current work is a reference grammar that aims to document the structure of the Chamorro language in some depth. Though written by a generative syntactician, it is a traditional grammar broadly informed by the generative approach to linguistics rather than a theoretical work. Quite a bit of factual detail is presented, often in ways that implicitly point to an account, but no attempt is made to construct explicit formal analyses or investigate their theoretical implications. At the same time, the overarching assumption is that there is much that all languages share, as well as many ways that they can differ from one another. In adopting this approach, my hope is to reach out to an audience that includes linguists, speakers of Chamorro, language learners, and Austronesian scholars.

This book is also an attempt to synthesize the two strands of linguistic investigation that I have pursued with respect to Chamorro: linguistic fieldwork and language documentation. My fieldwork on Chamorro, which began in 1977, has involved medium- to long-term elicitation in the U.S. mainland and in Saipan with fourteen Chamorro consultants (seven originally from Guam, six from Saipan, and one from Rota), and shorter-term elicitation with some twenty-five others (six originally from Guam, sixteen from Saipan, and three from Rota). Fieldwork has given me an overview of the linguistic structure of Chamorro and the differences among Chamorro

dialects. But mostly it has involved the targeted investigation of topics in syntax, semantics, and phonology that are relevant to linguistic theory, such as the syntax of agreement, the derivation of verb-first word order, the uses of indefinites, and the interaction of stress, syllable structure, and vowel quality. (Readers interested in this research should consult the references in the bibliography.) In 2008, I became involved in a multi-year collaboration with Chamorro speakers in the CNMI to upgrade the documentation of the Chamorro language before it becomes further endangered. This collaboration, which was initially funded by the National Science Foundation (2008-2011), also involves a significant revision and expansion of Topping, Ogo, and Dungca's (1975) *Chamorro-English dictionary*. Working on the dictionary project has exposed me to aspects of the language that I would never have thought to examine (including adverbs, imperatives, exclamatives, and derivational morphology). Without that exposure, this grammar could not have been completed.

1.6 Sources of data

For the most part, this book aims to describe the Chamorro language as it is spoken throughout the Mariana Islands. But most of the illustrative examples cited are from the CNMI. This is partly a consequence of the decision to cite naturally-occurring data wherever possible. By naturally-occurring data, I mean Chamorro language material provided outside the elicitation context in fieldwork. This includes data from various types of Chamorro discourse, such as written literature, tape-recorded narratives, conference presentations, conversations, letters, and email messages, as well as Chamorro sentences provided to illustrate usage in the revised dictionary that is still in progress.

For the first three years of the dictionary project (2008-2011), some thirty Chamorro speakers in the CNMI were active members of the working groups that met regularly to revise different portions of the dictionary. There were initially six working groups: four on Saipan, one on Tinian, and one on Rota (see Chung and Rechebei 2014). The working groups revised existing entries and contributed new entries. One of their major contributions was to illustrate the usage of each entry in the dictionary database with culturally appropriate Chamorro sentences of varying degrees of complexity. Although the plan was for three illustrative sentences to be created for each entry, some of the groups provided many more. In its unedited version, the dictionary database contains some 29,800 Chamorro sentences of different degrees of complexity, with accompanying English translations. These sentences are a rich source of information about the Chamorro language as it is now spoken in the CNMI.

Introduction

The unedited version of the Chamorro dictionary database (henceforth, the CD database) is the source of most of the examples cited in this work. (The unedited version is used because the editing process is still ongoing. All examples cited from the CD database were checked against the unedited version of the database that is dated September 23, 2016.) In addition, many examples are cited from Chamorro literature and other written materials produced since the mid 1990's. These works include books by Ayuyu (2007), Borja, Borja, and Chung (2006), Borja and Roppul (2009), Michael and Mundo, Sr., eds. (2019), Onedera (1994), and Sanchez (2009), as well as *Nuebu testamento* (the 2007 Chamorro translation of the New Testament), religious essays published by the late Bishop Tomas A. Camacho in the weekly newsletter of the Diocese of Chalan Kanoa, and editorials and opinion pieces by John S. del Rosario, Jr. in the *Saipan Tribune*. Examples are occasionally cited from Ann Cooreman's (1982; 1983) collections of Chamorro texts and from Chamorro readers developed in the 1970's and early 1980's by bilingual education programs in Guam and the CNMI. See the Abbreviations for the details of how these sources are cited in the examples. Examples not explicitly attributed to any source are from my fieldwork. This includes the ungrammatical examples, which are preceded by an asterisk (*) and presented in red type in an attempt to make it clear that they are not well-formed sentences of the language.

Audio recordings of the grammatical examples, read by Manuel F. Borja and accompanied by representations in the CNMI and Guam orthographies, are now available at the website LearningCHamoru.com. Many thanks to the creators of this resource: Dr. Gerhard J. Schwab, Manuel F. Borja, and Ray Gil Untalan Bolton.

2

PREDICATES

The most minimal clauses contain just a predicate, which can be from any of the major parts of speech. All predicates are marked for aspect. In addition, predicates that are verbs or adjectives are marked for mood and agreement with the subject. This chapter describes the form of predicates and the uses of mood and aspect.

2.1 Minimal clauses

Clauses are simple sentences. The most minimal clauses in Chamorro contain just a predicate. The predicate can be from any of the major parts of speech: verb (as in (1)), adjective (2), or noun (3).

- (1) a. Kumâkati.
AGR.cry.PROG
'S/he is crying.'
- b. Hu po'lu.
AGR.put
'I put it (there).'
- (2) a. Manlokka'.
AGR.tall
'They are tall.'
- b. Agaga'.
AGR.red
'It is red.'
- (3) a. Ma'estru.
teacher
'He is a teacher.'
- b. Ga'lâgu.
dog
'It's a dog.'

The predicate can also be a preposition (but see 4.3.2).

- (4) Para mǎnu?
to where?
‘Where are they heading?’

Predicates that are verbs or adjectives agree in person and/or number with their subject. The agreement is sometimes written as a separate word (as in (1b)), under conditions to be described below (in 2.2.2). No other information about the subject needs to be supplied. The Chamorro language permits null arguments: the subject, the direct object, and other noun phrases do not have to appear as separate, pronounced (overt) constituents if their reference can be determined from context (see 8.4).

Chamorro is a predicate-first language. When arguments do appear as independent constituents, they follow the predicate.

- (5) a. Kumǎkati i neni.
AGR.cry.PROG the baby
‘The baby is crying.’
b. Hu po’lu i nengkanu’ gi hilu’ lamasá.
AGR.put the food LCL top.L table
‘I put the food on top of the table.’
c. Manlokka’ siha.
AGR.tall they
‘They are tall.’
d. Ma’estra atyu na paláo’an.
teacher that L woman
‘That woman is a teacher.’
e. Para i tenda i famagu’un.
to the store the PL.child
‘The children are heading to the store.’

The word order of clauses is described in greater detail in 3.4.

2.2 The form of predicates

The form of the predicate is determined by its part of speech. All predicates are marked (inflected) for aspect. In addition, if the predicate is a verb or adjective, it is marked for mood and agreement with the subject. Predicates that describe events (i.e. actions, processes, occurrences) differ from predicates that describe states in their uses of aspect and their forms of agreement (see 2.2.1.2 and 2.2.2.2.1).

2.2.1 Aspect

2.2.1.1 Form

2.2.1.1.1 Basics

Chamorro has two aspects, neutral and progressive.¹ The neutral aspect is not indicated by special marking. The progressive aspect is indicated by reduplication: the predicate's stressed vowel (abbreviated V) and any preceding consonant(s) (abbreviated C) are doubled. The copied CV bears primary stress and is placed just before the original CV, which bears secondary stress.

Some examples of predicates and their progressive forms are given in (6), with the original stressed vowel underlined and the copied CV in boldface. Notice that reduplication does not double the entire stressed syllable, but only its nucleus (the stressed vowel) and onset (any preceding consonants).

(6)	PREDICATE		PROGRESSIVE
	kā <u>t</u> i	'cry'	kā kati
	s <u>o</u> dda'	'find'	so sodda'
	a <u>s</u> udda'	'meet'	a 'asudda'
	ki <u>m</u> ason	'burn'	ki ma son
	ma <u>p</u> otgi'	'pregnant'	ma po potgi'
	dā <u>n</u> gkulu	'big'	dā dangkulu
	pā <u>t</u> gun	'child'	pā patgun

2.2.1.1.2 More on reduplication for the progressive

Some details of reduplication for the progressive aspect are noted here.

If the stressed vowel of the predicate is followed by a glide (/w/ or /y/), reduplication for the progressive doubles the vowel but not the glide. In (7), the glides /y/ and /w/ are represented in the orthography as *i* (in *taitai*) and *o* (in *sāolak*).

(7)	PREDICATE		PROGRESSIVE
	tā <u>i</u> tai	'read'	tā taitai
	sā <u>o</u> lak	'spank'	sā sāolak

¹ Topping and Dungca (1973: 258) call the progressive aspect 'continuative' and the neutral aspect, 'noncontinuative'.

If the stressed vowel is immediately preceded by a consonant plus a glide, reduplication doubles both the consonant and the glide. In (8), the glides /y/ and /w/ are represented in the orthography as *i* (in *dies*) and *u* (in *guaiya* and *kuentus*).

(8)	PREDICATE		PROGRESSIVE
	<i>diēs</i>	‘ten’	diēdies
	<i>guaiya</i>	‘love’	guaguaiya
	<i>kuentus</i>	‘speak’	kuekuentus

If the stressed vowel is immediately preceded by a consonant plus a liquid (/l/ or /r/), reduplication can double both the consonant and the liquid, or just the liquid.²

(9)	PREDICATE		PROGRESSIVE
	<i>plānta</i>	‘set’	plāplanta, plālanta
	<i>trīsti</i>	‘sad’	tritrīsti, trirīsti

Not all Chamorro predicates have a stressed vowel. The language has unstressed, phonologically dependent predicates that must lean on material to their right to form a phonological word. When a dependent predicate is in the progressive, reduplication affects the larger phonological word containing it. To illustrate: Even though the orthography represents them as separate words, both the verb *malak* ‘go to’ and the preposition *para* ‘to’ are dependent. *Malak* leans on material in its goal noun phrase to form a phonological word; *para* leans on material in its object noun phrase. In (10), the phonological word containing the predicate is enclosed in brackets and its stressed vowel is underlined.

- (10)a. [Manmalak mānu]?
 AGR.go.to where?
 ‘Where did they go?’
- b. [Para i tēnda].
 to the store
 ‘He headed to the store.’

² Generally, both the options illustrated in (9) are allowed when the predicate is a borrowed word. When the predicate is an indigenous word, speakers prefer to double only the liquid.

When these predicates are in the progressive, reduplication looks beyond them to double the stressed CV of the entire phonological word.

- (11)a. Manmalak mǎmanu?
 AGR.go.to where.PROG
 ‘Where are they going?’
 b. Para i tetenda.
 to the store.PROG
 ‘He is heading to the store.’

Another illustration: Every possessed noun that is marked with the linker (see 7.1.1) is phonologically dependent: it leans to the right, on material in the possessor, to form a phonological word. In (12), this phonological word is enclosed in brackets and its stressed vowel is underlined. When a possessed noun of this sort is in the progressive, reduplication doubles the stressed CV of the entire phonological word.

- (12) [Ma’estrun Juan].
 teacher.L Juan
 ‘He is Juan’s teacher.’
 (13) Ma’estrun Juajuan ha’.
 teacher.L Juan.PROG EMP
 ‘He is still Juan’s teacher.’

2.2.1.2 Meaning and use

Aspect provides a perspective on the situation described by the clause. Many languages with aspect morphology use one aspect for situations that are viewed as in progress, continuing, or repeated—situations with internal temporal structure—and another aspect for situations that are viewed as undifferentiated wholes. Chamorro fits this basic description, although the progressive aspect in Chamorro has a wider range of uses than the progressive in languages like English. (Note that the Chamorro progressive also differs from the imperfective aspect found in languages like Russian.) This subsection surveys the meaning and use of the progressive aspect and the neutral aspect in Chamorro, first for events (actions, processes, occurrences), then for states, and finally in negative clauses.

2.2.1.2.1 Aspect for events

The progressive is used for events that are ongoing or in progress with respect to some other event. In (14a), the event of Paul Santos’s washing his clothes is ongoing with respect to the event of the speaker’s drawing him. In

(14b), the event of her mother's heading from the church is ongoing with respect to the event of her noticing this. And in (14c), the raining event is ongoing with respect to the speech event (the event of the speaker uttering the sentence).

- (14)a. Si Paul Santos, guiya esti hu penta anai ha
UNM Paul Santos he this AGR draw when AGR
fa'gãgasi i magagu-ña.
wash.PROG the clothes-AGR
 'Paul Santos is the one I drew while he was washing his clothes.'
 (Alamagan 16)
- b. Ha li'i' na **ginin** i **Gima' Yuyu'us** si nanã-ña.
AGR see COMP from the church.PROG UNM mother-AGR
 'She saw that her mother was heading from the church.' (Dibota 7-8)
- c. **U'uchan.**
AGR.rain.PROG
 'It's raining.'

The neutral aspect is used for events that are not in progress with respect to some other event. In (15), none of the events is viewed as ongoing with respect to any other event, including the speech event, so every predicate is in the neutral aspect.

- (15)a. Anai ma **baba**, **humuyung** pãtgun.
when AGR open AGR.go.out child
 'When they opened it, a child came out.' (Cooreman 1983: 107)
- b. Ha **nã'i** guatu ni na'-ña ya **sinangãni**
AGR give to.there OBL food-AGR and.then AGR.PASS.say.to
 na para u **chotchu.**
COMP FUT AGR ANTIP.eat
 'She gave him his food and told him that he should eat.' (Cooreman 1983: 79-80)
- c. Pues duru **uchan.**
so hard AGR.rain
 'Then it rained hard.'

In (16), the event lasts for a specific time period (*todu diha* 'all day'), but is not viewed as in progress, so the neutral aspect is used.

- (16) Todu diha nai **umåssun** gi tatalo'-ña.
all day COMP AGR.lie LCL back-AGR
 'All day [the turtle] lay on its back.' (Igu 4)

Either the progressive or the neutral aspect can be used for repeated events, as can be seen from (17), from a description of a visit to an auto factory.

- (17) **Mana'kabålis** i kareta,
AGR.PASS.make.complete the car
mana'kabåbalis i kareta **manmanå'yi**
AGR.PASS.make.complete.PROG the car AGR.PASS.add
 todu ... esta todu **manmapienta** todudu esti guini ni
all already all AGR.PASS.paint all.EMP this here COMP
mana'fankabåbalis i kareta yan lokkui'
AGR.PASS.make.AGR.complete.PROG the car and also
manmatetes ...
AGR.PASS.test.PROG
 '[a factory where] the car is assembled, the car is assembled and everything is added, everything is painted, all this here where the cars are assembled and also tested...' (from a tape-recorded narrative)

The use of the progressive for repeated events is crosslinguistically rather unusual. Although it is hard to generalize, the progressive seems to be used for repeated events most systematically when no other material in the sentence explicitly signals the repetition. In (18), the progressive provides the only linguistic cue that the event of his building houses (in (18a)) and the event of our telling our children (18b) are repeated.

- (18)a. **Manhåhatsa** guma'.
AGR.ANTIP.build.PROG house
 'He builds houses (e.g. as his profession).'
- b. Maila' ya ta aplika giya hita håfa ta
come and.then AGR apply LCL us.INCL what? AGR
sangångani i famagu'on-ta.
tell.PROG the PL.child-AGR
 'Come and let us (incl.) apply to ourselves (incl.) what we (incl.) tell our (incl.) children.' (Ginen I Obispo August 9, 2009)

But in (19), the repetition of the event is made explicit by an adverb (*sessu* ‘often’, *todu i tiempu* ‘all the time’) or a complementizer (*kada* ‘every time that’), and for many speakers the neutral aspect is preferred.

- (19)a. *Sessu* *yu’ di* **mapångun** *as* *nanâ-hu* *yan tatâ-hu*.
often I PRT AGR.PASS.wake OBL mother-AGR and father-AGR
 ‘Often I was awakened by my mother and father.’ (*Familia* 4)
- b. *Kada* **ma kumprendi** *una kosa,* *umannuk* *ottra*
whenever AGRunderstand one thing AGR.appear other
kosa ni ti ma kumprendi.
thing COMP not AGRunderstand
 ‘Every time they understand one thing, another thing appears that they don’t understand.’ (*Ginen I Obispo* August 9, 2009)
- c. *Magâhit* *na* **uchan** *todu i tiempu giya*
AGR.true COMP AGR.rain all the time LCL
Guåhan.
Guam
 ‘It’s true that it rains all the time in Guam.’

The progressive can be used for repeated events even in imperatives.

- (20) **Na’tutungu’** *ham* *hâfa* *hinassosom-mu*
make.know.PROG us.EXCL what? WH[OBJ].think-AGR.PROG
put esti na che’chu’-mâmi.
about this L work-AGR
 ‘Keep on letting us (excl.) know what you think about this work of ours (excl.).’ (from an e-mail message)

2.2.1.2.2 Aspect for states

The neutral aspect is the aspect used most often for states, even when the state overlaps in time with some other situation or is repeated. In (21a), the state of there being someone under the table overlaps with the speech event. In (21c), the state of it being not so hot overlaps with the state of it being evening. And in (21d), the state of the speaker’s being angry is repeated. Throughout, the neutral aspect is used.

- (21)a. *Guaha* **gaigi** *gi* *papa’* *lamasa.*
AGR.exist AGR.be.at LCL under.L table
 ‘There’s someone who is under the table.’
- b. *Ha tungu’* *ha’* *na* **mahettuk** *kaskarâ-ña.*
AGR.know EMP COMP AGR.hard shell-AGR

- ‘[The turtle] knew that its shell was hard.’ (Igu 3)
- c. Ti gof **maipi** an puengi.
 not AGR.very hot if evening
 ‘It’s not so hot when it’s evening.’
- d. Kada **tristi** hảo, lalálu’ yu’.
 whenever AGR.sad you AGR.angry I
 ‘Every time you’re sad, I’m angry.’

However, under certain circumstances the progressive can be used for states. The progressive can be used for a state in which the subject takes an active role. In (22a), the speaker is viewed as wanting to be actively going ahead down the road; in (22b), the addressee is viewed as actively busy at her job.

- (22)a. Ya-hu ha’ **mofo’na** pàpa’ gi chalan.
 like-AGR EMP AGR.INF.ahead.PROG down LCL road
 ‘I would enjoy going ahead down the road.’
- b. Lokkui’ hunggan, hu kumprendi ha’ na siempri
 also yes AGR.understand EMP COMP indeed
 bibisi hảo gi che’cho’-mu.
 AGR.busy.PROG you LCL work-AGR
 ‘And yes, I do understand that you are really keeping busy at your job.’ (from a letter)

The progressive can also be used when the state increases in intensity.

- (23)a. Esta **mamaipi**.
 already AGR.hot.PROG
 ‘It was getting hotter.’
- b. Intri mās tiempu, mās **triristi** yu’.
 among more time more AGR.sad.PROG I
 ‘As time goes on, I get sadder and sadder.’

Finally, the progressive can be used when the state is viewed as persisting, perhaps despite expectations. In such cases, the predicate is usually followed by the emphatic particle *ha’* (see 23.2).

- (24)a. Guaha **gagaigi** ha’ gi papa’ lamasa.
 AGR.exist AGR.be.at.PROG EMP LCL under.L table
 ‘There’s someone who is still under the table.’

- b. Todu i tiempu siempre **meggagai-ña** ha' kuestion
all the time indeed many-COMPAR.PROG EMP question
 ki ineppi.
than answer
 'Always there will surely be more questions than answers.' (*Ginen I Obispo* August 9, 2009)
- c. Hu **hahassu** ha' atyu na tiempu anai
AGR.remember.PROG EMP that L time COMP
pâpatgun yu'.
child.PROG I
 'I still remember the time when I was a child.'

All the progressive predicates in (22-24) except for *hassu* 'remember' in (24c) are intransitive. Their marking for mood and agreement is consistent with the idea that they describe states rather than events (see 2.2.2.1 for the details). Nonetheless, these predicates can appear in the progressive, although the neutral aspect is also possible. The nuances that determine which aspect is chosen can be difficult to pin down. Compare (25a), in which the adjective *fresku* 'fresh' appears in the progressive, and (25b), in which the same predicate appears in the neutral aspect.

- (25)a. **Frefresku** i hanum kada manhânão ham
AGR.fresh.PROG the water whenever AGR.go we.EXCL
 guatu.
to.there
 'The water is fresh every time we (excl.) go there.'
- b. **Fresku** i hanum kada manhânão ham
AGR.fresh the water whenever AGR.go we.EXCL
 guatu.
to.there
 'The water is fresh every time we (excl.) go there.'

2.2.1.2.3 Interaction of aspect with negation

Generally speaking, negation does not have an effect on the choice of aspect: aspect is used in the same way in negative clauses as in the corresponding clauses without negation. The progressive is used for events that are in progress with respect to some other event, for repeated events, and for states that are viewed as persisting. The neutral aspect is used otherwise. In (26), the predicate *usa* 'use' is in the progressive because it describes a repeated action, and the predicate *tungu* 'know' is in the neutral aspect because it describes a state.

- (26) Atyu ha' i biha ti ha **u'usa** i tinanum
that EMP the old.woman not AGR.use.PROG the plant.L
 kalamasa sa' ti ha **tungu'** hâfa esti na nengkanu'.
pumpkin because not AGR.know what? this L food
 'It was just the pumpkin plant that the old lady didn't use, because
 she didn't know what this food was.' (Mannge' 2)

However, the progressive has some more specialized uses in negative clauses. The progressive is often used in negative clauses when an event or state *no longer* holds, meaning that it does not hold at the time in question, but had held previously. These negative clauses often include the adverb *esta* 'already'.

- (27)a. Esta i neni ti **tumâtangis**.
already the baby not AGR.cry.PROG
 'The baby is not crying any more.'
 b. Ti **mamaipi** esta i nengkanu'.
not AGR.hot.PROG already the food
 'The food is no longer warm.'
 c. Ti **u'uchan**.
not AGR.rain.PROG
 'It is no longer raining.'

Similarly, the progressive is often used in negative clauses when an event or state does *not yet* hold, meaning that it does not hold at the time in question, but is expected to hold later. These negative clauses often include the adverb *trabiha* 'still, yet'.

- (28)a. Trabiha ti hu **tataitai** i lepblu ni ha nâ'i yu'.
still not AGR.read.PROG the book COMP AGR.give me
 'I haven't yet read the book that she gave me.'
 b. Trabiha ti **areklâlâo** i gima'.
still not AGR.orderly.PROG the house
 'The house isn't tidy yet.'
 c. Ti **o'ora**.
not hour.PROG
 'It wasn't yet time.' (EM 93)

Finally, the progressive is normally used in negative imperatives formed with the negative verb *cha*- 'better not', which shows agreement like a noun (see 15.2.2.2).

- (29)a. Cha'-mu **chuchuli'** sa' iyun-ñiha.
better.not-AGR take.PROG because possession-AGR
 'Better not take them, because they are [the ancient people's]
 possessions.' (Alamagan 21)
- b. Cha'-ñiha u **fanluluhan.**
better.not-AGR AGR.AGR.afraid.PROG
 'They shouldn't be afraid.' (EM 101)

But the neutral aspect is normally used in negative imperatives formed with the negative predicate *mungnga* 'don't, let it not be' (see 15.2.2.1).

- (30)a. Mungnga enñão **masangan.**
don't that AGR.PASS.say
 'Don't say that.' (EM 83)
- b. Mungnga **muma'ã'ñão.**
don't AGR.afraid
 'Don't be afraid.' (EM 82)

2.2.2 Mood and agreement

In Chamorro, predicates that are verbs or adjectives are marked for agreement with the subject by means of forms that also signal mood. (Predicates that are nouns or prepositions do not show agreement; see 4.3.) There are two moods, realis and irrealis.³ Depending on mood and on whether the predicate is transitive or intransitive, the agreement signals either the person and number, or else just the number, of the subject. The system is intricate, highly structured, and hard to lay out straightforwardly. This section begins by presenting the forms of agreement as though there were a single set of agreement paradigms that are sensitive to mood and transitivity. The presentation moves from the simple to the complex: first the agreement forms for transitive verbs are described (in 2.2.2.1), then the agreement forms for intransitive verbs and adjectives (in 2.2.2.2). The analysis is revisited in 2.2.2.3, where it is observed that the system actually consists of two separate types of agreement that can co-occur.

2.2.2.1 Transitive verbs

Transitive verbs show agreement with the subject through morphemes that precede the verb and are usually treated as proclitics. These morphemes are written as separate words in the official orthographies. The agreement forms

³ Topping and Dungca (1973: 263) refer to the irrealis mood as the 'future tense' and the realis mood as the 'nonfuture tense'.

for the realis mood are listed in (31), and the forms for the irrealis mood are listed in (32).⁴

- (31) AGREEMENT FOR TRANSITIVE VERBS IN THE REALIS MOOD
- | | |
|-----------------|----|
| 1 sg. | hu |
| 2 sg. | un |
| 3 sg. | ha |
| 1 incl. du./pl. | ta |
| 1 excl. du./pl. | in |
| 2 du./pl. | en |
| 3 du./pl. | ma |
- (32) AGREEMENT FOR TRANSITIVE VERBS IN THE IRREALIS MOOD
- | | |
|-----------------|----------------|
| 1 sg. | (bai) hu / bai |
| 2 sg. | un |
| 3 sg. | u |
| 1 incl. du./pl. | (u)ta |
| 1 excl. du./pl. | (bai) in |
| 2 du./pl. | en |
| 3 du./pl. | uma |

Safford (1904), who writes these forms as prefixes, identifies them as verbal particles, saying that they “indicate person, but they are quite distinct from the personal pronoun” (1904: 504). Topping and Dungca (1973: 106) refer to them as *hu*-type pronouns, naming them after the 1 sg. form in the paradigm in (31). The view taken here is that these forms are not pronouns but agreement, since (i) they also indicate mood, and (ii) they co-occur with the subjects they cross-reference. For instance, *ha* in (33a) agrees with *si Tan Biriña*, and *uma* in (33b) agrees with *i famalão’an* ‘the women’.

- (33)a. Ha lolommuk i amut si Tan Biriña.
AGR pound.PROG the medicine UNM Mrs. Biriña
 ‘Tan Biriña was pounding the medicine.’ (LSS 29)
- b. Para uma paini i famalão’an i gaputulun-ñiha.
FUT AGR comb the PL.woman the hair-AGR

⁴ Previous Chamorro grammars report other realizations for the 3 du./pl. forms. According to Safford (1904: 504), the 3 du./pl. realis form is *ha* and the 3 du./pl. irrealis form is *uha*. According to Topping and Dungca (1973: 262-263), the 3 du. irrealis form is *uha* and the 3 pl. irrealis form is *uma*. The form *uha* is apparently still used in Guam (see Stolz 2019).

‘The women are going to comb their hair.’

The interaction of agreement with the different types of Chamorro pronouns is discussed in 8.4.2.

The agreement forms in (31) and (32) distinguish three persons: first (referring to the speaker), second (referring to the addressee), and third (referring to individuals other than the speaker or addressee). They also distinguish two numbers: singular (referring to one individual) and dual/plural (referring to two or more than two; the reason for bringing dual into the picture will become clear shortly). The fact that the agreement forms are also sensitive to mood is most obvious in the third person and in certain options for the first person. In the second person, the realis and irrealis agreement forms are the same.

As in many other Austronesian languages, the first person dual/plural forms distinguish between inclusive and exclusive. The inclusive dual/plural *includes* the addressee(s), whereas the exclusive dual/plural *excludes* the addressee(s). The choice of inclusive versus exclusive is straightforward in conversation and can also serve rhetorical functions in group settings. In (34), from an introduction of native healers at a symposium, the use of the first person inclusive highlights the gathering’s unity of purpose, while the use of the first person exclusive recognizes the divide between those who are healers and those who are not.

- (34) **Ta** po’lu i inangokko’-**ta** na ginin esti na
AGR put the trust-AGR COMP from this L
 Symposium ... hamyu, kumu mana’amti, yan **hami**
symposium you.PL as PL.healer and we.EXCL
 ni ti mana’amti, todus **hit ta** na’metgut i
COMP not PL.healer all we.INCL AGR make.strong the
 diknu na dinisehå-**ta** ...
noble L NMLZ.wish-AGR
 ‘We (incl.) trust that with this Symposium...you (pl.), as native
 healers, and we (excl.), as nonhealers, together we (incl.) can
 strengthen our (incl.) noble endeavor...’ (LSS 38)

Finally, third person singular agreement is occasionally used to cross-reference a plural subject that is dual (see Stolz 2019) or collective (viewed as an undifferentiated group). This usage occurs in Guam and Rota but seems not to be as frequent in Saipan.

2.2.2.1.1 Pronunciation notes

The sound /h/ is often omitted in Chamorro, so the 1 sg. *hu* is typically pronounced [u], and the 3 sg. realis *ha* is typically pronounced [a]. The orthographies represent the 1 excl. du./pl. as *in* and the 2 du./pl. as *en*, but they have the same pronunciation (i.e. [In] in (35b)). The fact that these two forms are pronounced the same has a result that language learners might appreciate. A polar question whose subject is first person inclusive dual/plural can be answered by simply repeating the words of the question without changing the form of agreement (see (35a)). In spoken Chamorro, the same holds true of certain polar questions whose subject is *second* person dual/plural. As long as the predicate is a transitive verb, the question can be answered without overtly “changing” the agreement, because the 1 excl. du./pl. *in* and the 2 du./pl. *en* are pronounced the same. See (35b).

- (35)a. Kão **ta** nisisita ayudu? — Hunggan, **ta** nisisita ayudu.
 Q *AGR**need* *help* *yes* *AGR**need* *help*
 ‘Do we (incl.) need help? — Yes, we (incl.) need help.’
 b. Kão **en** nisisita ayudu? — Hunggan, **in** nisisita ayudu.
 Q *AGR**need* *help* *yes* *AGR**need* *help*
 ‘Do you (du./pl.) need help? — Yes, we (excl.) need help.’

The first person agreement forms in the irrealis mood include optional material. The 1 incl. du./pl. irrealis form is usually realized as *ta*; the preceding *u* is now less commonly used. According to Costenoble (1940: 307) and Topping and Dungca (1973: 262), the *bai* in the other first person irrealis forms may be borrowed from Spanish *voy*. *Bai* is often present, but can be omitted. In the 1 sg. irrealis agreement form, either *bai* or *hu* can be omitted, but not both.

2.2.2.2 Intransitive verbs and adjectives

2.2.2.2.1 In the realis mood

In the realis mood, intransitive verbs and adjectives show agreement with the subject through affixes that indicate number but not person. These affixes are given below.

- (36) AGREEMENT FOR INTRANSITIVE VERBS / ADJECTIVES
 IN THE REALIS MOOD
 Sg./Du. -um- / —
 Pl. man-

The agreement in (36) distinguishes two numbers: singular/dual (referring to one or two individuals) and plural (referring to more than two). Plural is indicated by the prefix *man-*, which can take various forms (see below and 30.4.3). Singular/dual is indicated by the infix *-um-* or by no special marking. Some examples of intransitive predicates with agreement are given in (37), with *-um-* in boldface. Notice that infixes are inserted before the first vowel of the predicate. If the predicate begins with a nasal (*m, n, ñ, ng*) or liquid (*l, r*), some speakers allow the infix *-um-* to be realized as the prefix *mu-*.

(37)	PREDICATE	SG./DU. REALIS	PL. REALIS
	kâti ‘cry’	kum âti	mangâti
	sâga ‘stay’	sum âga	mañâga
	peska ‘fish’	pum eska	mameska, manpeska, mampeska
	hânão ‘go’	hum ânão	manhânão
	macho’chu’ ‘work’	macho’chu’	manmacho’chu’
	tangnga ‘deaf’	tangnga	mantangnga
	lachi ‘wrong’	lachi	manlachi
	betdi ‘green’	betdi	manbetdi, mambetdi

Two characteristics of this agreement paradigm stand out. First, it is sparser than the agreement paradigms for transitive verbs (see 2.2.2.1). Second, its handling of number is different: dual (referring to two individuals) is realized by the same forms as singular in (36), but by the same forms as plural in the transitive paradigms in (31-32). The result is a split in the way the agreement system responds to subjects that refer to two individuals. The split is illustrated in (38), an excerpt from a narrative about two thieves in which each predicate is in the realis mood and has a third person dual subject. When the predicate is a transitive verb (*sienti* ‘feel’ or *galoppi* ‘jump over’), the agreement is *ma*—just as it would be if the subject had been plural. When the predicate is intransitive, the agreement is *-um-* (on *pâra* ‘stop’) or no special marking (on *magacha* ‘be detected’, *malâgu* ‘run’, and *mâttu* ‘arrive’)—just as it would be if the subject had been singular. (Transitive verbs in this excerpt are glossed TR, and intransitive verbs are glossed INTR.)

- (38) **Ma** senti ya kana' magacha' i dos.
AGR feel.TR and.then almost AGR.PASS.detect.INTR the two
 Pues gotpi ha' malågu i dos, ti
then suddenly EMP AGR.run.INTR the two not
pumåra asta ki måttu guatu gi
AGR.stop.INTR until PRT AGR.arrive.INTR to.there LCL
 simintetyun Chalan Kanoa ... **Ma** galoppi i patdit ...
cemetery.L Chalan Kanoa AGR.jump.TR the concrete
 'They felt that the two of them were about to be caught out. So
 suddenly they ran off, and didn't stop until they got to the Chalan
 Kanoa cemetery...they jumped the concrete wall...' (from a tape-
 recorded narrative)

The split in the way that the agreement handles dual number is echoed in the form of nouns and pronouns: dual nouns generally have the same form as the corresponding singular nouns (see 6.1.1.1), but dual pronouns have the same form as the corresponding plural pronouns (see 8.1).

The agreement paradigm in (36) is more complicated in its sensitivity to whether the predicate describes an event or a state.⁵

In the singular/dual, the choice between *-um-* and no special marking is correlated with whether the predicate describes an event or a state. Specifically: If *-um-* is the only affix allowed, then the predicate describes an event. If the predicate describes a state, then either *-um-* or no special marking can occur, under conditions outlined below.

Almost all intransitive verbs that describe events must use *-um-* in the realis mood to show singular/dual agreement. See the forms in (37) and below.

(39)	PREDICATE		SG./DU. REALIS
	chotchu	'eat'	chumotchu
	ta'yuk	'jump'	tuma'yuk
	attuk	'hide'	umattuk
	påra	'stop'	pumåra
	kuentus	'speak'	kumuentus

However, a few intransitive verbs that describe events cannot use *-um-*. These include *mumu* 'fight', verbs such as *macho'chu* 'work', *mamokkat* 'walk', and *måttu* 'arrive' (*m/f* verbs; see 2.2.3.1), all passive verbs (see

⁵ Aspect is also sensitive to whether the predicate describes an event or a state (see 2.2.1.2).

10.2.1), and antipassive verbs formed with *man-* (see 10.3.1). An even smaller number of verbs allow either *-um-* or no special marking, under the conditions described below (e.g. *maigu* ‘sleep’). All this reveals that *not every* intransitive verb that describes an event must use *-um-* to show singular/dual agreement. Instead, the generalization is that if a predicate must use *-um-* for this agreement, then it describes an event.

Adjectives and intransitive verbs that describe states can use *-um-* or no special marking for singular/dual agreement in the realis mood, but with a difference. When no special marking is used, the predicate simply describes a state. When *-um-* is used, the predicate is inchoative: it describes the beginning (inception) of a state.

(40)	PREDICATE	SG./DU. REALIS	
	gaigi	gaigi	‘be (at a place)’
		gumaigi	‘come to be (at a place)’
	guaha	guaha	‘exist’
		gumuaha	‘come to exist’
	agaga’	agaga’	‘red’
		umagaga’	‘become red, turn red’
	lokka’	lokka’	‘tall’
		lumokka’ ,	‘become tall’
		mulokka’	
	måolik	måolik	‘good’
		mumåolik	‘become good’

Note that the agreement can signal the difference between a state and its inception only in the singular/dual, not in the plural. The plural adjective *manlokka* ‘tall (pl.)’, for instance, simply describes the state of being tall; there is no way to get the agreement to convey the meaning ‘become tall’.

In the plural, there is just one agreement affix, *man-*. This affix is sensitive in a different way to the distinction between events and states.

The plural agreement prefix *man-* is one of the Chamorro prefixes that can undergo the Austronesian alternation known as nasal substitution (see 30.4). In nasal substitution, the *n* of the prefix assimilates to the place of articulation of an immediately following voiceless consonant (/p, t, k, ts, f, s/), and the voiceless consonant deletes. (Notice that *n* becomes the palatal nasal *ɲ* before the alveolar fricative *s* and before the alveolar affricate /ts/, which is represented *ch* in the orthographies.) Nasal substitution produces the alternations seen below.

(41)	PREDICATE		PL. REALIS
	poddung	‘fall’	mamoddung
	tångis	‘cry’	manångis
	kalamtin	‘move, start’	mangalamtin
	kuentus	‘speak’	manguentus
	chålik	‘laugh’	mañålik
	sena	‘have dinner’	mañena

Generally, the plural agreement prefix undergoes nasal substitution when the predicate describes an event but not when it describes a state. Compare the event predicates in (41) with the state predicates in (42).⁶

(42)	PREDICATE		PL. REALIS
	pika	‘spicy’	manpika
	to’a	‘almost ripe’	manto’a
	kadukadu’	‘unreal’	mankadukadu’
	chågu’	‘distant’	manchågu’
	fåtta	‘absent’	manfåtta
	suetti	‘lucky’	mansuetti

This general tendency has exceptions. Nasal substitution is optional, or does not occur at all, when the plural agreement prefix combines with certain event predicates.

(43)	PREDICATE		PL. REALIS
	påra	‘stop’	mamåra, manpåra
	kumplen	‘complain’	mangumplen, mankumplen
	tuhu’	‘drip, leak’	mantuhu’
	finu’	‘speak (a language)’	manfinu’

Nasal substitution never occurs when the plural agreement prefix combines with a passive verb, even one that describes an event.

⁶ A different Austronesian alternation, nasal assimilation, assimilates the /n/ of the prefix to an immediately following voiced consonant. Topping and Dungca (1973: 48-50) treat nasal assimilation as obligatory. But for many speakers in many contexts, it is optional or does not occur at all. The plural realis verbs in (37) include some forms that illustrate nasal assimilation. The effects of this optional alternation are not shown in (42) or in later examples in this chapter.

(44)	PREDICATE		PL. REALIS	
	patcha	‘touch’	manpinatcha	‘be touched’
	tugi’	‘write’	mantinigi’	‘be written’
	konni’	‘take’	mankinenni’	‘be taken’
	fa’nâ’gui	‘teach’	manfina’nâ’gui	‘be taught’
	sodda’	‘find’	mansinedda’	‘be found’

On the other hand, when the plural agreement prefix combines with a very few state predicates, nasal substitution *does* occur.

(45)	PREDICATE		PL. REALIS
	kadada’	‘short’	mangadada’
	siha	‘together (3 pers.)’	mañiha

Speakers vary in their handling of the patterns shown in (43) and (45). One notable example: in the CNMI, the plural of the adjective /tsamoru/ ‘Chamorro’ is generally *manChamorro*, without nasal substitution; but for some speakers in Guam, it is *maÑamoru*, with nasal substitution. All this makes it difficult to generalize with confidence. Perhaps the best that can be said is that in most cases, the plural prefix does *not* undergo nasal substitution when attached to a state predicate.

Fine-grained and partial though they are, the patterns just described reveal that the marking of mood and agreement, like the marking of aspect, is sensitive to whether the predicate describes an event or a state.

2.2.2.2.2 In the irrealis mood

In the irrealis mood, finally, intransitive verbs and adjectives show agreement with the subject through forms that indicate both person and number. These forms, which are listed below, distinguish *three* numbers: singular, dual, and plural.

(46) AGREEMENT FOR INTRANSITIVE VERBS / ADJECTIVES
IN THE IRREALIS MOOD

1 sg.	(bai) hu / bai
2 sg.	un
3 sg.	u
1 incl. du.	(u)ta
1 excl. du.	(bai) in
2 du.	en
3 du.	u
1 incl. pl.	(u)ta fan-
1 excl. pl.	(bai) in fan-
2 pl.	en fan-
3 pl.	u fan-

A few examples:

- (47)a. Nihi ta hânão.
let's AGR go
 'Let's (incl. du.) go.'
- b. Para bai in fanguentus.
FUT AGR AGR.speak
 'We (excl. pl.) are going to speak.'
- c. I putin kurason u fanmângung.
the hurt.L heart AGR AGR.healed
 'The heartaches are going to heal.' (EM 66)

2.2.2.3 Agreement revisited

Now that all the agreement forms have been presented, it is time to inspect the paradigms more carefully.

A close look at the irrealis paradigm for intransitive agreement in (46) reveals that it combines elements from two paradigms that were seen earlier. In the singular and dual, this agreement is basically the same as *transitive* agreement in the irrealis mood (see (32)). The only difference is that the 3 du. form is *u*, not *uma*. In the plural, the agreement consists of the dual forms combined with the prefix *fan-*, which is the irrealis form of the plural prefix used for intransitive agreement in the *realis* mood (see (36) and 2.2.3). The fact that *fan-* undergoes nasal substitution under the same conditions as *man-* confirms that the two prefixes are related.

These observations suggest that it would be simpler to analyze the agreement paradigms as the result of two separate types of agreement that can co-occur. The first type of agreement consists of the person-and-number

forms in (31) and (32), annotated to show that in the irrealis mood, the 3 du./pl. form is *uma* for transitive verbs but *u* for intransitive predicates. The second type of agreement consists of the number affixes in (36), with the additional information that in the irrealis mood, the plural prefix is *fan-*. This revised system is presented below.

(48) AGREEMENT REANALYZED: PERSON-AND-NUMBER FORMS

a.	<i>Realis</i>	
	1 sg.	hu
	2 sg.	un
	3 sg.	ha
	1 incl. du./pl.	ta
	1 excl. du./pl.	in
	2 du./pl.	en
	3 du./pl.	ma
b.	<i>Irrealis</i>	
	1 sg.	(bai) hu / bai
	2 sg.	un
	3 sg.	u
	1 incl. du./pl.	(u)ta
	1 excl. du./pl.	(bai) in
	2 du./pl.	en
	3 du./pl.	u [intransitive] / uma [transitive]

(49) AGREEMENT REANALYZED: NUMBER AFFIXES

a.	<i>Realis</i>	
	Sg./Du.	-um- / —
	Pl.	man-
b.	<i>Irrealis</i>	
	Sg./Du.	—
	Pl.	fan-

The two types of agreement occur together on intransitive verbs and adjectives in the irrealis mood; otherwise they occur separately. The chart in (50) shows how they are distributed according to mood and predicate type.

(50)	TRANSITIVE VERBS	INTRANSITIVE VERBS / ADJECTIVES
Realis	person-number (48a)	number affixes (49a)
Irrealis	person-number (48b)	person-number (48b) <i>plus</i> number affixes (49b)

Some readers may prefer this revised system to the four agreement paradigms originally presented in (31), (32), (36), and (46). Others may prefer the original paradigms. It makes no difference for much of the material in this book which system is adopted (although the revised system is required in Chapters 12 and 15). What matters is that agreement is sensitive to mood, the predicate's transitivity, and—to some extent—to whether the predicate describes a state or an event.

2.2.3 More on mood

2.2.3.1 The *m/f* alternation

Over and above their marking for mood and agreement (see 2.2.2), a small number of intransitive verbs and adjectives indicate mood through an alternation between initial /m/ and /f/. Some of these *m/f* predicates are shown below, in forms that show agreement with a 3 sg./du. subject.⁷

(51)	SG./DU. REALIS	3 SG./DU. IRREALIS
'work'	macho'chu'	u facho'chu'
'wake up'	makmâta	u fakmâta
'end, be over'	mâkpu'	u fâkpu'
'run'	malâgu	u falâgu
'disappear'	malingu	u falingu
'walk'	mamokkat	u famokkat
'give birth'	mañâgu	u fañâgu
'sit'	matâ'chung	u fatâ'chung
'quiet'	matkilu	u fatkilu
'arrive'	mâttu	u fâttu
'ahead, in front'	mo'na	u fo'na
'be finished'	munhâyan	u funhâyan

Every *m/f* predicate is either an intransitive verb or an adjective. Derived transitive verbs and derived nouns formed from these predicates do not participate in the *m/f* alternation, but always show /f/, as (52) shows.

(52)	fachu'chu'i	'work for'
	fatkiluyi	'be quiet about, keep a secret of'
	na'falingu	'lose, cause to disappear'
	na'funhâyan	'finish, cause to be finished'

⁷ *M/f* predicates generally are not marked with the realis sg./du. infix *-um-*, even to indicate the inception of a state.

finakpu'	'conclusion, end'
finattu	'arrival'

In addition, when an *m/f* predicate is in the progressive aspect and the consonant that precedes the stressed vowel is *m/f*, the C of the copied CV alternates to indicate mood, but the C of the original CV is always /f/. See (53).

(53)	SG./DU. REALIS	3 SG./DU. IRREALIS
	PROGRESSIVE	PROGRESSIVE
'arrive'	måfattu	u fāfattu
'ahead'	mofo'na	u fofo'na

These patterns are evidence that the /f/ of the *m/f* predicate is basic and the /m/ is derived; in other words, the underlying forms of the verbs 'work' and 'arrive' are *facho'chu* and *fattu*, the underlying form of the adjective 'quiet' is *fatkilu*, and so on. Assuming this, we can say that for the subclass of predicates illustrated in (51), initial /f/ changes to /m/ in the realis mood.

Although the *m/f* alternation usually indicates mood, there is a wrinkle. Chamorro has two prefixes with the shape *man-/fan-* that undergo the *m/f* alternation: the plural agreement prefix (see 2.2.2.2) and the antipassive prefix, which is attached to transitive verbs to produce their antipassive form (see 10.3). The initial consonant of these prefixes is realized as /m/ in the realis mood and /f/ in the irrealis. Some intransitive verbs or adjectives that show agreement with a 3 pl. subject are cited below.

(54)	PREDICATE	PL. REALIS	3 PL. IRREALIS
	sāga 'stay'	mañāga	u fañāga
	applacha' 'dirty'	manapplacha'	u fanapplacha'
	lo'lu' 'cough'	manlo'lu'	u fanlo'lu'

Some antipassive verbs that show agreement with a 3 sg./du. subject appear in (55). (The agreement reflects the fact that antipassive verbs are intransitive.)

(55)		ANTIPASSIVE	ANTIPASSIVE
	PREDICATE	SG./DU. REALIS	3 SG./DU. IRREALIS
	sodda' 'find'	mañodda'	u fañodda'
	osgi 'obey'	manosgi	u fanosgi
	li'i' 'see'	manli'i'	u fanli'i'

The fact that Chamorro has both *m/f* prefixes and *m/f* predicates raises the issue of how these forms combine. Here is the answer: When the plural agreement prefix combines with an *m/f* predicate, the *m/f* of the agreement prefix alternates to indicate mood, but the initial consonant of the *m/f* predicate is always realized as /m/. See (56), which shows some of the same *m/f* predicates as in (51), but this time agreeing with a 3 pl. subject.

(56)		PL. REALIS	3 PL. IRREALIS
	‘work’	manmacho’chu’	u fanmacho’chu’
	‘run’	manmalågu	u fanmalågu
	‘arrive’	manmåttu	u fanmåttu
	‘ahead, in front’	manmo’na	u fanmo’na

Similarly, when the plural agreement prefix combines with an antipassive verb, the *m/f* of the agreement prefix alternates to indicate mood, but the *m/f* of the antipassive prefix is always realized as /m/. See (57), which shows the same antipassive verbs as in (55), but this time agreeing with a 3 pl. subject.

(57)		ANTIPASSIVE	ANTIPASSIVE
	PREDICATE	PL. REALIS	3 PL. IRREALIS
	sodda’ ‘find’	manmañodda’	u fanmañodda’
	osgi ‘obey’	manmanosgi	u fanmanosgi
	li’i’ ‘see’	manmanli’i’	u fanmanli’i’

Only the leftmost *m/f*—that is, the initial consonant of the plural agreement prefix—alternates to indicate mood. The unexpected fact is that the other *m/f* is realized as /m/, not /f/.⁸

Could this mean that the /m/ of these forms is basic and the /f/ is derived, contrary to what was claimed earlier? Probably not. *M/f* predicates and the antipassive prefix undergo the *m/f* alternation as expected when they show singular/dual agreement; see (51) and (55). Given this, (56) and (57) seem to show that these forms behave unexpectedly when they show plural agreement. But if we continue to assume that the initial consonant of these forms is underlyingly /f/, then the appearance of /m/ after the plural agreement prefix in (56) and (57) cannot be conditioned by mood. There must be

⁸ When an antipassive verb shows agreement, the plural agreement prefix precedes the antipassive prefix. These two prefixes have the same shapes and undergo nasal substitution in the same way, but they differ in how nasal substitution interacts with reduplication for the progressive aspect (see 30.4).

two sources for /m/ in the *m/f* alternation: /f/ changes to /m/ to indicate realis mood *or* when immediately following the plural agreement prefix.

The different components of the *m/f* alternation are summarized below.

- (58) THE *M/F* ALTERNATION IN INTRANSITIVE PREDICATES AND PREFIXES
- a. The basic form of the initial consonant is /f/.
 - b. This /f/ changes to /m/
 - (i) when the predicate is in the realis mood; or
 - (ii) immediately after the plural agreement prefix *fan-*.

The *m/f* alternation is limited to a small number of predicates and prefixes. Many intransitive verbs and adjectives have an initial /m/ or an initial /f/ that does not alternate; some examples are cited below.

(59)	SG./DU. REALIS	3 SG./DU. IRREALIS
‘lonely’	mahålang	u mahålang
‘sleep’	maigu’	u maigu’
‘strong’	metgut	u metgut
‘absent’	fåtta	u fåtta
‘wet’	fotgun	u fotgun

Finally, a very few intransitive verbs or adjectives have an initial /m/ in all their inflected forms, but are used to create certain derived words that exceptionally show /f/. These words (e.g. *måtai* ‘die’ and *ma’a’ñaõ* ‘afraid’) suggest that the *m/f* alternation was once more general in the language than it is today.

(60)	3 SG. IRREALIS	DERIVED N	DERIVED V
‘die’	u måtai	fñatai	—
‘afraid’	u ma’a’ñaõ	mina’ñaõ	ma’a’ñagui, fa’ñagui

2.2.3.2 Meaning and use

2.2.3.2.1 Overview

Mood indicates whether the situation described by the clause is real, possible, desirable, permitted, or required. In languages that have a morphological contrast between just two moods, one mood is used when the situation is part of the actual world—when it is presented “as a matter of fact” (Huddleston and Pullum 2005: 53). The other mood is used when the situation is located in a world or worlds that are not actual, but rather possible, desirable, permitted, required, and the like. This rough description gives a good initial sketch of the uses of the realis and irrealis moods in Chamorro.

In Chamorro, the realis mood is used for situations that are real or actual—presented as facts. In the sentences below, the destruction of all the boats (in (61a)), the medicine’s habitually changing its color (61b), and Alamagan’s small size and richness (61c) are all presented as facts.

- (61)a. Ma distrosa todū i batku ni manistāba gi tasi.
AGR destroy all the ship COMP AGR.used.to.be LCL sea
 ‘They destroyed all the ships in the ocean.’ (Cooreman 1982: 13)
- b. Ha tulalaika esti i amut kulot-ña.
AGR change.PROG this the medicine color-AGR
 ‘The medicine changes its color.’ (LSS 52)
- c. Alamagan na tñnu’ sen dikiki’ lão riku
Alamagan L land AGR.extremely small but AGR.rich
gi bandan i nisisidāt tñotñ.
LCL side.L the necessity.L person
 ‘The island of Alamagan is very tiny, but rich from the standpoint of human needs.’ (*Alamagan* 31)

The irrealis mood is used for situations that are not actual—situations that are not presented as facts. Among the many types of nonactual situations are the following:

Situations in the future are not actual, because at the time of the speech event (or other relevant event) they have not occurred. In (62a), the event of our getting together is in the future relative to the speech event; in (62b), the state of the socks being finished is in the future relative to the speech event; and in (62c), the event of his burning the tangantangan is in the future relative to the event of his cutting down the tangantangan. (The verb *funhayan* in (62b) is an *m/f* predicate.)

- (62)a. Ta fandañña’ ta’lu gi oran alas 9:00 gi egga’an.
AGR AGR.join again LCL hour.L o’clock 9:00 LCL morning
 ‘We (incl.) are going to get together again at 9:00 in the morning.’
 (from an e-mail message)
- b. Esta para u funhayan esti i un pāt metyas.
already FUT AGR be.finished this the one pair.L socks
 ‘This pair of socks is about to be finished.’ (*Dibota* 8)
- c. Ha u’utut para u songgi.
AGR cut.PROG FUT AGR burn
 ‘He cut down [the tangantangan] so he could burn it.’ (EM 88)

Situations that are possible or necessary are not actual, because they are possibly or necessarily located in worlds besides the actual world. In (63a), the state of Sandy's being there is possible; in (63b), the event of our expediting this work is necessary.

- (63)a. Pumusipbli na u gaigi si Sandy.
AGR.possible COMP AGR be.at UNM Sandy
 'It's now possible that Sandy might be there.' (from an e-mail message)
- b. Nisisãriu na ta apura esti na cho'chu'.
AGR.necessary COMP AGR expedite this L work
 'It's necessary that we (incl.) expedite this work.' (CD, entry for *apura*)

Events presented by imperative clauses are not actual, given that an imperative directs the addressee to bring the event about. Imperative verbs in Chamorro show agreement with the number affixes but not the person-and-number forms (see 2.2.2.3 and 15.2.1). The shape of the plural agreement prefix in (64a) and the form of the *m/f* predicate in (64b) show that imperative clauses are in the irrealis mood.

- (64)a. Floris lestun, fandokku', / Gi iyok-ku hatdín.
floris lestun AGR.grow LCL possession-AGR garden
 'Flores lestun [a type of flower], grow / In my garden.' (EM 65)
- b. Falågu!
AGR.run
 'Run!'

Like imperatives, many other types of nonactual situations can be characterized in terms of the speaker's attitude, or the attitude of some other participant in the event described. Situations that are desired or wished for are not actual, for instance. In (65a), the speaker wishes for the event of God's guiding us, and in (65b), Charlie desires the event of his touching the canary.

- (65)a. Si Yu'us u isgaihun hit gi todú i
UNM God AGR guide us.INCL LCL all the
 dinisehá-ta.
WH[OBJ].wish-AGR
 'May God guide us (incl.) in all our (incl.) endeavors.'

- b. Sen manman si Charlie, ya
AGR.extremely amazed UNM Charlie and.then
 sen malagu' na u patcha i kanâriu.
AGR.extremely want COMP AGR touch the canary
 'Charlie was truly amazed, and he really wanted to (lit. that he might) touch the canary.' (Tronko 43)

Situations that are requested, permitted, or required are not actual. Consider the embedded clauses in the examples below.

- (66)a. Hu fafaisin kada unu giya hita na ta
AGR ask.PROG each one LCL us.INCL COMP AGR
 fana'asangani put i manmamaila' na aktibidât-ta.
AGR.RECP.tell.PROG about the AGR.come.PROG L activity-AGR
 'I'm asking each one of us (incl.) that we (incl.) inform one another about our (incl.) upcoming activities.' (from an e-mail message)
- b. Ti para bai hu sedi hamyu na hamyu para en
not FUT AGR allow you.PL COMP you.PL FUT AGR
 pinu' i patgon-hu.
kill the child-AGR
 'I'm not going to allow you (pl.) to be the ones to kill my child.'
 (EM 93)

Situations to be avoided are not actual, either.

- (67) Adahi na un falâgu ântis di un cho'gui i
careful COMP AGR run before PRT AGR do the
 che'cho'-mu.
work-AGR
 'Be careful not to (= lest you) run off before you finish your work.'

2.2.3.2.2 Details

Most uses of the realis and irrealis moods in Chamorro conform to the broad generalizations just described. However, some of the fine details of particular uses can seem more arbitrary. These details are discussed here.

Clauses that describe situations in the future are typically in the irrealis mood. But the realis mood can be used for future situations that the speaker believes are certain to occur. In such cases, the realis mood occurs along with the adverb *siempri* 'surely, certainly' to present the future situation as virtually a fact. In (68a), for instance, the event of the seeds sprouting in the

future is presented as real or actual, but in (68b), the event of the seeds not sprouting in the future is described in a way that allows other possibilities.

- (68)a. Siempri dokku' sa' un tãnum.
surely AGR.sprout because AGR plant
 '[The seeds] will definitely sprout, because you planted them.' (EM 139)
- b. Siempri sumumimiya ha' ya ti u dokku'.
surely AGR.seed.PROG EMP and.then not AGR sprout
 '[Seeds that are not planted] will definitely remain seeds, and might not sprout.' (EM 139)

Embedded clauses introduced by *dispues di* 'after' are in the realis mood, whereas embedded clauses introduced by *antis di* 'before' are in the irrealis mood.

- (69)a. Hãfa para ta kumpli dispues di munhãyan i
what? FUT AGR accomplish after PRT AGR.be.finished the
inali'e'-ta?
NMLZ.RECP.see-AGR
 'What will we (incl.) accomplish after our (incl.) meeting is over?'
- b. Tãya' ga'lãgu antis di u fanmãttu i Ispañót.
AGR.not.exist dog before PRT AGR AGR.arrive the Spanish
 'There were no dogs before the Spanish arrived.' (EM 109)

This fixed pattern can be explained largely, but not entirely, in terms of relations in time. Suppose the typical main clause describes a situation that is actual. Situations introduced by *dispues di* 'after' are in the past relative to the situation described by the main clause, so if the main clause situation is actual, they too are actual. Hence, embedded clauses introduced by *dispues di* are in the realis mood. Situations introduced by *antis di* are in the future relative to the situation described by the main clause: from the perspective of the main clause situation, they have not occurred. Hence, embedded clauses introduced by *antis di* are in the irrealis mood. The flaw in this line of thought is that some main clauses describe nonactual situations—the main clause in (69a) is an example—but even then, embedded clauses introduced by *dispues di* are realis. This part of the pattern appears to be arbitrary.

Clauses containing the auxiliary *siña* 'can' are typically in the realis mood (as in (70a)), although the irrealis is also possible (70b).

- (70)a. Ti siña manafa'måolik i mañume'lu.
not can AGR.RECP.treat.well the PL.sibling
 'The brothers could not treat each other right.' (Tres 4)
- b. Siña u mamaigu' ha'.
can AGRsleep.PROG EMP
 'She can just be sleeping.' (EM 141)

But clauses containing the auxiliary *debi* (*di*) 'ought to, should' are always in the irrealis mood.

- (71)a. Kada unu giya hami debi di u guaha
each one LCL us.EXCL should PRT AGR exist
 tarehan-måmi.
responsibility-AGR
 'Each one of us (excl.) ought to have our (excl.) own responsibilities.' (Alamagan 16)
- b. Ha hassu na debi di u nã'i rispetu i
AGRremember COMP should PRT AGR give respect the
 muna'såfu' gui' gi piligru.
WH[SBJ].make.safe him LCL danger
 'He remembered that he should pay his respects to the one who had saved him from danger.' (Pito 13)

It is unclear what is responsible for this difference.

2.2.3.2.3 Interaction with negation and conditionals

Mood interacts with negation and conditionals in largely predictable ways.

In negative clauses, the choice between the realis and irrealis moods follows the guidelines presented earlier (in 2.2.3.2.1). The realis mood is used for situations that are actual or presented as facts; the irrealis mood is used for situations that are not actual. Note that the situations that are used to determine mood choice have the negation factored in.⁹ In (72a), for instance, the situation of the mother's not seeing where her son had gone is presented as a fact, whereas in (72b), the situation of the dog's not hurting the speaker is presented as not actual.

⁹ If negation were not factored in, the clause ought to be invariably in the irrealis mood. (72a), for instance, states that the mother did not see where her son had gone. If mood choice here was determined by the situation of the mother's *seeing* where her child had gone, then the clause should be irrealis, because (72a) asserts that such a seeing event is *not* a fact.

- (72)a. Ti ha li'i' i nana malak mǎnu i lahi-ña.
not AGR see the mother AGR.go.to where? the son-AGR
 'The mother did not see where her son had gone.' (Cooreman 1983: 82)
- b. Åhi', buenti ti u na'lamin yu' i ga'lǎgu.
no maybe not AGR make.hurt me the dog
 'No, maybe the dog won't hurt me.' (Igu 3)

In conditional sentences, the use of the realis and irrealis moods also follows the guidelines presented earlier, but with a difference. The function of a conditional sentence is to relate two situations even when they are not part of the real world. Perhaps because of this, location in the real world has no direct effect on mood choice in conditionals. What matters instead are the specific considerations that identify a situation as not actual: if it is in the future (relative to the other situation described), if it is possible or necessary, if it is desired or requested by the speaker, and so on. When these considerations positively identify a situation as not actual, the irrealis mood is used; otherwise, the default mood in conditionals is realis. The conditional sentences in (73) use the realis mood throughout, because the situations described are not future, desired, requested, etc.

- (73)a. Yanggin ha istoriãriayi yu' si tatã-hu
if AGR tell.story.to.PROG me UNM father-AGR
 kana' ha' yu' mǎmatai chumǎlik.
almost EMP I AGR.die.PROG AGR.INF.laugh
 'If my father was telling me a story, I would almost die laughing.'
 (Familia 6)
- b. Guaha mǎpan i campus gi ge'papa' yanggin ti
AGR.exist map.L the campus LCL farther.down if not
 siguru hǎo mǎnu guatu i kuǎttu.
AGR.sure you where? over.there the classroom
 'There is a map of the campus below if you're not sure where the classroom is located.' (from an e-mail message)

But in the conditional sentence in (74), the antecedent clause (the 'if' clause, introduced by *yanggin* 'if') is irrealis, because the event of their eating is in the future relative to the event of their searching for small fish and plants.

- (74) Yanggin para u fañotchu, manhãnao
if FUT AGR.AGR.ANTIP.eat AGR.go
 manmanaligão mandikiki' siha na guihan yan
AGR.INF.ANTIP.look.for AGR.small PL L fish and
 tinanum.
plant
 'If they were going to eat, they went to look for small fish and plants.' (Igu 1)

In the conditional sentence in (75), the main clause is irrealis, because it is an imperative.

- (75) Yanggin esta munhayan un lommuk, nã'yi dididi'
if already AGR.finished AGR.pound add a.little
 lañan niyuk.
oil.L coconut
 'When you are done pounding, put a small amount of coconut oil.'
 (LSS 59)

In the conditional sentence in (76), finally, the antecedent clause is irrealis because it is in the future with respect to the main clause, and the main clause is irrealis because it contains the auxiliary *debi* (*di*) 'ought to, should'.

- (76) Debi di un lãssas i kalamasa ... yanggin para un
should PRT AGR.peel the pumpkin if FUT AGR
 na'lãgu.
cook
 'You should peel the pumpkin...if you're going to cook it.'
 (Mannge' 8)

2.2.4 Time in a language without tense

Like some other Austronesian languages, Chamorro does not have tense as a grammatical category; the predicate has no marking that specifically indicates tense. Combinations of mood and aspect are used to signal relations in time. For event predicates, the realis mood plus the neutral aspect is used to indicate the past, while the realis mood plus the progressive aspect can indicate either the past or the present.

- (77)a. Pues anai humihut guatu, ha hunguk atyu na
then when AGR.near to.there AGR.hear that L

bos tãotão i uma'apatti.
voice.L person the AGR.RECP.share.PROG

'Then when he got close, he heard those voices of (two) people who were dividing something.' (from a tape-recorded narrative)

- b. Bula tiempu en gagasta put esti na impottântin
much time AGR.spend.PROG about this L important.L
cho'chu'.
work

'You (pl.) are spending a lot of time on this important task.'

For state predicates, the realis mood can indicate either the past or the present.

- (78)a. Ti ha tungu' i asaguã-hu.

not AGR.know the spouse-AGR

'My wife didn't know.' (Cooreman 1983: 180)

- b. Ni guãhu mismu ti hu tungu' hãfa gaigi gi
even I same not AGR.know what? AGR.be.at LCL
tattin pettan gima'-ñiha.
behind.L door.L house-AGR

'Not even I myself know what lies behind the doors of their houses.' (*Saipan Tribune* December 10, 1998)

The irrealis mood is used to indicate the future for all types of predicates (see 2.2.3.2).

2.3 Further reading

See Safford (1903; 1904; 1905) and Topping and Dungca (1973) for other views of the form of Chamorro predicates, and Chung and Timberlake (1985) for further discussion of the uses of aspect and mood in Chamorro.

3

CLAUSES

The basic structure of Chamorro clauses is discussed here, including the grammatical relations borne by arguments to the predicate, the form and function of some common types of adjuncts, and word order.

3.1 Predicates, arguments, and adjuncts

The main ingredients of a clause are a predicate and arguments. Predicates describe an event or a state (see Chapter 2). Arguments are constituents that name the participants in the event or state described by the predicate. The clause in (1a) contains the predicate *sangãni* ‘tell’ plus three arguments: the noun phrase *si nanã-hu* ‘my mother’, the pronoun *yu* ‘I’, and the embedded clause *na ti siña bai in patcha* ‘that we (excl.) could not touch it’. *Si nanã-hu* names the one who does the telling, the embedded clause names what is told, and *yu* names the one who it is told to. The clause in (1b) contains the predicate *ma’ã’ñão* ‘afraid’ plus two arguments: *yu* ‘I’, which names the one who experiences fear, and *as nanã-mu* ‘your mother’, which names what is feared.

- (1) a. Ha sangãni yu’ si nanã-hu na ti siña bai in
 AGR say.to me UNM mother-AGR COMP not can AGR
 patcha.
 touch
 ‘My mother would tell me that we (excl.) could not touch it.’ (LSS 426)
- b. Ma’ã’ñão yu’ as nanã-mu.
 AGR afraid I OBL mother-AGR
 ‘I’m afraid of your mother.’

The predicate dictates the structure and function of its arguments, including their grammatical relations: which argument is realized as the subject, which as the direct object, and so on. For the predicate *ma’ã’ñão* ‘afraid’, the argument that names the experiencer of fear is realized as the subject (*yu* ‘I’ in (1b)) and the argument that names what is feared is realized as an oblique (*as nanã-mu* ‘your mother’ in (1b)). Predicates can

differ in the grammatical relations used to realize their arguments. For instance, the predicate *ma'a'ñãgui* ‘fear, afraid of’, which is derived from *ma'a'ñão*, has the same two arguments as *ma'a'ñão*: one that names the experiencer of fear and another that names what is feared. But the argument that names what is feared is realized as the direct object, not as an oblique; see (2).

- (2) Hu ma'a'ñãgui si nanã-mu.
 AGR *fear* *UNM* *mother-AGR*
 ‘I fear your mother.’

The arguments of a predicate can be *null*: they do not have to appear as independent, overt (pronounced) constituents if their reference can be determined from context (see 8.4). In (2), the argument that names the experiencer of fear does not appear as a separate subject noun phrase, but the verb agrees with this null subject, and the agreement reveals that the one who experiences fear is the speaker. In (3), the argument that names what was touched is not realized as a separate direct object noun phrase and does not trigger any agreement. The discourse reveals that the one that was touched was a sick child.

- (3) Hu patcha — kalintura.
 AGR *touch* *AGR* *feverish*
 ‘I touched him—he had fever.’ (LSS 340)

In the minimal clauses discussed in 2.1, all the arguments are null.

In addition to the predicate and its arguments, the clause can include adjuncts—constituents that supply additional information about the event or state and its participants. Adjuncts can be used to specify location in time and space, frequency, duration, manner, degree, purpose, result, and so on. The adjuncts in the clauses below are the location phrase *gi espitât* ‘in the hospital’, the time phrases *un puengi* ‘one night’ and *put fin* ‘in the end, finally’, and the purpose clause *para u akumprendi* ‘so they could come to an understanding’.

- (4) a. Gi espitât ha guifi si San Roque un puengi.
 LCL *hospital* *AGR* *dream* *UNM* *San Roque* *one night*
 ‘In the hospital she dreamt of San Roque one night.’ (LSS 216)

- b. Umafana' put fin i dos para u akumprendi.
AGR.RECP.face because end the two FUT AGR RECP.understand
 'Finally the two faced each other to come to an understanding.'
 (CD, entry for *áfana*)

3.2 Grammatical relations

The predicate's arguments bear grammatical relations to the clause. Three grammatical relations are discussed here: subject, direct object, and oblique.

3.2.1 Subject

The subject is the most prominent constituent of the clause. Every Chamorro clause has a subject, which is typically one of the predicate's arguments. In (5a), the subject is the noun phrase *si nanâ-hu* 'my mother', which names the one who did the touching; in (5b), it is the pronoun *hâo* 'you', which names the one who was told.

- (5) a. Ha patcha si nanâ-hu i sanhilu' i hetnu'.
AGR touch UNM mother-AGR the DIR.above.L the oven
 'My mother touched the top of the incubator.' (EM 92)
 b. Sinangâni hâo as Miguel.
AGR.PASS.say.to you OBL Miguel
 'You were told by Miguel.'

The complex sentence in (6) contains two clauses (enclosed in brackets), each of which has a subject. *Esti* 'this' is the subject of the main clause (*klâru esti ginin as nanâ-hu* 'this is clear from my mother'); it names what is clear. The null first person plural inclusive pronoun is the subject of the embedded clause (*siña ta âmti* 'we can heal them'); it names the ones who do the healing.

- (6) [Klâru esti ginin as nanâ-hu] na ... [siña ta
AGR.clear this from OBL mother-AGR COMP can AGR
âmti].
heal
 'This is very clear from my mother, that...we (incl.) can treat them.'
 (LSS 318)

Although the subject is typically one of the predicate's arguments, this is not always the case. Clauses formed from a weather predicate, such as *uchan* 'rain' (see (7a)), have a null, meaningless placeholder known as a

dummy as their subject (see 14.2.1). The same is true of clauses formed from the existential verbs *guaha* ‘exist’ and *tāya* ‘not exist’ (see (7b)). Existential clauses have a dummy subject even though they also have an argument that names what exists or does not exist—for instance, the morning glory flowers in (7b) (see 14.2.2).

- (7) a. U’uchan.
 rain.PROG
 ‘It’s raining.’
 b. Guaha kulot ā’paka’, asut yan lila na floris
 AGR.exist color.L white blue and purple L flowers.L
 abubu.
 abubu
 ‘There are white, blue and purple-colored morning glory flowers.’
 (CD, entry for *abubu*)

In the raising construction (see 21.3), the subject of the main clause—*i famagu’un* ‘the children’ in (8)—is an argument of the *embedded* predicate (*yiluluk* ‘rub’).

- (8) Manpāra i famagu’un [yumiluluk i ataduk-ñiha].
 AGR.stop the PL.child INF.rub the eye-AGR
 ‘The children stopped rubbing their eyes.’

It is easy to identify the subject when the predicate is a verb or adjective: the subject is the constituent that the verb or adjective agrees with (see 2.2.2). If imperatives are set aside, this generalization has no exceptions.¹ Consider (5) and (6) again. The verb *patcha* ‘touch’ (5a) shows 3 sg. agreement with the subject *si nanā-hu* ‘my mother’; the verb *sinangāni* ‘be told’ (5b) shows sg. agreement with the subject *hāo* ‘you’; and the adjective *klāru* ‘clear’ in (6) shows sg. agreement with the subject *esti* ‘this’. Dummy subjects are treated as third person singular for agreement purposes, as (9) shows.

- (9) a. Para u uchan agupa’.
 FUT AGR.rain tomorrow
 ‘It’s going to rain tomorrow.’

¹ The verb of an imperative clause does not show person-and-number agreement (see 15.2.1), so if this verb is transitive, it does not show agreement at all.

- b. Debi di u guaha guãfi ni maninila'.
should PRT AGR exist fire COMP AGR.lighted.PROG
 'There should be a fire that is burning.' (from a tape-recorded narrative)

Chamorro has many other generalizations that distinguish the subject from other constituents of the clause. For instance:

The understood constituent in an infinitive clause—the constituent that must be missing—is always the subject (see 21.2.2). The infinitive clause is bracketed in (10).

- (10) Maila' ta acha'igi [gumãнна i premiu].
come AGR compete INF.win the prize
 'Let us (incl.) compete to win the prize.' (CD, entry for *achá'igi*)

The constituent that must be missing in an imperative clause is always the subject (see 15.2).

- (11) Fañuha nãya guini.
AGR.move.away for.awhile here
 'Move away (pl.) from here for awhile.' (LSS 478)

The subject is the only one of the predicate's arguments that cannot be a negative concord item (see 17.3).

Further, the subject is the only one of the predicate's arguments that must have wide scope with respect to sentence negation (see 17.4). To see this, consider the meaning of the clause in (12). This clause does not say that fewer than three children came to the party (i.e. the party was poorly attended by children). Instead, it says that there were three children who didn't come to the party—a meaning that leaves open the possibility that the party was attended by many (other) children.

- (12) Ti manmãttu tres na famagu'un gi giput.
not AGR.arrive three L PL.child LCL party
 'Three children didn't come to the party.'

Two facts about the subject in Chamorro should be emphasized at this point. First, the subject does not have to be a noun phrase. Under the right circumstances, it can be a finite embedded clause or an infinitive clause (see Chapters 20 and 21). Second, the subject does not have to name an agent or instigator of the event. Consider the clauses below. Each of these clauses has

a predicate constructed from the root *sangan* ‘say’, but a subject that names a different participant in the event of saying. In (13a), the subject (the null first person singular pronoun) names the one who says something to someone; in (13b), the subject (*håfa* ‘anything’) names what is said; and in (13c), the subject (*hamyu* ‘you (pl.)’) names the ones who it is said to (see 3.1).

- (13)a. Ya bai hu sangani hao put famagu’un.
and.then AGR say.to you about PL.child
 ‘And then I’ll tell you about children.’ (EM 79)
- b. Yanggin hafa pa’gu masangan gi halum i
if anything now AGR.PASS.say LCL inside.L the
familiak-ku ...
family-AGR
 ‘If anything now was said within my family...’ (Dibota 4)
- c. Kao mansinangani hamyu ni famagu’un nu atyu na
Q AGR.PASS.say.to you.PL OBL PL.child OBL that L
istoria?
story
 ‘Were you (pl.) told that story by the children?’

3.2.2 Direct object

The direct object is the other important grammatical relation in Chamorro besides the subject. But whereas every Chamorro clause has a subject, only clauses formed from certain verbs have a direct object. Verbs that take a direct object are called *transitive*. All other verbs—as a matter of fact, all other predicates, whether they are verbs, adjectives, or nouns—are *intransitive*. These terms can also be applied to clauses: clauses formed from a transitive verb are *transitive*, and all other clauses are *intransitive*.

The presence or absence of a direct object is typically revealed by the form of the predicate’s agreement with the *subject*. If the agreement is chosen from the paradigms for transitive verbs (see 2.2.2.1), then the clause has a direct object, although the agreement does not indicate what that direct object is. In the clauses below, the agreement is in boldface; the direct object is *esti* ‘this’ in (14a) and a null third person plural pronoun in (14b).

- (14)a. Yanggin **ta** pula’ esti gi finu’ English ...
if AGR translate this LCL speech.L English
 ‘If we (incl.) translate this into English...’ (EM 105)
- b. **Ha** na’fanhohomlu’.
AGR make.AGR.healed.PROG
 ‘She (habitually) healed them.’ (LSS 201)

If the agreement is chosen from the paradigms for intransitive verbs and adjectives, then the clause has no direct object. This means that in (15), the place name *Saipan* is not a direct object, but an oblique.

- (15) Yanggin **manggaigi** hit Saipan
 if *AGR.be.at* *we.INCL* *Saipan*
 ‘If we (incl.) are in Saipan...’ (EM 112)

Except in imperatives, the absence of agreement on the predicate means that the clause has no direct object.² In (16), the noun phrase *i tenda* ‘the store’ is not a direct object, but the object of the preposition *para* (see 4.3.2).

- (16) Para i tenda ham gi una ora.
 to *the store* *we.EXCL* *LCL one hour*
 ‘We (excl.) are heading to the store in an hour.’

Certain transitive verbs, including *ga’ña-* ‘prefer’, *ga’o-* ‘prefer’, and *ya-* ‘like’, exceptionally show agreement with the subject through the suffixes used on nouns to show agreement with the possessor (see 14.4). These verbs are nonetheless transitive, and clauses formed from them have a direct object. In (17), the direct object of *ya-* is *i nuebu na gimã’-ña* ‘his new house’.

- (17) **Ya-ña** si Pito i nuebu na gimã’-ña.
 like-AGR *UNM* *Pito* *the new* *L* *house-AGR*
 ‘Pito liked his new house.’ (*Pito* 4)

What else can be said about the direct object? The direct object realizes the same argument of the verb as the subject of the corresponding passive (see 10.2.2.1). This systematic relationship is illustrated by the transitive clause in (18a), which has *esti na dotsi* ‘this wild passionfruit’ as its direct object, and the corresponding passive in (18b), which has *esti na dotsi* as its subject.

- (18)a. Ha kãnnu’ i paluma esti na dotsi.
 AGR eat *the bird* *this L* *passion.fruit*
 ‘The bird ate this wild passion fruit.’

² Verbs of imperative clauses systematically lack person-and-number agreement, but can be transitive; see note 1.

- b. Kinannu' ni paluma esti na dotsi.
 AGR.PASS.eat OBL bird this L passion.fruit
 'This wild passion fruit was eaten by the bird.'

Chamorro has further generalizations that differentiate subject and direct object noun phrases from other constituents. Subject and direct object noun phrases are the only arguments of the predicate that are always in the unmarked case and never immediately preceded by a preposition (see 5.1.2.1). This is true, for instance, of the direct object *atyu i balutan* 'that package' in (19).

- (19) Ha baba atyu i balutan i dos umasagua.
 AGR open that the package the two AGR.married
 'The couple opened that package.' (Cooreman 1983: 107)

Subject and direct object noun phrases are the only constituents that can be realized as weak pronouns, such as *yu* 'I' in (20a) and *hào* 'you (sg.)' in (20b) (see 8.3).

- (20)a. Sigi yu' di ha sangani na hassu si
 AGR.keep.on me PRT AGR.say.to COMP remember UNM
 Yu'us.
 God
 'She kept on telling me, remember God.' (Cooreman 1983: 177)
- b. Ya-hu hào.
 like-AGR you
 'I like you.'

Direct objects differ from subjects, however, in that they are always arguments—more precisely, arguments *of verbs*—but the verb never agrees with them. Taken together, these generalizations do a reasonable job of distinguishing direct object noun phrases from other constituents.

The situation is different when the direct object is a finite embedded clause or infinitive clause. Then, the most reliable diagnostic for direct objecthood is the form of the predicate's agreement with the subject. In (21), the form of agreement on *chagi* 'try' reveals that the main clause has a direct

object, which in this case is the infinitive clause *tuma'lu tatti* 'to come back again'.³

- (21) Guãhu mismu hu chagi tuma'lu tatti.
I same AGR try INF.again back
 'I myself tried to come back again.' (NT 377)

3.2.3 Obliques

The term *oblique* is used here to refer to the grammatical relations borne by all arguments of the predicate besides the subject and direct object. These arguments are diverse. What unites them that they are not subjects or direct objects.

The obliques include any argument of an intransitive verb, adjective, or noun besides the subject. This argument can name a location, goal, source, instrument, beneficiary, and so on, as is suggested by the examples in (22). (The obliques in the sentences below are represented in boldface.)

- (22)a. Manmatâta'chung i famagu'un **gi bangkun anâkku'**.
AGR.sit.PROG the PL.child LCL bench.L long
 'The children are sitting on the long bench.' (CD, entry for *bângku*)
- b. Bula nâ'yi manggaigi ni ti maulik **para**
AGR.many add AGR.be.at COMP not AGR.good for
i tataotão i taotão.
the body.L the person
 'There are lots of additives [in the food] that are not good for a person's body.' (LSS 259)
- c. Ti uma'andi' si Maria **gi as Juan.**
not AGR.flirt.PROG UNM Maria OBL Juan
 'Maria is not flirting with Juan.'
- d. Mahâlang yu' **nu hâgu,** asaguã-hu.
AGR.lonely I OBL you spouse-AGR
 'I missed you very much, my love.' (CD, entry for *mahâlang*)

The obliques associated with intransitive verbs include agents of passive verbs (see 10.2.2.1).

³ Compare (26b), in which the form of agreement on *malagu* 'want' reveals that the main clause is intransitive, and therefore the infinitive clause is an oblique.

- (23) Inisgaihun pãpa' **ni un ga'lågu.**
AGR.PASS.guide down OBL a dog
 'He was guided by a dog.' (Cooreman 1983: 14)

They also include oblique objects of antipassive verbs (see 10.3).

- (24) Mañãñakki i dos **maseha hãfa ni siña**
AGR.steal.PROG the two at.all anything COMP can
ma bendi.
AGR.sell
 'The two habitually stole whatever they could sell.' (from a tape-recorded narrative)

The obliques also include any argument of a transitive verb besides the subject and the direct object. Once again, this argument can name a location, goal, source, instrument, beneficiary, and so on. Certain types of transitive verbs have more than two arguments and, therefore, usually have obliques. These include verbs of transfer (as in (25b)), verbs of putting and placing (25c), and causatives formed by attaching the causative prefix *na'* to a transitive verb (25d).

- (25)a. Para u goddi **ni patma bendita.**
FUT AGR.tie OBL palm blessed
 'She would tie it with the blessed palm.' (Cooreman 1983: 16)
- b. In risibi rikesa **ginin i mañainan-mãmi.**
AGR.receive wealth from the PL.parent-AGR
 'We (excl.) inherited wealth from our (excl.) parents.' (CD, entry for *rikesa*)
- c. Piót yanggin para ta pula' **gi finu'**
especially if FUT AGR.translate LCL speech.L
English.
English
 'Especially if we (incl.) are going to translate it into English.' (EM 143)
- d. Ma na'håtmi hit **ni gima'.**
AGR.make.trespass us.INCL OBL house
 'They made us (incl.) enter the house illegally.'

Unsurprisingly, different types of constituents can serve as obliques, including noun phrases that are marked for case (e.g. (22a)), noun phrases that are not case-marked (24), and prepositional phrases (25b). Finite

embedded clauses and infinitive clauses can also serve as obliques. The finite embedded clause in (26a) is an oblique associated with the transitive verb *sangâni* ‘tell’; the infinitive clause in (26b) is an oblique associated with the intransitive verb *malagu* ‘want’.

- (26)a. Ha sangâni i gubetnu na esta gui’
AGR.say.to the governor COMP already he
mañodda’ nubiâ-ña.
AGR.ANTIP.find girlfriend-AGR
 ‘He told the governor that he had already found a girlfriend.’
 (Cooreman 1983: 193)
- b. Manmalagu’ ham mana’lu tâtti giya
AGR.want we.EXCL AGR.INF.again back LCL
hamyu.
you.PL
 ‘We (excl.) wanted to come back to you (pl.).’ (NT 377)

Finally, a clause has exactly one subject and can have at most one direct object, but it can have more than one oblique. The clause in (27), which is formed from the antipassive of the verb *nâ’i* ‘give’, has two obliques: *rigâlu* ‘a gift’ and *guatu gi as Carmen* ‘to Carmen’.

- (27) Kâo mannâ’i hâo rigâlu guatu gi as Carmen?
Q AGR.ANTIP.give you gift to.there LCL Carmen
 ‘Did you give a present to Carmen?’

3.3 A brief survey of adjuncts

Adjuncts are constituents that supply further information about the event or state and its participants. Unlike the predicate and its arguments, adjuncts are always optional. They can be realized in various ways; as noun phrases, prepositional phrases, finite embedded clauses, or adverbs. (Chamorro has no productive way of forming adverbs; see Chapter 18.) Adjuncts are usually classified according to meaning, and that is the approach taken here. The most common types of adjuncts specify location in space (3.3.1), location in time (3.3.2), duration (3.3.3), frequency (3.3.4), and manner (3.3.5). Some further types of adjuncts are mentioned in 3.3.6. Ways of conveying frequency and manner that do not involve adjuncts are discussed in 3.3.7.

3.3.1 Location in space

Adjuncts that specify location in space are usually realized as noun phrases in the local case. The complex sentence below contains two adjuncts of this type (in boldface): the demonstrative *guatu* ‘over there’ in the main clause and *gi gualu* ‘at the farm’ in the embedded clause.

- (28) Ha li’i’ **guatu** i ma’gas na guaha
AGR.see over.there the boss COMP AGR.exist
 machocho’chu’ **gi gualu** dos ânghit.
AGR.work.PROG LCL farm two angel
 ‘The boss saw over there that there were two angels working on the farm.’ (Cooreman 1983: 159)

Adjuncts that specify location in space are often formed from local nouns, such as *hâlum* ‘inside’, *pâpa* ‘bottom, below’, *tâtiti* ‘back, behind’, or *uriya* ‘surrounding, around’ (see 5.3). Local nouns have a possessor that identifies the reference point for the location, as (29) shows.

- (29)a. Un diha anai mamomokkat i biha **gi halum**
one day when AGR.walk.PROG the old.woman LCL inside.L
i hatdin ...
the garden
 ‘One day when the old lady was walking inside the garden...’
 (Mannge’ 3)
- b. Sigi i lalû ha bengbingi yu’ **gi uriyan**
AGR.keep.on the fly AGR.buzz.at me LCL around.L
lamasa.
table
 ‘The fly kept on buzzing at me around the table.’ (CD, entry for *bengbingi*)

Adjuncts can also specify location in a more abstract sense—for instance, by identifying the domain with respect to which a state holds. In (30), the noun phrase *gi bandan guâlû* ‘in the area of farming’ specifies in what respect the people of Rota are skilled.

- (30) Mampraktiku i taotâo Luta gi bandan guâlû.
AGR.skilled the people.L Luta LOC.side.L farm
 ‘The people of Rota are skilled in the area of farming.’ (CD, entry for *praktiku*)

3.3.2 Location in time

Adjuncts that specify location in time can take various forms. They can be realized as adverbs, such as *ântis* ‘before’.

- (31) *Ântis* i kuttura yan i linguâhi mapratitika
before the culture and the language AGR.PASS.practice.PROG
 yan ma’infisisa mampus.
and AGR.PASS.enforce.PROG so.much
 ‘In the past, culture and language were practiced and enforced.’
 (CD, entry for *ântis*)

They can also be realized as noun phrases, either in the local case (see (32a)) or not case-marked (32b-c).

- (32)a. Ta silelebra i aña nuebu **gi Eneru diha**
AGR.celebrate.PROG the year new LCL January day
unu.
one
 ‘We (incl.) celebrate New Year’s Day on January first.’ (CD, entry for *Eneru*)
- b. **Un biâhi** i famagu’un famagu’on-hu manbatchigu’.
one time the PL.child.L PL.child-AGR AGR.blind
 ‘At one time my grandchildren’s eyes were not opening normally.’
 (LSS 71)
- c. Hâssan **pâ’gu na tiempu** un li’i’ paluman apâka’.
AGR.rare now L time AGR.see bird.L bird.sp
 ‘It is rare to see a white-throated dove nowadays.’ (CD, entry for *apâka*)

Adjuncts that specify location in time can be realized as prepositional phrases, such as *dispues di giput* ‘after the party’.

- (33) Ni châsku ti sopbla **dispues di giput.**
not trace not AGR.left.over after PRT party
 ‘There wasn’t even a trace of anything left after the party.’ (CD, entry for *châsku*)

Finally, they can be realized as adverbial clauses introduced by subordinating conjunctions such as *anai* ‘when (realis)’, *yanggin* ‘when (future, irrealis, habitual), if’, or *gigun* ‘as soon as’ (see 20.4.2).

- (34)a. Pues **anai** **ha atan** **si** **Pedro tâtiti,** ha li'i'
 then when AGR look.at UNM Pedro back AGR see
 na haggan gaigi gi tatten-ña.
 COMP turtle AGR.be.at LCL back-AGR
 ‘When Pedro looked back, he saw that it was a turtle that was
 behind him.’ (Cooreman 1983: 102)
- b. **Yanggin tiempun kamuti,** pues mañâkki
 if time.L sweet.potato then AGR.ANTIP.steal
 i dos kamuti ya ma bendi gi tenda.
 the two sweet.potato and.then AGR sell LCL store
 ‘If it was sweet potato time, then the two stole sweet potatoes and
 sold them at the market.’ (from a tape-recorded narrative)

3.3.3 Duration

Adjuncts that specify duration are typically realized as noun phrases that are not case-marked.

- (35) Ya **dos oras** ti kumalamtin.
 and.then two hours not AGR.move
 ‘And for two hours it didn’t move.’ (EM 52)

They can also be realized as adverbs, such as *tulanotchi* ‘all night’.

- (36) Ti maigu’ i neni **tulanotchi** ni tatkilu’
 not AGR.sleep the baby all.night OBL AGR.high
 kalenturâ-ña.
 fever-AGR
 ‘The baby did not sleep all night because of high fever.’ (CD, entry
 for *tulanotchi*)

3.3.4 Frequency

Like adjuncts of duration, adjuncts that specify frequency can be realized as adverbs (as in (37)) or as noun phrases that are not case-marked (38).

- (37) Esti na istoria, **sessu** si nanâ-hu ha sangâni yu’
 this L story often UNM mother-AGR AGR say.to me
 anai dikiki’ yu’.
 when AGR.small I
 ‘This story, my mother often told it to me when I was little.’ (from a
 tape-recorded narrative)

- (38)a. Na'guaha rispetu **todu i tiempu** gi mañaina-mu.
make.exist respect all the time LCL PL.parent-AGR
 'Have respect for your parents always.' (CD, entry for *na'guaha*)
- b. Yanggin esta ha gimin **dos, tres biâhi** i
when already AGR drink two three times the
amut ...
medicine
 'When [the patient] has taken the medicine two or three times...' (LSS 444)

They can also be realized as embedded clauses. Frequency is expressed in (39) by an adverbial clause introduced by the subordinating conjunction *kada* 'every time that, whenever'.

- (39) Pues **kada humihut gui'**, sumeha tâtti.
then whenever AGR.near she AGR.back.up back
 'Then every time she came near, he backed away.' (EM 98)

Some other ways of expressing frequency are described in 3.3.7.

3.3.5 Manner

Adjuncts that specify manner can be realized as noun phrases in the local case, typically formed from the head noun *manera* 'way'.

- (40)a. Ma'u'usa i imbudu **gi difirentis manera**.
AGR.PASS.use.PROG the funnel LCL different way
 'Funnels are used in different ways.' (CD, entry for *imbudu*)
- b. Mana'ayuda ... **gi maseha hâfa na manera**.
AGR.RECP.help.PROG LCL at.all any L way
 'They help one another in whatever way.' (Alamagan 12)

They can also be realized as adverbs. For another way of expressing manner, see 3.3.7.

- (41)a. **Adumididi'** esta mâmagun i chetnut gi addeng-hu.
gradually already AGR.heal.PROG the wound LCL foot-AGR
 'The sore on my foot is gradually healing.' (CD, entry for *adumididi'*)
- b. Hu balâha i balâha **chaddik**.
AGR.shuffle the cards fast
 'I shuffled the cards in a hurry.' (CD, entry for *balâha*)

3.3.6 Further types

Among the many other types of Chamorro adjuncts are:

(i) Adverbs that specify modal or aspectual notions, including *fà'na'an* 'perhaps', *mohon* (a desiderative or contrary-to-fact adverb), *nâya* 'yet, for awhile', *siempri* 'certainly, surely', and *trabiha* 'still, yet' (see Chapter 18).

- (42)a. Ti o'ora **nâya** i amotsan talu'âni.
 not hour.PROG yet the meal.L afternoon
 'It is not yet time for lunch.' (CD, entry for *nâya*)
- b. Hâfa ti un ikspekta / **Siempri** humâlum gi petta.
 what not AGR.expect surely AGR.go.in LCL door
 'What you do not expect / Will surely come in the door.' (EM 55)

(ii) Degree morphemes, such as *gof* 'very', *mampus* 'so (much), too (much), extremely', and *sen* 'extremely, most' (see Chapter 25).

- (43)a. Ti **gof** klâru.
 not AGR.very clear
 'It wasn't very clear.'
- b. Masen agradesi hâo nu i familia.
 AGR.PASS.extremely appreciate you OBL the family
 'You are really appreciated by the family.' (CD, entry for *sen*)

(iii) Adjuncts that specify accompaniment (see 19.7).

- (44) Hami **yan** si Juan che'lu-hu, humâhanâo
 we.EXCL with UNM Juan sibling-AGR AGR.go.PROG
 ham pâpa' **yan** i asaguan-mâmi.
 we.EXCL down with the spouse-AGR
 'My brother Juan and I were going down with our (excl.) wives.'
 (Cooreman 1983: 183)

(iv) Adjuncts that specify reason.

- (45)a. Ta silelebra esti na guput **put** i
 AGR.celebrate.PROG this L party because the
 hinemlo'-hu.
 NMLZ.healed-AGR
 'We (incl.) are celebrating this party because of my cure.'
 (Cooreman 1983: 71)

- b. Ti hu patcha ni hãfafa **sa'** **ilek-ñiha** **na**
not AGR touch not any.EMP because say-AGR COMP
dididi' **ha'**.
AGR.little EMP
 'I did not touch any of it because they said that there was only a little of it.' (LSS 468)

(v) Adjuncts that specify purpose.

- (46) Hu bãla' i paketi **para** **bai hu li'i'** **hãfa**
AGR unwrap the package FUT AGR see what?
sanhalom-ña.
DIR.inside-AGR
 'I unwrapped the package in order to find out what was in it.' (CD, entry for *bãla'*)

3.3.7 A note on frequency and manner

Although Chamorro has adjuncts that specify frequency and manner, often it conveys these notions through the predicate of a complex sentence.

To illustrate: one very common Chamorro equivalent of 'sometimes' or 'never' involves a complex sentence in which the predicate is an existential verb (see 14.2.2), and the argument of the existential verb is *biãhi* 'time', or a null argument with similar meaning. Information about the situation under discussion is supplied by a relative clause modifying this argument. The result can be translated 'there were (no) times when...'. In the sentences below, the existential verbs are in boldface.

- (47)a. **Guaha** na biãhi na i paluma dumengkut
AGR.exist L time COMP the bird WH[SBJ].peck
 i frutas.
the fruits
 'Sometimes it was the birds that pecked at the fruit.' (EM 89)
- b. **Tãya'** na gaigi si tatã-ña guini
AGR.not.exist COMP AGR.be.at UNM father-AGR LCL.this
 na silebrasion.
L celebration
 'Her father was never at this celebration.' (Trongko 21)

Frequency can also be conveyed through sentence types in which the predicate is a frequency adjective. The predicate of the first clause in (48) is the adjective *sessu* 'frequent, often'; this clause can be literally translated 'in

the past you were frequent to here’. The predicate of the second clause is the adjective *ekalak* ‘rare, seldom’; its subject is the noun phrase *fattom-mu* ‘the way that you arrive’.

- (48) Hagas **sessu** hão mągi, pã’gu **ekalak**
in.past AGR.often you to.here now AGR.rare
fattom-mu.
WH[DJ].arrive-AGR
 ‘You often came here before, now you seldom come.’ (CD, entry for *ekalak*)

Manner, too, is typically conveyed through sentence types in which the predicate is an adjective. In such constructions, information about the situation under discussion is supplied by an infinitive clause or complex noun phrase that serves as an argument of the adjective. The sentences below can be translated ‘Warships are fast to travel in the ocean’ (see (49a)), ‘The way he was injured was very bad’ (49b), and ‘Why was the way she did it like that?’ (49c).

- (49)a. I batkun gera siha manchaddik manhãnao gi tasi.
the ship.L war PL AGR.fast AGR.INF.go LCL sea
 ‘Warships travel fast in the ocean.’ (CD, entry for *bătkun gera*)
- b. Sen **băba** ma’anñan-ña.
AGR.extremely bad WH[DJ].PASS.injure-AGR
 ‘He was very badly injured.’ (CD, entry for *anña*)
- c. Sa’ hăfa na **taiguennăo** bidă-ña?
because what? COMP AGR.like.that WH[DJ].do-AGR
 ‘Why did she do it like that?’ (EM 94)

Notice that in (49a), the adjective *chaddik* ‘fast’ agrees with the subject. The agreement reveals that *chaddik* is the predicate of the clause, and not an adverb. (Compare (41b), where *chaddik* serves as an adverb.) The adjectives *băba* ‘bad’ in (49b) and *taiguennăo* ‘like that’ in (49c) likewise agree with the subject, but that agreement is not realized by any special morphology (see 2.2.2.2.1).

The fact that these constructions occur frequently in Chamorro may be related to lexical resources: as mentioned in Chapter 18, the language has no productive means of deriving adverbs from other parts of speech. (See also 14.2.2 on existential clauses, Chapter 21 on infinitive clauses, and Chapter 24 on relative clauses.)

3.4 Word order

3.4.1 The predicate and its arguments

Chamorro is a predicate-first language. In neutral clauses—clauses that could be used to answer the questions ‘What happened?’, ‘What is the situation?’, or ‘Why?’—the predicate comes first, followed by its arguments.

- (50) Ha po’lu ta’lu tâtti si nanâ-hu i lâta gi
AGR put again back UNM mother-AGR the can LCL
 papa’ i hagun gâlak.
under.L the leaf.L galak
 ‘My mother put the can back again under the galak leaf.’ (EM 98)

The predicate’s part of speech determines the word order of arguments that are independent constituents—noun phrases, prepositional phrases, finite embedded clauses, or infinitive clauses.⁴ The word order of arguments is flexible when the predicate is a verb or adjective, but rigid when the predicate is a noun or preposition.

3.4.1.1 When the predicate is a verb or adjective

When the predicate is a verb or adjective, the order of arguments is flexible. The dominant word order—the word order that occurs most often and is volunteered first in elicitation contexts in fieldwork—is: *Predicate Subject Object Obliques*. (*Object* here refers to the direct object.)

- (51)a. Ha dâggâo i patgun i bola guatu gi taotâo.
AGR throw the child the ball to.there LCL person
 ‘The child threw the ball to the man.’
 b. Ma’a’ñaô si Juan ni ga’lâgu.
AGR.afraid UNM Juan OBL dog
 ‘Juan is afraid of the dog.’
 c. Humânâo guatu si nanâ-hu para i me’nan i
AGR.go to.there UNM mother-AGR to the front.L the
oven
 ‘My mother went to the front of the incubator.’ (EM 92)

⁴ The placement of weak pronouns is determined phonologically (see 8.3).

However, other word orders are possible, particularly for the subject. The subject can occur at the right edge of the clause, so that the word order is: *Predicate Object Obliques Subject*.

- (52)a. Ha dăggăo i bola guatu gi taotăo i patgun.
AGR throw the ball to.there LCL person the child
 ‘The child threw the ball to the man.’
- b. Ha tokcha’ i gatgantăk-ku i te’lang i guihan.
AGR poke the uvula-AGR the bone.L the fish
 ‘The fish bone poked my uvula.’ (CD, entry for *gatgânta*)
- c. Manma’ă’ňăo ni ga’lăgu i famagu’un.
AGR.afraid OBL dog the PL.child
 ‘The children are afraid of the dog.’
- d. Humăňăo guatu ta’lu gi hetnu si nană-hu.
AGR.go to.there again LCL oven UNM mother-AGR
 ‘My mother went over to the incubator again.’ (EM 93)

The subject can also follow the direct object but precede obliques, giving the word order: *Predicate Object Subject Obliques*.

- (53) Para u po’lu i kusăs-ňă siha i ma’estra gi
FUT AGR put the things-AGR PL the teacher LCL
istânti.
shelf
 ‘The teacher is going to put her things on the shelf.’

These word orders, which are quite common, appear to be neutral from the standpoint of information structure.

The same word order options are available when one of the predicate’s arguments is a finite embedded clause or an infinitive clause. Some of the possibilities are illustrated below, with the finite embedded clause or infinitive clause enclosed in brackets.

- (54)a. Ma’ă’ňăo si Chungi’ [na u mătms si
AGR.afraid UNM Chungi’ COMP AGR drown UNM
Kanăriu].
Kanariu
 ‘Chungi’ was afraid that Kanariu would drown.’ (EM 83)
- b. Ha tungu’ i neni [kumunanaf].
AGR know the baby AGR.INF.crawl
 ‘The baby knows how to crawl.’ (CD, entry for *kúnanaŋ*)

- (55)a. Maleffa [para u apâsi i apas kontribusion-ña]
AGR.forget FUT AGR pay the tax-AGR
 si Juan.
UNM Juan
 ‘Juan forgot to pay his taxes.’ (CD, entry for *âpas kontribusión*)
- b. Ti ha tungu’ [gumoddi i sinturon-ña] si Bill.
not AGR know INF.fasten the belt-AGR UNM Bill
 ‘Bill doesn’t know how to fasten his belt.’ (CD, entry for *goddi*)

Certain contexts can favor or require one of these word orders. When it could be ambiguous which noun phrase of a transitive clause is the subject and which is the direct object, speakers often report that the subject must precede the direct object: in other words, the word order *Predicate Subject Object* is forced. This is probably a strong preference but not an absolute requirement, since the word order *Predicate Object Subject* is occasionally judged to be well-formed. Compare (56a), in which the subject *si Carmen* precedes the direct object *i lalâhi* ‘the men’, with the unexpected (56b).⁵

- (56)a. Ha apâpasi si Carmen i lalâhi singku pesos.
AGR pay.PROG UNM Carmen the PL.man five dollars
 ‘Carmen is paying the men five dollars.’
- b. Ha apâpasi i lalâhi singku pesos si Carmen.
AGR pay.PROG the PL.man five dollars UNM Carmen
 ‘Carmen is paying the men five dollars.’

The fact that the word order *Predicate Subject Object* is strongly preferred or required in cases of potential ambiguity suggests that this is the unmarked word order.

On the other hand, there may be a preference for the word order *Predicate Object Subject* when the direct object contains a reflexive possessor pronoun that is bound by the subject (see 13.2.1.1). But this preference, if it exists at all, is slight. (The reflexive possessor and its antecedent are underlined in the English translations below.)

⁵ In this example, either *si Carmen* and *i lalâhi* could be taken to be the subject. Both noun phrases are in the unmarked case, and both could be cross-referenced by the 3 sg. agreement on the verb, since 3 sg. agreement can be used to cross-reference a plural subject that is collective (see 2.2.2.1). Both noun phrases also name individuals who might plausibly pay money.

- (57)a. Ha latchai i na'-ña i taotão.
AGR consume the food-AGR the person
 'The man had consumed his food.' (Cooreman 1983: 80)
- b. Ma na'pâkpak kannai-ñiha i aodensia.
AGR make.clap hand-AGR the audience
 'The audience clapped their hands.' (CD, entry for *aodensia*)

Still more word order options are available to the direct object. In addition to the word orders just described, the direct object can follow an oblique. Many naturally-occurring examples of this pattern involve an oblique noun phrase that is introduced by the null indefinite article. In (58), *i chalan-mâmi* 'our (excl.) road' is the direct object and *bâras* 'gravel' is the oblique.

- (58) Ha nâ'yi i taotão bâras i chalan-mâmi.
AGR add.to the person gravel the road-AGR
 'The man put gravel on our (excl.) road.' (CD, entry for *bâras*)

It remains unclear exactly when this word order is allowed, and how it interacts with the different word order options for the subject.

The overall message is that the word order of clauses formed from verbs or adjectives is flexible. The word orders described above range from very frequent (as in (51)) to reasonably frequent (58); all are attested in naturally-occurring data. But once one goes beyond these patterns, it can be hard to determine whether a particular word order seems natural or is merely conceivable.

3.4.1.2 When the predicate is a noun or preposition

When the predicate is a noun or a preposition, the word order is *Predicate-Phrase Subject*, where *Predicate-Phrase* refers to the entire noun phrase or prepositional phrase formed from the predicate and its dependents. This phrase includes the predicate's arguments—except for the subject—as well as modifiers and other material. In the clauses below, the predicate is a noun and the predicate phrase is enclosed in brackets. (In (59d), the weak pronoun *yu* 'I', which is the subject, occurs inside the predicate phrase; see 8.3.)

- (59)a. [Putlumenus benti singku âñus] idat-ñiha.
at.least twenty five years age-AGR
 'They [should] be at least twenty-five years old (lit. their age should be at least twenty-five years).' (*Estoria-Hu* 5)

- b. [Kandit-ñiha i taotão mo'na] esti.
lamp-AGR the person.L before this
 'These were the lights of the ancient people.' (Cooreman 1983: 5)
- c. Para [batanggan karabão] esti.
FUT sled.L carabao this
 'This is going to be a carabao sled.' (CD, entry for *batangga*)
- d. Guãhu lokkui', [un tãotão yu' ni guaha
I also a person I COMP AGR.exist
manma'gãs-hu siha.
PL.boss-AGR PL
 'I, too, am a person who has masters.' (NT 13)

In (60a) and in the embedded clause of (60b), the predicate appears to be a preposition (but see 4.3.2).

- (60)a. [Disdi i apuya' para hulu'] pãttin i matlina.
from the navel to above portion.L the godmother
 'The godmother's portion is from the navel up.' (Cooreman 1983: 41)
- b. Ha li'i' na [ginin i Gima' Yuyu'us] si
AGRsee COMP from the house.L God.PROG UNM
nanã-ña guatu.
mother-AGR to.there
 'She saw that her mother was heading from the church.' (Dibota 7-8)

The word order just illustrated is fixed: the subject cannot immediately follow the predicate but precede the other arguments. This is why (61a) is unambiguous and (61b) is ungrammatical. (Note that examples introduced by an asterisk (*) are ungrammatical; Chamorro language material that is ungrammatical is in red.)

- (61)a. Kão patgon-ña si Dolores atyu na ma'estra?
Q child-AGR UNM Dolores that L teacher
 'Is that teacher Dolores's child?' (Not: Is Dolores that teacher's child?)
- b. *Disdi pãttin i matlina i apuya' para hulu'.
from portion.L the godmother the navel to above
 ('The godmother's portion is from the navel up.')

Clauses formed from nouns or prepositions differ from clauses formed from verbs or adjectives in this respect.

The fact that predicates that are nouns or prepositions form a phrase with their dependents raises the question of whether predicates that are verbs or adjectives might do the same. Do they combine with their dependents to form verb phrases and adjective phrases? The coordination patterns described in 19.6 suggest that they do. This means that an account must be given of the word order options in 3.4.1.1, some of which evidently allow the subject to come in the middle of a verb phrase or adjective phrase.

3.4.2 Adjuncts

The word order of adjuncts is largely flexible. The most common types of adjuncts can occur at the left or right edge of the clause, regardless of whether they are realized as adverbs, noun phrases, prepositional phrases, or adverbial clauses. Except for embedded clauses, many of these adjuncts can also occur after the predicate (in clauses formed from verbs or adjectives) or after the predicate phrase (in clauses formed from nouns or prepositions). Other word orders may be possible as well.

- (62)a. **Yanggin maipi i ha'ani**, falak esti na trongku
if AGR.hot the day go.to this L tree
 ya un lihing **gi papá'-ña sa' sen**
and.then AGR.shelter LCL below-AGR because AGR.extremely
fresku.
cool
 'If it's a hot day, go to this tree and take shelter under it because it's extremely cool.' (Alamagan 19)
- b. Manmasusesedi **sessu gi intri i difirentis**
AGR.PASS.experience.PROG often LCL among the different
lingguâhi siha gi tanu'.
language PL LCL earth
 '[Borrowings] often occur among the different languages of the world.' (EM 113)

A few types of adjuncts have a more restricted distribution:

The desiderative or contrary-to-fact adverb *mohon* immediately follows the constituent it modifies, so it cannot occur at the left edge of the clause. (See Chapter 18 for discussion of adverbs and their word order.)

- (63) Kulang **mohon** sinientin matarabiran tânu'.
seems.like UNREAL NMLZ.feel.L NMLZ.PASS.turn.L earth

‘It seems like the feeling of the earth spinning.’ (CD, entry for *matarabiran tãnu*)

Even though they are written as independent words, the degree morphemes *gof* ‘very’ and *sen* ‘extremely, most’ are stressed prefixes. These prefixes attach to the left of an adjective or verb, immediately after the agreement. (See Chapter 25 for discussion of degree morphemes.)

- (64)a. *Todu nina’in Yu’us mansen mǎolik.*
all gift.L God AGR.extremely good
 ‘All gifts from God are very good.’ (CD, entry for *nina’i*)
- b. *I amigã-hu ha sen honggi i paktu.*
the friend-AGR AGR.extremely believe the magic
 ‘My girlfriend really believes in magic power.’ (CD, entry for *paktu*)

Adjuncts that specify accompaniment occur somewhere to the right of the predicate, unless they are syntactically focused or part of a syntactically focused constituent (see 19.7).

- (65) *Istãba un biha na sumãsaga gi un*
AGR.used.to.be a old.woman COMP AGR.live.PROG LCL a
guma’ dikiki’ yan i ga’-ña katun ã’paka’ ...
house.L small with the pet-AGR cat.L white
 ‘There was an old lady who lived in a little house with her white cat...’ (*Mannge*’ 1)

Finally, adjuncts that specify purpose typically occur somewhere to the right of the predicate, as (66) shows.

- (66) *Ta arienda i tanu’ kosa ki siña hit*
AGR.lease the land so.that can we.INCL
mulalibiãnu.
AGR.a.little.more.easy
 ‘We (incl.) will lease the land so that our (incl.) lives can be a little easier.’ (CD, entry for *arienda*)

3.4.3 Summary

Although the word order of Chamorro clauses is too flexible to be neatly summarized in a single word order template, many of the facts just discussed

are captured by the templates below. In these templates, *x* is used to mark the most common locations for adjuncts.

- (67) WORD ORDER OF CHAMORRO CLAUSES (FIRST PASS)
- a. Dominant word order of clauses formed from verbs or adjectives
x Predicate x Subject Object Obliques x
 - b. Word order of clauses formed from nouns or prepositions
x Predicate-Phrase x Subject x

These templates are revised and slightly expanded in 4.1.

3.5 Further reading

The material described here is discussed in almost all previous grammars of Chamorro. For further discussion from the perspective taken here, see Chung (1998).

4

MORE ABOUT CLAUSES

The predicate of the clause can be preceded by negation and a marker of tense-aspect-mood. The tense-aspect-mood markers are described; then, clauses whose predicates are nouns or prepositions are scrutinized more carefully.

4.1 Negation, tense-aspect-mood, and word order

In addition to the predicate, its arguments, and adjuncts, the clause can contain two further elements: the sentential negative *ti* ‘not’ and a marker of tense-aspect-mood (henceforth TAM). The TAM precedes the predicate, and the negative *ti* precedes the TAM. This information is incorporated below into the word order templates from the end of Chapter 3. (Recall that *x* is used to mark the most common locations for adjuncts.)

- (1) WORD ORDER OF CHAMORRO CLAUSES (FINAL VERSION)
 - a. Dominant word order of clauses formed from verbs or adjectives
x Negative TAM Predicate x Subject Object Obliques x
 - b. Word order of clauses formed from nouns or prepositions
x Negative TAM Predicate-Phrase x Subject x

Clauses formed from verbs or adjectives allow a range of word orders (see 3.4.1.1). The template in (1a) shows the dominant word order for clauses of this type.

Negation in Chamorro is discussed in Chapter 17. The realizations of the TAM are documented below.

4.2 Tense-aspect-mood markers

4.2.1 Form

In Chamorro, the predicate supplies basic information about the tense, aspect, and mood of the clause. Every predicate is marked for neutral versus progressive aspect; predicates that are verbs or adjectives are also marked for realis versus irrealis mood (see Chapter 2). The TAM contributes further information about tense, aspect, and mood. The TAMs include *para*, which indicates future or subjunctive mood; *ginin*, which indicates imperfect tense-

aspect; and the modals *siña* ‘can, possible’ and *debi (di)* ‘should, ought to’. Typically, the TAM restricts the mood of the predicate it combines with. *Para* and *debi (di)* combine only with irrealis predicates; *ginin* combines only with realis predicates; and *siña* typically combines with a realis predicate (but see below and 4.2.2.3). This information is summarized in (2).

(2) SOME TENSE-ASPECT-MOOD MARKERS

	<i>Meaning of TAM</i>	<i>Mood of predicate</i>
<i>para</i>	future, subjunctive	irrealis
<i>ginin</i>	imperfect	realis
<i>siña</i>	‘can, possible’	realis (typically)
<i>debi (di)</i>	‘should, ought to’	irrealis

The assumption here is that the TAM is an optional element of the clause. If one assumes instead that every clause has a TAM, then Chamorro also has a TAM that is null (not pronounced) and can combine with realis or irrealis predicates.

Two TAMs are homophonous with prepositions. The future/subjunctive *para* is homophonous with the preposition *para* ‘to, for’; the imperfect *ginin* is homophonous with the preposition *ginin* ‘from’ (see 5.2).

The other two TAMs can be called auxiliaries, meaning that they have some but not all of the characteristics of verbs or adjectives.

Siña ‘can, possible’ resembles a verb or adjective in certain respects. It can combine with the causative prefix *na* ‘-’, which otherwise attaches only to verbs or adjectives.

- (3) Kumu un nã'i ânimu, un na'siña chumo'gui maseha
if AGR give effort AGR make.can INF.do at.all
 hãfa.
anything
 ‘If you give it all you got, you’ll be able to do anything.’ (CD, entry for *na'siña*)

It can have the word order of a verb or adjective: it can be immediately followed by the subject (represented in boldface below).

- (4) Ti siña **i biha** chumotchu pãn royu,
not can the old.woman AGR.ANTIP.eat bread.L roll
 solu ha sumai gi kafe.
only AGRsoak LCL coffee

‘The old lady cannot eat toasted bread unless she soaks it in coffee.’
(CD, entry for *pân royû*)

Finally, *siña* by itself can form a minimal clause. In the most deeply embedded clause of (5) (enclosed in brackets), *siña* is the only plausible candidate for the predicate.

- (5) Si Pâli’ ha pâpagat todû i taotâo siha
UNM priest AGRpreach.PROG all the person PL
na u fanmanaitai [amânu siña].
COMP AGRAGR.ANTIP.pray wherever can
‘The priest is preaching to the people to pray as much as they can.’
(CD, entry for *pâgat*)

(Although the English translation of this example makes use of verb phrase ellipsis, Chamorro does not have this type of ellipsis. A more accurate translation of minimal clauses like (5) might be ‘(it is) possible’.)

In other respects, *siña* more closely resembles the TAMs *para* and *ginin*. Like *para* and *ginin*, *siña* does not show agreement with the subject. And although *siña* can be immediately followed by the subject, it is more usual for the subject to come later in the clause, immediately after the (main) predicate. The more usual word order is consistent with the idea that *siña* too is a TAM.¹ Compare (4) with (6).

- (6) Ti siña manhugându i famagu’un bola sa’
not can AGR.play the PL.child ball because
tâya’ di’u.
AGR.not.exist base
‘The children couldn’t play baseball because there’s no base.’ (CD,
entry for *di’u*)

¹ A search of the CD database early in September 2010 turned up 495 examples of clauses containing *siña*. Sixty-seven of these had a subject noun phrase in the vicinity of the predicate. (Clauses with weak pronoun subjects were excluded, because the placement of weak pronouns is determined phonologically; see 8.3. Clauses that could be analyzed either as passive clauses with a subject noun phrase, or as transitive clauses with a third personal plural null pronoun as subject, were excluded when the English translation was not explicitly passive.) In 19 out of 67 examples, the subject came immediately after *siña*; in the remaining 48, the subject came immediately after the main predicate.

The upshot is that *siña* is a predicate, but defective—in other words, it is an auxiliary.

Debi (di) ‘should, ought to’, the other auxiliary, has the profile of a TAM in certain respects. Like *para* and *ginin*, it cannot combine with the causative prefix *na*’, cannot form a minimal clause, and does not show agreement with the subject. However, *debi (di)* can have the word order of a verb or adjective. Like *siña*, it can be immediately followed by the subject (as in (7a)), although the subject can also come later in the clause, immediately after the irrealis predicate (7b).²

- (7) a. Ti debi **i prumesa** di u madisonra.
 not should the promise PRT AGR PASS.dishonor
 ‘A promise should not be dishonored.’ (CD, entry for *prumesa*)
- b. Rason na ti debi di u fanprisenti **i famagu’un**
 reason COMP not should PRT AGR AGR.present the PL.child
 yanggin guaha bisita ...
 if AGR.exist visitor
 ‘The reason that children should not be present when there are visitors...’ (*Familia* 2-3)

More tellingly, the irrealis predicate that follows *debi* can be introduced by the finite complementizer *na* (see 20.2.1). This is expected if the sentence is actually a complex sentence in which *debi* is the predicate of the main clause, and the irrealis predicate is located in an embedded clause. The embedded clause in such an analysis is enclosed in brackets in (8).³

- (8) Debi ha’ [na u taiguihi i hetnu].
 should EMP COMP AGR like.that the oven
 ‘The incubator should be like that.’ (EM 92)

Further support for this analysis comes from the *di* that often follows *debi*. This *di* (glossed ‘PRT’ in the examples) has a limited distribution: it occurs in certain subordinating conjunctions (e.g. *antis di* ‘before’, *dispues*

² The CD database contains relatively few examples of *debi (di)*.

³ The predicate following *siña* can also be introduced by the complementizer *na*. However, examples like (a) are much less frequent than the examples of *debi di* and *debi na* discussed in the text:

- (a) Ti siña na bai hu yuti’ pã’gu ...
 not can COMP AGR discard now
 ‘I can’t abandon [whoever helped me] now.’ (EM 96)

di ‘since’, *inlugåt di* ‘instead of’; see 20.2.2), after certain interjections (e.g. *båsta di* ‘stop (doing something)’), after the verb *sigi* ‘keep on’, and so on. In such cases, *di* is followed by an embedded clause. The fact that *di* cannot co-occur with the finite complementizer *na* suggests that the two serve the same function; that is, *di* is a complementizer. But then sentences like (9) should be analyzed as complex sentences in which *debi* is the predicate of the main clause, just like (8).

- (9) Ti debi [di un muyuyu’i i mañaina-mu].
 not should PRT AGR sneer.at.PROG the PL.parent-AGR
 ‘You should not be sneering at your parents.’ (CD, entry for *muyu’i*)

The upshot is that *debi*, too, is a defective predicate—an auxiliary.

The TAMs are a closed class. Other modal and aspectual predicates in Chamorro, including *malagu* ‘want’, *tutuhun* ‘begin’, *påra* ‘stop’, and so on, are clearly verbs or adjectives. These other predicates show agreement with the subject, they can combine with the causative prefix *na* ‘-’, and they can form minimal clauses. They have the word order of predicates that are verbs or adjectives. And they can be immediately preceded by a TAM.⁴ See Chapter 21 for further discussion of these predicates and the constructions in which they occur.

4.2.2 Meaning and use

4.2.2.1 *Para*

The future/subjunctive TAM *para* often occurs in irrealis clauses that describe a situation in the future, relative to the speech event or to some other event.

- (10)a. **Para** u mana’gimin åmut i neni sa’
 FUT AGR PASS.make.drink medicine the baby because
 kalintura.
 AGR.feverish
 ‘They will make the baby drink medicine because it has a slight fever.’ (CD, entry for *u*)
- b. Esta **para** talu’åni ya ha siesienti i
 already FUT afternoon and.then AGR feel.PROG the

⁴ *Iståba* ‘used to’ and perhaps *sigi* ‘keep on’ are borderline cases. Although *iståba* is identified as a TAM by Chung (1998), it is perhaps better classified as a verb that can also be used as an adverb.

ñalâng-ña.

NMLZ.hungry-AGR

‘It was about to be afternoon and she was feeling hungry.’ (EM 81)

- c. Un diha, anai ... **para** si nanâ-hu ha’ gi
one day when FUT UNM mother-AGR EMP LCL
tenda, sinangâni as tihu-ña ...

store AGR.PASS.say.to OBL uncle-AGR

‘One day, when...it was going to be just my mother at the store, her uncle told her...’ (EM 100)

However, when the clause describes a future situation that the speaker believes is certain to occur, the combination of the adverb *siempri* ‘surely, certainly’ plus the realis mood can be used instead (see 2.2.3.2.2).

Para can also occur in irrealis clauses that are embedded under verbs of desire, commitment, permission, effort, and so on (see 20.2.1 and 21.4.2). In such cases, the embedded clause describes a non-actual situation that is wanted, promised, allowed, or which effort is devoted to bringing about. The relevant embedded clauses are enclosed in brackets below.

- (11)a. Yanggin guaha malago’-ña [**para** u faisin
if AGR.exist WH[OBL].want-AGR FUT AGR ask
yu’ ta’lu], siña ha’.
me again can EMP
‘If there’s anything else she wants to ask me, she can.’ (Cooreman 1983: 38)

- b. Ti bai hu sedi hâo [na **para** un anña i
not AGR allow you COMP FUT AGR harm the
patgon-hu].
child-AGR

‘I will not let you harm my child.’ (CD, entry for *anña*)

Para can occur in irrealis clauses embedded under an adjective. The embedded clause in (12) describes a non-actual situation (the taking of coral from the ocean) which has the property named by the adjective (namely, being dangerous).

- (12) Piligru i kulâling [**para** u machuli’ gi
AGR.dangerous the coral FUT AGR PASS.take LCL
tasi].
ocean

‘It’s dangerous to take coral from the ocean.’ (CD, entry for *kulåling*)

Finite embedded clauses in Chamorro are generally introduced by the complementizer *na* (see 20.2.1). This complementizer can be omitted if it is immediately followed by *para*, as in (11a) and (12). But it is also possible for *na* and *para* to co-occur, as in (11b) and (13).

- (13) Ti ha tungu’ si nanå-hu [na **para** u guaha
not AGR know UNM mother-AGR COMP FUT AGR exist
gera].
war
 ‘My mother did not know that there was going to be a war.’ (EM 102)

Para is optional in irrealis embedded clauses that serve as arguments; its presence or absence there seems to have little impact on meaning.⁵ The situation is different in adverbial clauses introduced by the subordinating conjunction *sa* ‘because’ (see 20.4.2.2). When *para* occurs in an irrealis adverbial clause introduced by *sa*, the (non-actual) situation described by the embedded clause gives a positive reason for the situation described by the main clause.

- (14)a. Ha bareta si tatå-hu i atchu’ sa’ **para** u
AGR pry UNM father-AGR the rock because FUT AGR
na’suha.
make.go.away
 ‘My father pried the rock out with a digging iron because he was going to remove it.’ (CD, entry for *bareta*)
 b. Mamuda hiya’ sa’ **para** un guput.
get.dressed for. awhile because FUT AGR party
 ‘Get dressed because you are going to go to the party.’ (CD, entry for *mamuda*)

But when the embedded clause describes a (non-actual) situation that would be harmful or unfavorable—an alternative future that should be prevented from happening—then *para* does not occur. This can happen, for instance, when the main clause is an imperative. Imperatives of this sort direct the

⁵ The complementizer *na* generally introduces these clauses if *para* does not appear.

addressee to act so as to avoid the non-actual situation described in the embedded clause. See (15).

- (15)a. Na'nahung hānum i satten sa' u pāsmu
 make.enough water.L the pot because AGRpartly.cooked
 i sini.
 the taro
 'Put enough water in the pot so that the taro does not become
 partially cooked (lit. because the taro might become partially
 cooked).' (CD, entry for *pāsmu*)
- b. Mungnga mampus mana'bokka' i basu sa'
 don't so.much AGR.PASS.make.full the glass because
 u machuda'.
 AGR.PASS.spill
 'Do not fill the glass too much or it will spill (lit. because it might
 spill).' (CD, entry for *bokka'*)

4.2.2.2 *Ginin*

The TAM *ginin* indicates imperfect tense-aspect. It occurs in realis clauses that describe a past situation that lasted for some time. It can appear when the predicate names a state that occurred in the past, as in (16).

- (16)a. Si Ambrosio **ginin** atkâtdin sankattan na isla
 UNM Ambrosio IMPF mayor.L DIR.north L island
 siha.
 PL
 'Ambrosio was the mayor of the Northern Islands.' (CD, entry for
 atkâtdi)
- b. **Ginin** guaha kantidâ na tinanum asukat guini Saipan
 IMPF AGR.exist a.lot L plant.L sugar here Saipan
 gi tiempun Chapanis.
 LCL time.L Japanese
 'There were once a lot of sugarcane plants here on Saipan during
 the Japanese time.' (CD, entry for *asukat*)

It can also appear when the predicate names an event that was ongoing or habitual in the past, as in (17). In such cases, the predicate is typically in the progressive aspect.

- (17) **Ginin** manhohokka yu' bronsi anai
 IMPF AGR.ANTIP.collect.PROG I bronze when

didikiki' yu'.
AGR.small.PROG I
 'I used to collect bronze when I was small.' (CD, entry for *bronsi*)

4.2.2.3 *Siña*

The auxiliary *siña* 'can, possible' is used to indicate possibility (as in (18a)) or ability (18b).

- (18)a. **Siña** ha' mafa'tali i alaihai.
can EMP AGR.PASS.make.into.rope the morning.glory
 'The morning glory vine can be used as rope.' (CD, entry for *alaihai*)
- b. Ma konni' ândas si Juan sa' ti **siña**
AGR.take stretcher UNM Juan because not can
 mamokkat.
AGR.walk
 'They took Juan on the stretcher because he could not walk.' (CD, entry for *ândas*)

Although *siña* normally is followed by a realis predicate, it can also combine with an irrealis predicate. The combination of *siña* plus irrealis mood seems to convey more remote possibility or, perhaps, greater politeness.

- (19) Kão **siña** bai hu ayão i musigomo'-mu?
Q can AGR borrow the eraser-AGR
 'Can I borrow your eraser?' (CD, entry for *musigomo*')

4.2.2.4 *Debi (di)*

The auxiliary *debi (di)* 'should, ought to' occurs in irrealis clauses to indicate (cultural or societal) expectation (as in (20a-b)) or personal obligation (20c).

- (20)a. Kumu tiempun Pâsgua Nabitât, **debi** **di** u guaha
if time.L Christmas should PRT AGR exist
 buñelus dâgu.
doughnuts.L yam
 'There have to be yam doughnuts in the Christmas season.' (CD, entry for *buñelus dâgu*)
- b. **Debi** **di** u anâkku' i gigão yanggin para un
should PRT AGR long the fish.trap if FUT AGR

fangonni' bula na guihan.

ANTIP.catch much L fish

'The fish trap should be long if you're going to catch a lot of fish.'
(CD, entry for *gigão*)

- c. Maskiseha esta un yuti' i basula, **debi** na un
although already AGR throw the trash should COMP AGR
hokka ya un laknus i tutniyu.
pick.up and.then AGR take.out the screw
'Despite the fact that you already threw out the trash, you must pick
it back up and take out the screw.' (CD, entry for *maskiseha*)

4.3 A closer look at nonverbal predicates

As discussed earlier (in Chapters 2 and 3), predicates in Chamorro can be from any of the major parts of speech. All predicates can be preceded by a TAM. Predicates that are verbs or adjectives show agreement with the subject, through forms that also indicate mood; predicates that are nouns or prepositions do not show agreement with the subject. Although this correctly characterizes verbs and adjectives, the situation is more complex for nouns and prepositions. 4.3.1 discusses some initially puzzling patterns involving predicate nouns. 4.3.2 presents some facts that suggest that prepositions are not predicates after all, but might instead be arguments of a null copula.

4.3.1 Predicates that are nouns

Predicates that are nouns (or noun phrases) have the same overall distribution as other types of predicates. To begin with, they can be preceded by a TAM. Consider (10b), (16a), and the following (in which the TAM is in boldface).

- (21)a. **Siña** peknu' i rãbia na chetnut para i taotão
can killer the rabies L disease for the person
siha.

PL

'Rabies may be deadly diseases (lit. The rabies disease may be a
killer) for people.' (CD, entry for *rãbia*)

- b. Dìretchok-ku esti i para bai hu atyik [hãyì **para**
right-AGR this the FUT AGR choose who? FUT
asaguã-hu].

spouse-AGR

'It is my personal right to choose my spouse (lit. who will be my
spouse).' (CD, entry for *dìretchu*)

- c. **Debi di** ma'estråk-ku hão.
should PRT teacher-AGR you
 'You should be my teacher.'

Predicates that are nouns can occur in main clauses (as in (21a)) and finite embedded clauses (21b). They can also occur in infinitive clauses. In such cases, they show infinitival agreement, which is represented in boldface below (see 21.2.1).

- (22)a. Esta yu' o'o'sun [**muma**'estrãm-mu].
already I AGR.bored.PROG INF.teacher-AGR
 'I'm already getting tired of being your teacher.'
 b. Malagu' si Juan para u chagi [**umampaia**'
AGR.want UNM Juan FUT AGR try INF.umpire.L
afulu'].
wrestle
 'Juan wants to try being a wrestling referee.' (CD, entry for *ampaia*')

Predicates that are nouns can occur in the full range of constituent questions (see 22.3). In the questions below, the interrogative word is the predicate in (23a), the subject in (23b), and an adjunct in (23c).

- (23)a. Kão hãyi hão?
Q who? you
 'Who are you?' (Cooreman 1983: 22)
 b. Hãfa para sahguan-ña i katdu?
what? FUT container-AGR the soup
 'What is going to be the container for the soup?' (CD, entry for *sahguan*)
 c. Disdi ngai'an nai medikun nanã-mu si Juan?
since when? COMP doctor.L mother-AGR UNM Juan
 'Since when has Juan been your mother's doctor?'

On the other hand, predicates that are nouns differ from predicates that are verbs or adjectives in not showing agreement with the subject. The clauses in (24) contain the future/subjunctive TAM *para*, but no irrealis form of agreement appears on the predicate noun.

- (24)a. Kão un tungu' [hãyi **para** ma'estrãm-mu]?
Q AGR know who? FUT teacher-AGR

- ‘Do you know who will be your teacher?’ (CD, entry for *tungu*)
- b. Esta para talu’âni.
already FUT afternoon
 ‘It was almost noon.’ (EM 81)
- c. Para lâhi i patgon-ña.
FUT male the child-AGR
 ‘His child is going to be a boy.’ (from an e-mail message)

When an agreement form is inserted, the result is often ungrammatical (but see below). In (25), the asterisk (*) means ‘ungrammatical’, and the ungrammatical language material appears in red.

- (25) Para (*u) agupa’ i fandânggu.
FUT AGR tomorrow the wedding
 ‘The wedding is going to be tomorrow.’

This overall picture is not changed by two initially puzzling facts, both of which involve agreement with the subject.

First, some predicates that are nouns appear to show the agreement prefix *man-*, which indicates a plural subject in the realis mood (see 2.2.2.2). In general, only verbs and adjectives show agreement with the subject, so this marking is unexpected.

- (26)a. **Mañe**’lu-ña hit famalão’an si Antonio.
PL.sibling-AGR we.INCL PL.woman UNM Antonio
 ‘We (incl.) are Antonio’s sisters.’
- b. Ni unu gi famagu’un Dolores **manneni**.
not one LCL PL.child.L Dolores PL.baby
 ‘None of Dolores’ children are babies.’

However, *man-* is not only an agreement prefix but also a plural prefix that can optionally be attached to any human noun, whatever its function in the clause (see 6.1.1.1). This plural prefix is attached to the possessor of the direct object in (27a), and to the inner topic at the left edge of the clause in (27b) (see 26.2.1).

- (27)a. Gof ya-hu mampâgat famagu’un **mañe**’lu
very like-AGR AGR.ANTIP.advise PL.child.L PL.sibling
 siha.
PL

‘I love giving advice to my siblings’ children.’ (CD, entry for *pāgat*)

- b. Meggaiña na **manneni** ma u’usa mamadot
many.COMPAR *L* *PL.baby* *AGR use.PROG* *baby.bottle*
 kinu u fañusu.
than *AGR AGR.breastfeed*
 ‘Most babies use bottles instead of breastfeeding.’ (CD, entry for *mamadót*)

The existence of this other prefix suggests that the predicate nouns in (26) do not, in fact, show agreement with the subject, but instead are marked with the plural prefix for human nouns. This view is supported by a further observation: if the *man-* that appears on predicate nouns were a form of agreement with the subject, it should have a corresponding irrealis form. But it does not: there is no **u fañe’lu* or **fañe’lu* corresponding to *mañe’lu* ‘siblings’, for instance.

Second, Chamorro has a subclass of predicate nouns that clearly *can* be marked for agreement with the subject. These are nouns that name professions, such as *ma’estra* ‘teacher (f.)’, *ma’estru* ‘teacher (m.)’, *pāli* ‘priest’, and so on. In the irrealis embedded clauses below, the affix that shows agreement with the subject (in boldface) is unmistakable:

- (28)a. I amko’-hu manistutudia [para **u** pāli’].
the old-AGR *AGR.ANTIP.study.PROG* *FUT* *AGR priest*
 ‘My eldest is studying to be a priest.’ (CD, entry for *pāli*)
 b. Humånão si Andrew [para **u** marinun mantikiya
AGR.go *UNM* *Andrew FUT* *AGR navy.steward*
 giya Amerika].
LCL *America*
 ‘Andrew went to join the stewardship on the Navy ship in America.’ (CD, entry for *marinun mantikiya*)

The agreement illustrated in (28) is limited. Though allowed for professional nouns, it normally does not occur on other predicates that are nouns, such as kinship terms, inanimate nouns, and so on; see (10b) and (25). Even on professional nouns, this agreement typically does not occur when the noun shows (suffixal) agreement with a possessor, as in (21c) and (24a). The typical pattern is illustrated below.

- (29)a. Para **u** ma’estra ottru sǎkkan.
FUT *AGR teacher* *other* *year*

- ‘She’s going to be a teacher next year.’
- b. ?**Para ma’estra (gui’) ottru sâkkan.*
FUT teacher she other year
 (‘She’s going to be a teacher next year.’)
- c. *Para ma’estrâk-ku gui’ ottru sâkkan.*
FUT teacher-AGR she other year
 ‘She’s going to be my teacher next year.’

This pattern suggests that Chamorro has a word formation process that turns nouns with the meaning ‘member of profession *x*’ into intransitive verbs that mean ‘serve as a member of profession *x*’, without adding affixes or other morphology. Assuming this, the predicates in (28) and (29a) would show agreement with the subject because they are derived verbs that mean ‘serve as a priest’, ‘serve as a steward’, and ‘serve as a teacher’. The predicate in (29c) is a noun because it has a possessor, and generally only nouns have possessors.⁶ What matters here is that this predicate noun does not show agreement with the subject.

Chamorro has other word formation processes that convert nouns into derived verbs or adjectives without affixes or other morphology, so the process just proposed has precedents within the language. (This type of word formation, called *conversion*, is discussed in 27.4 and 28.4.9.) Even if one were to deny the existence of conversion and treat the agreement pattern in (28) as exceptional, the exception is systematic. Overall, it remains true that predicates that are nouns can be preceded by a TAM, and have the same overall distribution as other types of predicates, but are not marked for mood or agreement with the subject.

4.3.2 Predicates that are prepositions

Predicates that are prepositions are harder to analyze.

Most predicates that are prepositions do not show agreement with the subject.

- (30)a. *Para si Maria esti na lepblu.*
for UNM Maria this L book

⁶ A few transitive verbs, including *ga’ña-* ‘prefer’, *ga’o-* ‘prefer’, and *ya-* ‘like’, are marked as if they were nouns: they show agreement with the subject using the suffixes for possessor agreement (see 14.4). The subjects of these verbs are subjects, not possessors. In addition, verbs and adjectives in certain forms of *wh*-agreement agree with their subject as if it were a possessor (see 22.4.1).

- ‘This book is for Maria.’
- b. Para i tenda hit guatu gi un ora.
to the store we.INCL to.there LCL a hour
 ‘We (incl.) are heading to the store in an hour.’

However, when the predicate is the preposition *ginin* ‘from’, some speakers allow it to show agreement with the subject, as shown in (31).

- (31)a. Pues i palu siha **mangginin** iya Truk ...
then the some PL AGR.from UNM Truk
 ‘Then there were some who were from Truk...’ (Cooreman 1983: 147)
- b. I profesias sessu **mangginin** i manmenhalum siha na
the prophecy often AGR.from the AGR.wise PL L
indibiduât.
individual
 ‘Prophecies often come from wise individuals.’ (CD, entry for *prófesias*)

Ginin is the only Chamorro preposition that shows this pattern. The agreement is mysterious in several respects. It tends to appear when the prepositional phrase formed from *ginin* describes a permanent or persistent characteristic, such as nationality or place of origin. But it can also appear when no persistent characteristic is involved. See (32).

- (32) Tâya’ fumaisin yu’ [**mangginin** manu na guma’
AGR.not.exist WH[SBJ].ask me AGR.from which? L house
i famagu’un].
the PL.child
 ‘No one asked me which house the kids were coming from.’

The form of the agreement is mysterious as well: it is chosen from the agreement paradigms for intransitive verbs and adjectives in the realis mood (see 2.2.2.2). Like most other Chamorro prepositions, *ginin* takes an object noun phrase in the unmarked case (see 5.2). Given that this noun phrase looks like a direct object, it is unclear why the agreement shown by *ginin* is not chosen from the paradigms for transitive verbs.

Predicates that are prepositions have a peculiarly limited distribution. These predicates are awkward or ungrammatical when preceded by a TAM (in boldface in the examples below).

- (33)a. ?**Debi di** para i tenda hảo guatu.
ought PRT to the store you to.there
 ‘You should head to the store.’
- b. ***Ginin para i tetenda hảo.**
IMPERF to the store.PROG you
 (‘You had been heading to the store.’)

Further, although predicates that are prepositions can occur in main clauses and finite embedded clauses, they cannot form infinitive clauses. This holds true whether or not the preposition shows infinitival agreement (see 21.2.1). Compare the finite embedded clause in (34a) with the infinitive clause in (34b).

- (34)a. Humallum yu’ [na ginin Saigon esti i
AGR.assume I COMP from Saigon this the
cha’guan Saigon].
Cinderella.weed
 ‘I assume that this Cinderella weed is from Saigon.’ (CD, entry for *chả ’guan Saigón*)
- b. ***O’sun yu’ [p(um)ara i tenda].**
AGR.bored I INF.to the store
 (‘I’m tired of heading to the store.’)

Finally, predicates that are prepositions evidently cannot occur in the full range of constituent questions. In the questions below, the interrogative phrase originates in a clause whose predicate is a preposition. The interrogative phrase can be the object of this preposition (as in (35a)) or the subject of the clause (35b). But it cannot be an adjunct (35c).

- (35)a. Ti ha tungu’ si Helena esta [para mǎnu gui’
not AGR.know UNM Helena already to where? she
ni atarantǎo-ña].
OBL NMLZ.indecisive-AGR
 ‘Helena does not know where she’s going with her indecisiveness.’
 (CD, entry for *atarantǎo*)
- b. Mǎnu na aniyu sinangǎni hảo as Miguel [na
which? L ring AGR.PASS.say.to you OBL Miguel COMP
para i che’lu-ña palǎo’an]?
for the sibling-AGR female
 ‘Which ring did Miguel tell you is for his sister?’

- c. **Kuântu tiempu [para i tenda siha]?*
how.much? time to the store they
 ('How long will they be gone to the store?')

This restricted distribution brings to mind Richards' (2009) discussion of nonverbal predicates in Tagalog, a Western Malayo-Polynesian language related to Chamorro. Richards observes that nonverbal predicates in Tagalog cannot occur in certain infinitive clauses. This leads him to propose that nonverbal predicates in Tagalog are arguments of a null copula. The predicate of an infinitive clause in Tagalog must be marked for aspect, but the null copula cannot be marked for aspect. That, he claims, is why infinitive clauses in this language can be formed only from (overt) verbs.

Conceivably, Richards' proposal could be extended to Chamorro predicates that are prepositions. The extension might go like this: Every Chamorro predicate that appears to be a preposition actually forms a prepositional phrase that is the argument of a null copula. But in Chamorro, the TAMs and infinitive clauses require a predicate that is overt. That is why 'predicates that are prepositions' cannot be preceded by a TAM or occur in an infinitive clause.

Such a proposal would handle the limited distribution illustrated in (33) and (34).⁷ Moreover, copulas in many languages are intransitive. So the proposal would be consistent with the fact that the exceptional agreement on the preposition *ginin* in (31) and (32) comes from the paradigms for intransitive verbs and adjectives (though it would not explain where this agreement appears, or why it appears). This approach deserves further investigation.

⁷ Not yet accounted for: the ungrammaticality of constituent questions like (35c).

5

CASE MARKING AND PREPOSITIONS

Noun phrases in Chamorro are marked for case. The case system is sensitive to grammatical relations and meaning. Some noun phrases that are obliques or adjuncts are realized as objects of prepositions.

5.1 Case marking

5.1.1 Form

5.1.1.1 Basics

Almost all noun phrases in Chamorro are marked for case. There are three cases: unmarked, oblique, and local. Case is indicated by an unstressed morpheme that immediately precedes the noun phrase and is sensitive to the word from which the noun phrase is constructed. There are separate case markers for noun phrases formed from common nouns (e.g. *palão'an* 'woman', *guma'* 'house', *nã'an* 'name'), names of people (e.g. *Joaquina*), place names (e.g. *Luta*), and pronouns (e.g. *guãhu* 'I', *siha* 'they').¹ The case markers are listed below in (1).

The case markers show a significant amount of regional variation and individual variation, not all of which is captured in the chart. The unmarked case marker is *si* for names of people, *iya* for place names (in the Guam dialect), and unpronounced otherwise. The oblique case marker for common nouns is *ni* in the Guam dialect and *nu* or *nai* in the Rota dialect; in the Saipan dialect it is *nu* or *ni* before the definite article and *nu* otherwise. The oblique case marker for names of people is *gi as* for some speakers of the Saipan dialect and *as* otherwise. The oblique case marker for pronouns is *ni* for some speakers of the Guam dialect and *nu* otherwise. Very occasionally, the oblique case markers *ni as* (for names of people) and *niya* (for pronouns) are heard; these appear to be nonstandard.

¹ The common nouns *tãta* 'father', *nãna* 'mother', and *pãli* 'priest' are often marked for case as if they were names of people; e.g. *si nanã-hu* 'my mother (unmarked case)', *as pãli* 'the priest (oblique case)'. Independent pronouns are marked for case, but weak pronouns are not (see 8.3).

(1)	CASE MARKERS			
		<i>Unmarked</i>	<i>Oblique</i>	<i>Local</i>
	Common Ns	—	ni [Guam], nu / nai [Rota], nu / ni [Saipan]	gi
	Names	si	as, gi as [Saipan]	gi as
	Place names	— , iya [Guam]	—	giya
	Pronouns	—	nu, ni [Guam]	giya

5.1.1.2 Combined with an article or demonstrative

The case markers for common nouns can combine with an immediately following article or demonstrative. Specifically:

When the oblique case marker *ni* or the local case marker *gi* is immediately followed by the definite article *i*, many speakers fuse the case marker with the article, reducing the two /i/ sounds to one. For these speakers, the noun phrase *i palão'an* ‘the woman’ is realized as *gi palão'an* in the local case, and *ni palão'an* (in Guam and Saipan), *nu i palão'an* (in Saipan and Rota), or *nai palão'an* (in Rota) in the oblique case. Other speakers insert a glottal stop between the case marker and the article. For these speakers, *i palão'an* is realized as *gi' i palão'an* in the local case and as *ni' i palão'an* in the oblique case.

The local case marker *gi* typically combines with a following demonstrative—*esti* ‘this (near speaker)’, *ennão* ‘that (near addressee)’, or *atyu* ‘that (near third person)’—to produce the forms *guini*, *guennão*, and *guihi*, respectively. These forms also serve as locative adverbs that mean ‘here’, ‘there (near addressee)’, and ‘there (near third person)’ (see 6.2.2).

5.1.1.3 Noun phrases with no case marking

The following types of noun phrases are not case-marked:

(i) Vocatives (noun phrases used to call the addressee) are not case-marked. In (2), *Nang* ‘Mom’ is caseless, because it is vocative.

- (2) **Nang**, sedi yu' ya bai patcha i amot-mu.
Mom allow me and.then AGR touch the medicine-AGR
‘Mom, allow me to touch your medicine.’ (LSS 355)

(ii) The objects of the verbs of possession *gai* ‘have’ and *tai* ‘not have’ are not case-marked (see 14.3.2). Even though these objects are formed from nouns and written as independent words in the official orthographies, they are not independent noun phrases. Instead, they are ‘small’ noun phrases whose head noun is incorporated. In (3), *ganas* ‘appetite’, which is the object of *tai*, is incorporated.

- (3) *Sa’ tai ganas i lina’lâ’-hu.*
 because AGR.not.have appetite the life-AGR
 ‘Because my life has no appetite.’ (EM 60)

(iii) Noun phrases are not case-marked when a phonologically dependent verb or noun immediately precedes them. For instance, the dependent verb *malak* ‘go to’ must combine with material in its goal noun phrase to form a phonological word. This noun phrase—*Luta* in (4a)—is not case-marked. A possessed noun that is marked with the linker is phonologically dependent, and must combine with material in its possessor to form a phonological word. This possessor—*Tan Ignacia* in (4b)—is not case-marked.²

- (4) a. *Malak Luta si mǎlli’.*
 AGR.go.to Luta UNM godmother
 ‘My *kumairi* went to Rota.’ (CD, entry for *mǎlli’*)
 b. *i mañainan Tan Ignacia*
 the PL.parent.L Mrs. Ignacia
 ‘Tan Ignacia’s parents’ (EM 101)

In addition, certain types of adjuncts typically are not case-marked. These include adjuncts of duration (such as *dos oras* ‘for two hours’ in (5a)), adjuncts of frequency (such as *kada diha* ‘every day’ in (5b)), and certain expressions of location in time (see 5.1.2.3).

- (5) a. *Ákalayi’ fan dos oras gi puntan i haligi?*
 hang please two hours LCL tip.L the pole
 ‘Can you hang for two hours on the tip of the pole? (CD, entry for *ákalayi’*)

² Note that the goal argument of *malak* is a noun phrase; possessors are also noun phrases. Objects of the verbs of possession *gai* ‘have’ and *tai* ‘not have’ are ‘small’ (incomplete) noun phrases that cannot contain determiners, possessors, or modifiers preceding the head noun (see 14.3.2).

- b. Kahuhulu' yu' gi chatanmak **kada diha.**
AGR.get.up.PROG I LCL dawn every day
 'I get up before dawn every day.' (CD, entry for *chatanmak*)

5.1.1.4 Weak noun phrases in the oblique case

Certain noun phrases in the oblique case are not preceded by an overt (pronounced) case marker when they are *weak* (indefinite in some sense; see 6.2.5). These noun phrases include (i) oblique arguments of intransitive verbs or adjectives, (ii) oblique arguments of nominalized predicates, and (iii) oblique arguments of antipassive, applicative, or causative verbs that correspond to the direct object of the original transitive verb from which these verbs are derived. Noun phrases of types (i-iii) are preceded by the oblique case markers described in 5.1.1.1 when they are *strong*; for instance, when they consist of a pronoun, a name, or a noun phrase with the definite article at its left edge, as shown below.

- (6) a. Ma'â'ňão yu' **nu hãgu.**
AGR.afraid I OBL you
 'I'm afraid of you.'
- b. In apãsi i patgun lâhi **ni salãppi'.**
AGR.pay the child.L male OBL money
 'We (excl.) paid the boy the money.'
- c. Hu na'kumpreprendi **nu i linachi-ňa.**
AGR.make.understand.PROG OBL the mistake-AGR
 'I make him understand his mistakes.' (CD, entry for *á'akunseha*)

But when they are *weak*—for instance, when they are noun phrases with the null indefinite article, a numeral, or *bula* 'much, many' at their left edge—then no oblique case marker appears. Compare (6) with (7).

- (7) a. Ma'â'ňão yu' **dos klãsin gã'ga'.**
AGR.afraid I two sort.L animal
 'I'm afraid of two kinds of animals.'
- b. In apãsi i patgun lâhi **bula na salãppi'.**
AGR.pay the child.L male much L money
 'We (excl.) paid the boy a lot of money.'
- c. Ha na'fanmanatyik ham i ma'estru
AGR.make.AGR.ANTIP.choose we.EXCL the teacher
ga'chung-mãmi.
partner-AGR
 'The teacher let us (excl.) choose our (excl.) partners.'

- d. Hinatmi **gã'ga'** i matã-hu ya
 AGR.PASS.get.inside *insect* *the eye-AGR* *and.then*
 nina'gef sagi' yan bula mugu'.
 AGR.PASS.make.very *painful* *and AGR.much* *eye.discharge*
 'An insect got into my eye and it got very irritated and discharges
 matter.' (CD, entry for *mugu*)
- e. Adumididi' sigi ha' manmaleffa hit **unus kuântus**
 gradually *keep.on EMP* *AGR.forget* *we.INCL some*
 na palåbra.
 L *word*
 'We (incl.) gradually keep on forgetting a few words.' (from a
 conference presentation)

Some speakers also allow passive agents and instruments to exhibit this pattern; see (7d). Other speakers require passive agents and instruments to be preceded by an oblique case marker, even when they are weak.³

5.1.2 Use

5.1.2.1 Unmarked case

The many uses of the unmarked case are summarized below.

First of all, the unmarked case is used for noun phrases that are subjects or direct objects. The subject of the clause in (8a) is *si nanã-hu* 'my mother'; the direct objects of the clauses in (8b) are *i kemmun* 'the bathroom' and *i katta* 'the letter'. (Here and below, the noun phrases under discussion are represented in boldface.)

- (8) a. Mampus hobin **si** **nanã-hu.**
 so.much *AGR.young* *UNM* *mother-AGR*
 'My mother was too young.' (Cooreman 1982: 7)
- b. Ha fa' gui' ha na'sesetbi **i** **kemmun** lão ha
 AGRpretend *she* *AGRmake.use.PROG* *the toilet* *but AGR*
 tataitai **i** **katta.**
 read.PROG *the letter*

³ Examples cited by Safford (1904: 506) and other early twentieth-century grammars suggest that the older pattern is for instruments and passive agents to have no case marking when they were weak. But for some speakers of the Saipan dialect, instruments and passive agents are preceded by an overt case marker even when they are weak. Note that appositive noun phrases, which are also in the oblique case, are never weak.

‘She pretended she was using the toilet, but she was reading the letter.’ (Cooreman 1983: 27)

The unmarked case is also used for noun phrases that serve as the subject or direct object of constituents smaller than the clause. For instance, the possessor of a noun phrase can be analyzed as the *subject* of the noun phrase: it is the most prominent constituent of the noun phrase, just as the subject is the most prominent constituent of the clause. When the possessor is an independent constituent, it is in the unmarked case, and the possessed noun agrees with it in person and number (see 7.1.1). The noun phrase in (9) illustrates this pattern: the possessor *si Vicente* is in the unmarked case, and the possessed noun *asagua* ‘spouse’ shows agreement with it using the 3 sg. possessor agreement suffix *-ña*.

- (9) *i* *asagua-ña* **si** **Vicente**
 the spouse-AGR UNM *Vicente*
 ‘Vicente’s wife’

(Alternatively, the possessed noun can be marked with the linker, in which case it is phonologically dependent and must combine with material in the possessor to form a phonological word. When that happens, the possessor is caseless and the possessed noun does not show possessor agreement; see 5.1.1.3 and 7.1.1.)

Similarly, the object of a preposition can be analyzed as the *direct object* of the preposition: it bears the same relation to the preposition as a direct object bears to the verb. Most prepositions have an object that is in the unmarked case. This includes prepositions such as *kini* ‘than’ (see (10a)) and *para* ‘to, for’ (10b).

- (10)a. *Ñangnangña* *si* *Dorothy* *kini* *si*
 AGR.talkative.COMPAR *UNM* *Dorothy* *than* *UNM*
 Denita.
 Denita
 ‘Dorothy is more talkative than Denita.’ (CD, entry for *ñangnang*)
- b. *Màs* *sâfu’* *para* **si** **Kanâriu** *yanggin* *ha*
 more *AGR.safe* *for* *UNM* *Kanariu* *if* *AGR*
 nangga i *ma’tin* *i* *tasi.*
 wait *the low.tide.L* *the ocean*
 ‘It was safer for Kanâriu if she waited for low tide.’ (EM 83)

Second, the unmarked case is used for noun phrases that are topics, syntactically focused, or appear for other reasons at the left edge of the clause. Such noun phrases are in the unmarked case even when a different case would be dictated by their grammatical relation. For instance, noun phrases that are normally in the oblique case, such as agents of passive verbs, appear in the unmarked case when they are syntactically focused. In (11a), the passive agent *si Bernie* is in the unmarked case, because it is syntactically focused. Except in the Saipan dialect, the same holds true for noun phrases that are normally in the local case, such as adjuncts that specify location (see 22.3.2 and 23.3). In (11b), the locative adjunct *atyu i sanpapa' gi kantun tasi* 'that place down by the beach' appears at the left edge of the clause; this noun phrase is in the unmarked case as well.

- (11)a. **Si Bernie** para u inisgaihun gui'.
 UNM Bernie FUT AGR PASS.escort she
 'It's Bernie who is going to escort her (lit. who she is going to be escorted by).' (CD, entry for *isgaihun*)
- b. Pues **atyu i sanpapa' gi kantun tasi** guaha
 then that the DIR.under LCL side.L sea AGR.exist
 guihi unu, dos, poku menus singku na mandikiki'.
 there one two more.or.less five L AGR.small
 'So, at that place down by the beach there are one, two, more or less five small ones.' (Cooreman 1983: 8)

(In Saipan, a noun phrase that would ordinarily be in the local case can remain in the local case when it appears at the left edge of the clause.)

Third, the unmarked case is used for noun phrases that serve as the predicate of the clause, such as *si Maria Castro* 'Maria Castro' in (11a) and *i gualu' Yu'us* 'God's field' in (12b).

- (12)a. Guahu **si Maria Castro**.
 I UNM Maria Castro
 'I am Maria Castro.'
- b. Hamyu **i gualu' Yu'us**.
 you.PL the field.L God
 'You (pl.) are God's field.' (NT 302)

The unmarked case is also used for various types of noun phrases that occur in isolation. Noun phrases that have been stranded by ellipsis, such as *si Juan* in (13), are typically in the unmarked case. (When a noun phrase is

stranded by ellipsis, the rest of the clause associated with it is deleted; see 26.1.)

- (13) Mankuinintusi hamyu as Maria, lão ti **si** **Juan.**
AGR.PASS.speak.to you.PL OBL Maria but not UNM Juan
 ‘Maria spoke to you (pl.); however, not Juan [i.e. Juan didn’t speak to you (pl.)].’

Names in signatures are sometimes in the unmarked case, as in (14), but they can also be caseless.

- (14) Sin mās, **si** **Rita**
without more UNM Rita
 ‘Sincerely, Rita’

The fact that the unmarked case is used for noun phrase predicates and noun phrases in isolation suggests that it is the default case.

5.1.2.2 Oblique case

5.1.2.2.1 Basics

The oblique case is used for most types of arguments that are neither the subject nor the direct object. (These arguments are called *obliques*; see 3.2.3.)

For instance, agents of passive verbs are in the oblique case.

- (15)a. Madāggāo matā-ña si Ben **ni bola.**
AGR.PASS.hit eye-AGR UNM Ben OBL ball
 ‘Ben’s eye was hit by the ball.’
 b. Chinatgi **gi as tatā-hu.**
AGR.PASS.smile.at OBL father-AGR
 ‘She was smiled at by my father.’ (Cooreman 1982: 6)

So are the obliques associated with many other types of intransitive predicates, including antipassive verbs (as in (16a)), nominalized verbs (16b), and adjectives (16c).

- (16)a. Asta pā’gu ti manhohonggi yu’ **nu ... atyu**
until now not AGR.ANTIP.believe.PROG I OBL that
i siñāt.
the sign
 ‘Even now I don’t believe in...those signs.’ (Cooreman 1983: 184)

- b. ... *sigun* *gi* *kinimprenden-ña* **nu i finu'**
according LCL NMLZ.understand-AGR OBL the language.L
i manãmku' siha.
the PL.old PL
 '...according to his understanding of the language of the elders' (EM 131)
- c. *Mahãlang* **gi as tatã-ña.**
AGR.lonely OBL father-AGR
 'She is lonely for her father.'

The oblique case is also used for oblique objects of applicative or causative verbs. These arguments correspond to the direct object of the original transitive verb from which the applicative or causative verb is derived. In (17a), the oblique object of *nã'i* 'give' is *nu i amut* 'the medicine', which names what was given; this noun phrase is in the oblique case. (The direct object of *nã'i* is the noun phrase *si Lucy*, which names who the medicine was given to.) In (17b), the oblique object of the causative verb *na'li'i* 'cause to see' is *ni tararãñas* 'the spiderweb', which names what was caused to be seen; this noun phrase too is in the oblique case.

- (17)a. *Ha nã'i si Lucy nu i amut ãntis di u*
AGR give UNM Lucy OBL the medicine before PRT AGR
mãtai.
die
 'She gave Lucy the medicinal knowledge before she died.' (LSS 388)
- b. *In faisin si Pedro kão siña ha na'li'i' ham*
AGR ask UNM Pedro Q can AGR make.see us.EXCL
ni tararãñas.
OBL spiderweb
 'We (excl.) asked Pedro if he could show us (excl.) the spiderweb.'

In addition, the oblique case is used for instruments.

- (18) *Guaha gã'ga' ma mâtka i puestun-ñiha ni*
AGR.exist animal AGR mark the territory-AGR OBL
me'mi'-ñiha.
urine-AGR
 'There are animals that mark their territory with their urine.' (CD, entry for *puestu*)

Finally, the oblique case is used for noun phrases that are appositives modifying another noun phrase. In (19), the noun phrase *as Miguel* ‘Miguel’ is an appositive modifier of *i chi’lu-mu* ‘your brother’.

- (19) *i chi’lu-mu as Miguel*
the sibling-AGR OBL Miguel
 ‘your brother Miguel’

5.1.2.2.2 Special uses of *as*

The oblique case marker for names of people, *as*, has some uses beyond those just described.

As is used to mark names of people that are objects of the preposition *sigun* ‘according to’ and—for some speakers—objects of the preposition *ginin* ‘from’ (see 5.2). A few examples are cited in (20).

- (20)a. *sigun as Chai*
according OBL Chai
 ‘according to Chai’ (LSS 453)
- b. *sin petmision ginin as Joaquin Flores Borja*
without permission from OBL Joaquin Flores Borja
 ‘without permission from Joaquin Flores Borja’ (EM 4)

These uses are special, because neither *sigun* nor *ginin* generally takes its object in the oblique case. Objects of *sigun* are generally in the local case (see (21a)); objects of *ginin* are generally in the unmarked case (21b-c).

- (21)a. *sigun gi kinimprendek-ku*
according LCL NMLZ.understand-AGR
 ‘according to my understanding’ (*Familia* 1)
- b. *ginin i asaguâ-ña*
from the spouse-AGR
 ‘from his wife’
- c. *ginin Saipan*
from Saipan
 ‘from Saipan’

In addition, *as* combines with names of people to produce locative noun phrases that mean ‘at (the person’s) home’ or ‘at (the person’s) place’. Some of these locative noun phrases have been conventionalized as place names, as (22) shows.

- (22) As **Matuis**
OBL Matuis
 ‘As Matuis (name of a mountainous region in northern Saipan)’

5.1.2.3 Local case

The distribution of the local case is determined primarily by meaning.

The local case is used for noun phrases that specify location in time or space, whether they are oblique arguments or adjuncts. In (23a), the noun phrase that specifies location in space is an oblique argument of the verb *såga* ‘stay, live’; in (23b), the noun phrase that specifies location in time is an adjunct. Both noun phrases are in the local case.

- (23)a. Iståba un biha na sumåsaga **gi un**
AGR.used.to.be a old.woman COMP AGR.live.PROG LCL a
guma’ dikiki’.
house.L small
 ‘An old woman was living in a little house.’ (*Mannge*’ 1)
- b. Yanggin listu hão, asagua **gi Sabalu.**
if AGR.ready you get.married LCL Saturday
 ‘If you’re ready, get married on Saturday.’ (Cooreman 1982: 7)

The local case can also be used for noun phrases that specify source (as in (24a)) or goal (24b).⁴ Goals that are in the local case are often preceded by a directional adverb such as *guatu* ‘to there (near third person)’ or *tåtti* ‘back’.

- (24)a. Poddung i fallut **gi lamasa.**
AGR.fall the lantern LCL table
 ‘The lantern fell from the table.’ (CD, entry for *fållut*)
- b. Hunggan, hu nisisita na un bira yu’ tåtti **gi**
yes AGR.need COMP AGR.turn me back LCL
lugåt-tu.
place-AGR
 ‘Yes, I need you to return me to my place.’ (Cooreman 1983: 105)

The local case is, finally, used for common noun objects of the preposition *sigun* ‘according to’.

⁴ Noun phrases that specify source or goal can also occur as objects of the prepositions *ginin* ‘from’ or *para* ‘to’.

- (25) *sigun* **gi hãfa** **na asuntu malagu'-mãmi**
 according LCL whatever L reason WH[OBL].want-AGR
 'according to whatever reasons we (excl.) want'

Not every noun phrase that specifies location in time or space is in the local case. Noun phrases that serve as subjects or direct objects are always in the unmarked case, even when they specify a location. In addition, the local case is optional for place names that serve as oblique arguments of certain verbs of location or motion, including *sãga* 'stay, live', *mãttu* 'come, arrive', and *hãnao* 'go'. Place names with this function can occur without any case marking.

- (26)a. *Sumãsaga* *si* *Rosan* *che'lu-hu* **(giya)** **Tini'an.**
 AGR.stay.PROG UNM Rosa.L sibling-AGR LCL Tinian
 'My sister Rosa is living on Tinian.'
- b. *Yanggin* *guaha* *bisita* *manmãttu* **Alamãgan ...**
 if AGR.exist visitor AGR.arrive Alamagan
 'When there are visitors who come to Alamagan...' (*Alamagan* 12)

The local case is optional for certain temporal noun phrases, such as *nigap* 'yesterday'. It typically is not used for certain other temporal noun phrases, including *agupa* 'tomorrow', *todu i tiempu* 'all the time', and *kada diha* 'every day'.

5.2 Prepositions

Chamorro has a small number of prepositions, most of which were originally borrowed from Spanish. These prepositions indicate relations in time as well as goal, source, benefaction, accompaniment, cause, comparison, and exception. In general, the prepositions are not used for relations in space, which are indicated instead by the local case (see 5.1.2.3) or by a local or directional noun (see 5.3 and 5.4). Some common prepositions are listed below.

- (27) SOME PREPOSITIONS
- | | |
|------------------------|----------------|
| <i>ãntis di</i> | 'before' |
| <i>asta</i> | 'until, up to' |
| <i>disdi</i> | 'since' |
| <i>dispues di</i> | 'after' |
| <i>inlugãt di</i> | 'instead of' |
| <i>fuera (di / ki)</i> | 'except' |

ginin	‘from’
inkuenta (ginin)	‘on behalf of’
ki, kinu, kini	‘than’
kontra	‘against’
para	‘to, for’
put	‘because of, for the sake of, about’
sa’	‘because of’
sigun	‘according to’
sin	‘without’
yan	‘with’

Most prepositions take an object noun phrase in the unmarked case. Other prepositions present a more complicated picture: either they combine an object noun phrase in some other case, or else they combine with a prepositional phrase. Specifically:

(i) For some speakers, the object of the preposition *ginin* ‘from’ is in the oblique case when it is the name of a person (see 5.1.2.2.2). This pattern is unexpected, given that *ginin* otherwise takes its object in the unmarked case (see (28)).

- (28) ... kosa ki un tungu’ **ginin** **hågu** **mismu** ya ti
so.that AGR know from you same and.then not
ginin i ottru.
from the other
 ‘...so that you know it from you yourself and not from someone else.’ (EM 132)

(ii) The object of the preposition *sigun* ‘according to’ is in the oblique case when it is the name of a person (see 5.1.2.2.2), but in the local case otherwise (see 5.1.2.3).

(iii) The preposition *inkuenta* ‘on behalf of’ can be followed by an object noun phrase in the unmarked case (as in (29a-b)) or else by a prepositional phrase formed from the preposition *ginin* ‘from’ (29c).

- (29)a. inkuenta i familia
on.benefit the family
 ‘on behalf of the family’ (CD, entry for *inkuenta*)
 b. inkuenta si Juan
on.benefit UNM Juan
 ‘on behalf of Juan’ (CD, entry for *inkuenta*)

- c. inkuenta ginin hami
on.behalf from us.EXCL
 ‘on behalf of us (excl.)’ (CD, entry for *inkuenta*)

(iv) Like other prepositions, *antis di* ‘before’, *dispues di* ‘since, after’, and *inlugat di* ‘instead of’ take an object noun phrase in the unmarked case. It is not entirely clear how to analyze *di*, which is written as an independent word (glossed PRT) but has no obvious meaning.

- (30)a. **Antis di esti,** si nanâ-nâ biha ha kokonni’
before PRT this UNM mother-AGR old AGR take.PROG
 si Vicky ...
UNM Vicky
 ‘Before this, her grandmother would take Vicky...’ (LSS 46)
- b. Si tatâ-hu mâtai anai mandikiki’ ham,
UNM father-AGR AGR.die when AGR.small we.EXCL
 singku âñus **dispues di** i sinisedin i hetnu.
five years after PRT the NMLZ.experience.L the oven
 ‘My father died when we (excl.) were little, five years after the event of the incubator.’ (EM 95)

Though borrowed from a Spanish preposition (Sp. *de* ‘of, from, with’), *di* does not function freely in Chamorro as a preposition; it has a limited distribution. It occurs after *antis*, *dispues*, and *inlugat* when these are used as prepositions. It also occurs in certain fixed expressions (e.g. *di nuebu* ‘again’, *dama di notchi* ‘type of plant: *Cestrum nocturnum*’). In addition, it occurs in some contexts where it seems to serve as a complementizer: after the auxiliary *debi* ‘should, ought to’ (where it alternates with the finite complementizer *na*; see 4.2.1), and optionally after the predicates *bâsta* ‘stop, enough’, *sessu* ‘often’, and *sigi* ‘continue’ when these introduce an embedded clause.

Chamorro has several prepositions that can be used as subordinating conjunctions, as will be seen later (in 20.2.2). When combined with the fact that *di* seems to be a complementizer, this may suggest that *di* serves as a preposition when it follows *antis*, *dispues*, and *inlugat*. Then *antis*, *dispues*, and *inlugat* would be prepositions that combine with a prepositional phrase formed from *di*, and *di* itself would take an object noun phrase in the unmarked case. Alternatively, one could simply view *antis di*, *dispues di*, and *inlugat di* as complex prepositions that take an object noun phrase in the unmarked case.

(v) The preposition *fuera* ‘except’ can take a prepositional phrase formed from *ki* ‘than’ (as in (31a)); it can also be followed by *di* and then an object noun phrase in the unmarked case (31b).

- (31)a. Bai hu gimin ennão siha **fuera ki sitbesa.**
 AGR drink that PL except than beer
 ‘I will drink those but not beer.’ (CD, entry for *fuera*)
- b. Fuera di i magâhit na ulun i’i’ ...
 besides PRT the true L head.L baby.skipjack
 ‘Besides the actual head of the baby skipjack...’ (EM 127)

The same issues arise as in (iv): *di* can be analyzed as a preposition with unclear meaning, or as part of the complex preposition *fuera di*.

(vi) Finally, the preposition *ki* ‘than’ has two variants, *kinu* and *kini*, which may well have originated from the combination of *ki* plus the oblique case marker for common nouns. Whatever their historical origin, all three versions of this preposition are now followed by an object noun phrase in the unmarked case. In (32a-b), the objects of *ki* and *kini* are names of people that are in the unmarked case. In (32c), the object of *kinu* is an indefinite noun phrase formed with the null indefinite article. Since this type of indefinite is not overtly marked for the oblique case (see 5.1.1.4), the fact that *nu* appears here suggests that it is not the oblique case marker.

- (32)a. Si tata-hu ha pâtti ham ni guihan ya
 UNM father-AGR AGR share us.EXCL OBL fish and.then
 menus pattek-ku **ki si Ana.**
 AGR.less portion-AGR than UNM Ana
 ‘My father shared the fish with us (excl.) and I had less fish than Ana.’ (CD, entry for *menus*)
- b. Bunitãña yu’ **kini si Allison.**
 AGR.pretty.COMPAR I than UNM Allison
 ‘I’m more beautiful than Allison.’ (CD, entry for *-ña*)
- c. Ga’ok-ku lalanghita **kinu kâhit.**
 prefer-AGR tangerine than orange
 ‘I prefer eating tangerines over oranges.’ (CD, entry for *lalanghita*)

Despite the details, it remains true that most prepositions take an object in the unmarked case. Some typical examples are given below.

- (33)a. Ya u balutan gui’ i palão’an **disdi i**
 and.then AGR wrap her the woman from the

tiyã-ña **pãpa'** **asta** **i** **addeng-ña.**
stomach-AGR down until the feet-AGR

‘And the woman should wrap herself from her belly down to her feet.’ (LSS 60)

- b. Si Vicky manã'i nu i tiningo'-ña **put**
UNM Vicky AGR.PASS.give OBL the NMLZ.know-AGR about
ãmut **natibu** as nanan nanã-ña.
medicine.L native OBL mother.L mother-AGR
 ‘Vicky received her knowledge of how to treat with native medicine from her mother’s mother.’ (LSS 46)
- c. Tãmpi i chetnut nu i gãsa **sa'** **i** **lalu'**.
cover the sore OBL the gauze because.of the fly
 ‘Cover the sore with the gauze because of the flies.’ (CD, entry for *gãsa*)
- d. I abuni ya mafotgi lemmun,
the food.sac and.then AGR.PASS.squeeze lemon
 paiririri **yan** **i** **titiyas.**
AGR.very.best with the tortillas
 ‘The food sac with lemon juice is best eaten with tortillas.’ (CD, entry for *abuni*)

Finally, some prepositions can serve as subordinating conjunctions: they can be followed by a finite embedded clause instead of a noun phrase (see 20.2.2). These prepositions include *put* ‘in order, because of’, *sa'* ‘because’, *sin* ‘without’ and the complex prepositions *ãntis di* ‘before’, *asta ki* ‘until’, *dispues di* ‘after’, and *inlugãt di* ‘instead of’.

- (34)a. Tãya' ga'lãgu [**ãntis di** u fanmãttu i
AGR.not.exist dog before PRT AGR AGR.arrive the
 Españot].
Spanish
 ‘There were no dogs before the Spanish arrived.’ (EM 109)
- b. Diretchas kuetdas ha chocho'gui hãfa
scattered.left.and.right AGR do.PROG anything
 malago'-ña [**sin** mamaisin].
WH[OBL].want-AGR without AGR.ANTIP.ask
 ‘He’s doing whatever he wants in a disorderly manner without asking.’ (CD, entry for *diretchas kuetdas*)

5.3 Local nouns

Chamorro makes extensive use of *local nouns* to indicate relations in space. A local noun is a possessed noun that names a spatial relation with respect to some reference point, which is identified by its possessor. The local nouns in common use are listed below. (Many local nouns also serve as directional adverbs; see 18.2.)

(35)a. LOCAL NOUNS THAT ARE ALSO DIRECTIONAL ADVERBS

hålum	‘inside, in(to)’
hulu’	‘top, above’
huyung	‘outside, out’
mo’na	‘front, before’
påpa’	‘bottom, under’
tåtti	‘back, behind’

b. OTHER LOCAL NOUNS

éntalu’	‘middle, between’
fi’un	‘beside, near’
uriya	‘vicinity, around’

Like other possessed nouns, the local noun either agrees in person and number with its possessor or else is marked with the linker (see 7.1.1). When the possessor is a (null) pronoun, as in (36), the local noun always agrees with it.

- (36)a. Mampus mahettuk esti i katnin guaka sa’
so.much AGR.tough this the meat.L cow because
 bula getmun **gi entalo’-ña.**
AGR.much gristle LCL middle-AGR
 ‘The cow meat is very tough because there is a lot of gristle in between the meat.’ (CD, entry for *getmun*)
- b. Yanggin maloffan i sasata **gi fi’on-mu,** siempri un
if AGR.pass the bee LCL near-AGR indeed AGR
 hunguk bingbing.
hear buzz
 ‘If the bee passes by you, you’ll hear a buzz.’ (CD, entry for *bingbing*)

Otherwise, the local noun is almost always marked with the linker.⁵

- (37)a. Manmaguåssan todū i masiksik lāhi **gi hiyung**
AGR.PASS.mow all the grass.sp LCL outside.L
gimå'-ña si Antonetta.
house-AGR UNM Antonetta
 'The *triumfetta semitriloba* grasses were all mowed outside Antonetta's house.' (CD, entry for *masiksik lāhi*)
- b. Bula binādu siha **gi halum tānu' Luta.**
AGR.much deer PL LCL inside.L land.L Rota
 'There are many deer in Rota's wilderness.' (CD, entry for *Rota*)

Local nouns are marked for case like other nouns. When they serve as oblique arguments or adjuncts (as in (36-37)), they are in the local case—just like other nouns that specify location. When they serve as subjects or direct objects, they are in the unmarked case, as (38) shows. In (38a), the local noun is the subject of a passive clause; in (38b), it is the subject of an adjective.

- (38)a. I chetnut riuma ti gof måolik sa'
the disease.L rheumatism not AGR.very good because
 inatātaka **i papa' ādding** yan i
AGR.PASS.attack.PROG the bottom.L foot and the
 kuyintura siha.
joint PL
 'The rheumatism disease is not very pleasant because it attacks the soles of the feet and the joints.' (CD, entry for *riuma*)
- b. Mi'atchu' mampus **i uriyan i gimå'-hu.**
AGR.full.of.rock so.much the vicinity.L the house-AGR
 'I have lots of rocks around my house.' (CD, entry for *mi'atchu'*)

Local nouns generally require a possessor.⁶ However, the words listed in (35a) can be combined with the prefix *san-* (glossed DIR in the examples) to create derived nouns that name a location but do not have to be possessed (see 28.5). When there is no possessor, the reference point for the location is

⁵ Other possessed nouns have a wider range of options when the possessor is overt (pronounced): they can either agree with the possessor or else be marked with the linker.

⁶ *Uriya* 'vicinity, around' can be used without a possessor, in which case it means 'vicinity, surroundings, neighborhood'.

recovered from context. This is why the local noun *halum* ‘inside’ in (39) has a possessor but the derived noun *sanhiyung* ‘(area, place) outside’ does not.

- (39) Gåsgas parehu ha’ i **halum guma’** yan i
AGR.clean equal EMP the inside.L house and the
sanhiyung lokkui’.
DIR.outside also
 ‘The inside of the house and the outside as well were equally clean.’
 (Anakko 1)

5.4 Directional nouns

Chamorro has four directional nouns that can also serve as directional adverbs. These nouns name a direction from some reference point, which is either specified by a possessor or else recovered from context.

The directional nouns are often assumed to name the cardinal points—the principal directions on a compass. But regional dialects of Chamorro differ in exactly which cardinal point is named by a given directional noun, as can be seen from (40).

- (40) DIRECTIONAL NOUNS IN CHAMORRO DIALECTS
- | | <i>Guam, Rota</i> | <i>Saipan</i> |
|--------|-------------------|---------------|
| håya | ‘south’ | ‘east’ |
| kåttan | ‘east’ | ‘north’ |
| lågu | ‘north’ | ‘west’ |
| luchan | ‘west’ | ‘south’ |

These differences led Solenberger (1953) to claim that the directions named by the directional nouns were originally defined not by the compass, but by the land-sea axis. Many Austronesian languages have two direction terms, one that means ‘toward the ocean’ and another that means ‘away from the ocean’. Solenberger hypothesized that originally, Chamorro’s directional nouns elaborated on this basic pattern, as shown in (41).

- (41) ORIGINAL MEANINGS OF DIRECTIONAL NOUNS (SOLENERGER 1953)
- | | |
|--------|---------------------------------------|
| håya | ‘away from the ocean, inland’ |
| kåttan | ‘to the right as one faces the ocean’ |
| lågu | ‘toward the ocean, seaward’ |
| luchan | ‘to the left as one faces the ocean’ |

He proposed that later, as a result of contact with Spanish and other European languages, the directional nouns came to refer to the cardinal points, and their different meanings on different islands reflected the locations of the major Chamorro settlements during that period. In the Guam and Rota dialects, *lāgu* came to mean ‘north’ because the ocean is to the north of Hagåtña (in Guam) and Songsong (in Rota). But in the Saipan dialect, *lāgu* came to mean ‘west’ because the ocean is to the west of Garapan.

Solenberger’s hypothesis gives an elegant account of the historical origins of the meaning differences summarized in (40). It also explains some additional, otherwise puzzling facts. It is often suggested that the Chamorro noun *ga’lāgu* ‘dog’ was originally a possessive noun phrase formed from the dependent noun *ga’*- ‘animal, pet’ plus *lāgu* (see 7.1.3). Dogs are not indigenous to the Mariana Islands but were introduced by the Spanish, who came not from the north or the west, but from the Americas—from *across the ocean*. Similarly, the derived noun *sanlāgu*, which is formed from the prefix *san-* plus *lāgu* (see 5.3 and 28.5), means not only ‘(area, place) in the *lāgu* direction’ but also ‘the United States mainland’. But the continental U.S. is not to the north or west of the Mariana Islands, but to the east—again, *overseas*.

What are the meanings of the directional nouns today? The vast majority of speakers of Chamorro define them in terms of the cardinal points. And indeed, most speakers of the Saipan dialect who happen to be in Kagman, on the east coast of Saipan, would probably use *lāgu* to refer to the west, even though in Kagman, the ocean is to the east or to the south. Nonetheless, even today, one very occasionally encounters Chamorro speakers who define the directional nouns in terms of the land-sea axis. This suggests that the change from (41) to (40) is not yet fully complete.

Some examples of directional nouns are given below, with their meanings in the Saipan dialect.

- (42)a. Mambebendi si Maria madoya **gi kattan**
 AGR.ANTIP.sell.PROG UNM Maria fried.banana LCL north.L
 chālān.
 road
 ‘Mary is selling fried banana at the northern side of the road.’ (CD,
 entry for *madoya*)
- b. Ha a’gu chalān-ña i manglu’, istāba ginin
 AGR.shift road-AGR the wind formerly from
 hahaya, pā’gu ginin **lilichan.**
 east.PROG now from south.PROG
 ‘The wind shifted direction, it was coming from the east, now it is

- from the south.’ (CD, entry for *a’gu*)
- c. Meggaiña na tãotão **gi sanlagu**
many.COMPAR L person LCL DIR.west
mambulenchuk.
AGR.have.pointed.nose
‘Most of the mainlanders have pointed noses.’ (CD, entry for
bulenchuk)

Note finally that in Chamorro, the directional nouns are used far more often than the words *akagui* ‘left’ or *agapa* ‘right’, which name directions in terms of orientation with respect to the body.

5.5 Further reading

Directional nouns and their meanings are discussed by Solenberger (1953), Cunningham (1998), and Borja, Borja, and Chung (2006: 105-112).

6

NOUN PHRASES

The typical noun phrase in Chamorro consists of a head noun plus a determiner. The determiner occurs at the left edge of the noun phrase, preceding the head noun. This chapter discusses number and gender within the noun phrase and the form and function of determiners.

6.1 Nouns and noun phrases

Noun phrases in Chamorro can serve as subjects or direct objects and can be marked for case. These phrases can be constructed from a name or a pronoun, but—as the term *noun phrase* suggests—they are most typically constructed from a noun. The noun from which the noun phrase is constructed is called the *head noun*. Some examples of noun phrases are given in (1), with the head noun in boldface.

- (1) a. un dāngkulun **saligão**
a big.L centipede
 ‘a huge centipede’ (CD, entry for *saligão*)
- b. todudu i **pusision** i guihan
all.EMP the figure.L the fish
 ‘the entire figure of the fish’ (Cooreman 1983: 11)
- c. i malolommuk siha na **klâsin** âmut
the AGR.PASS.pound.PROG PL L sort.L medicine
 ‘the pounded types of medicine’ (LSS 400)
- d. **agradesimienton-ña** nu i nina’gimen-ña si
gratitude-AGR OBL the NMLZ.make.drink-AGR UNM
 nanâ-hu hānum nu guiya
mother-AGR water OBL him
 ‘his gratitude for my mother’s letting him drink water’ (EM 99)

6.1.1 Number

6.1.1.1 Form

Both nouns and noun phrases can be marked for number. There are three numbers: singular (referring to one individual), dual (referring to two individuals), and plural (referring to multiple individuals). However, the only

noun that actually makes a three-way morphological distinction among singular, dual, and plural is *che'lu* 'sibling'.¹

(2)		SINGULAR	DUAL	PLURAL
	'sibling'	che'lu	chume'lu	mañe'lu

The vast majority of Chamorro nouns distinguish just two numbers, singular/dual and plural, and do so only *optionally*. Singular/dual number is not indicated on nouns by any special morphology. (Dual noun phrases are distinguished from singular noun phrases by the numeral *dos* 'two'.) The morphology used to indicate plural number depends on the noun:

(i) A few nouns are marked irregularly and obligatorily for the plural, with morphology that can involve reduplication or nasal substitution (see 30.4.1). These nouns are listed below.

(3)		SINGULAR/DUAL	PLURAL
	'sibling'	che'lu	mañe'lu
	'man, son'	lâhi	lalâhi
	'woman'	palâo'an	famalâo'an
	'priest'	pâli'	mamâli'
	'child'	pâtgun	famagu'un
	'parent'	saina	mañaina

(ii) A very few nouns borrowed from Spanish are marked for the plural, or the dual/plural, with the suffix *-s* or *-is*. This marking seems to occur on a wider range of nouns in Guam than in the Northern Mariana Islands.² For some of these nouns (e.g. *ânghit* 'angel') the dual is identical to the singular form, whereas for others (e.g. *sântu* 'saint') the dual is apparently identical to the plural form.

¹ *Asagua* 'spouse' might appear to be another noun that distinguishes among singular, dual, and plural. However, the noun *ásagua* 'spouse' has a different stress pattern from the related intransitive verb *ásagua* 'get married'. Forms like *umásagua* 'spouses, married ones (du.)' and *manásagua* 'married couples (pl.)' are actually verb forms, because they have the stress pattern of the intransitive verb. So the noun phrase *i dos umásagua* 'the two (ones) who got married' does not have an overt head noun that is dual, but rather a null head noun modified by a relative clause whose verb is dual. See Chapter 24.

² The Chamorro nouns *kosas* 'thing' and *trâstis* 'thing' are borrowed from plural nouns in Spanish, but can be singular or plural in Chamorro.

(4)		SINGULAR	PLURAL
	'angel'	ânghit	ânghelis
	'inch'	putgâda	putgâdas
	'saint'	sântu	sântus

(iii) Human (or humanlike) nouns can be optionally marked for the plural with the prefix *man-*. This prefix, which usually does not undergo nasal substitution, can co-occur with the plural suffix *-s* or *-is* described in (ii), but not with the obligatory plural marking described in (i).

(5)		SINGULAR/DUAL	PLURAL
	'soul, spirit'	ânicas	manânicas
	'angel'	ânghit	manânghelis
	'Chamorro'	Chamorro	manChamorro
	'Catholic'	katoliku	mangkatoliku
	'teacher (f.)'	ma'estra	manma'estra
	'saint'	sântu	mañântus
	'father'	tâta	mantâta
	'writer'	titugi'	mantitugi'

In addition to these realizations of plural marking on nouns, a noun phrase can be marked optionally for the plural (as opposed to the singular/dual) with the particle *siha*. The location of *siha* within the noun phrase is flexible. It can occur immediately after the head noun (represented in boldface below).

- (6) a. i **famalão'an** siha
 the PL.woman PL
 'the women'
- b. i mandangkulu yan i mandikiki' na **bayogu** siha
 the AGR.big and the AGR.small L sea.bean PL
 'the large and the small sea beans' (CD, entry for *bayogu*)
- c. meggai na **palâbra** siha
 many L word PL
 'many words' (CD, entry for *âtlibis*)
- d. esti na **kosas** siha
 this L thing PL
 'these things' (CD, entry for *gastão*)
- e. i **prinsipât** siha gi iskuela
 the principal PL LCL school
 'the school principals' (CD, entry for *atmirâpbli*)

If the head noun is phonologically dependent—for instance, because it is marked with the post-head form of the linker (see 7.3.1)—*siha* occurs immediately after the larger phonological word containing it. This larger phonological word is surrounded by brackets in (7).

- (7) a. ni [**bayogun** dāngkulu] siha
 OBL sea.bean.L big PL
 ‘big sea beans’ (CD, entry for *bayogun dāngkulu*)
 b. i [**Dipattamentun** Gubietnu] siha
 the department.L government PL
 ‘the Government Offices’ (CD, entry for *ufisiāt*)

Siha can also occur immediately after a determiner that is a phonological word, such as a demonstrative (in (8a-b)) or a quantifier (8c).

- (8) a. esti siha i **manpipenta**
 this PL the PL.painter
 ‘these painters’ (CD, entry for *pípenta*)
 b. todū ennāo siha manma’utut na **trongku**
 all that PL AGR.PASS.cut L tree
 ‘all those trees that were cut’ (CD, entry for *pohni*)
 c. todū siha i **hugeti**
 all PL the toy
 ‘all the toys’

And it can occur immediately after an adjective (9a) or a relative clause (9b) that precedes the head noun.

- (9) a. i mandāngkulu siha na **besti**
 the AGR.big PL L decoration
 ‘the big decorations’ (CD, entry for *besti*)
 b. i nilaksin Francisca siha na **metyas**
 the WH[OBJ].sew.L Francisca PL L socks
 ‘the socks that Francisca sewed’

These patterns suggest that *siha* is an enclitic: it must lean on a phonological word to its left. However, matters are more complicated when the noun phrase begins with the definite article *i* (as in (10a)) or the null indefinite article (10b). Then *siha* has a further option: it can occur at the left edge of the noun phrase, preceding the article.

- (10)a. Uma mǎgi siha i **hayu**.
 carry to.here PL the wood
 ‘Carry over all the wood.’ (CD, entry for *uma*)
 b. Guaha siha **tinanum** gi gualu’.
 AGR.exist PL plant LCL farm
 ‘There are plants at the farm.’ (EM 139)

In such cases, *siha* is not an enclitic. It can be the first word of the sentence (as in (11a)), and can support a phonologically dependent element that must lean to the right (such as *para* ‘to’ in (11b)).

- (11)a. Siha i **famagu’un** fuma’gāsi i kareta.
 PL the PL.child WH[SB].wash the car
 ‘The children are the ones who washed the car.’
 b. Hu taitai i istoria para siha i **famagu’on-hu**.
 AGR.read the story to PL the PL.child-AGR
 ‘I read the story to my children.’

These patterns suggest that *siha* can attach to the head noun or to any element preceding it within the noun phrase. In (6), *siha* has attached to the head noun; in (9), to a preceding adjective or relative clause; and in (8), (10), and (11), to the determiner.³ If the element to which *siha* has attached is a determiner that is not a phonological word, *siha* is realized to its left (see (10-11)). Otherwise, *siha* is realized to the right, as an enclitic (see (6-9)).

Note finally that *siha* can appear in a noun phrase even when the head noun is already marked for the plural; see (6a), (8a), and (11). This, plus its flexible location, argues that it does not realize the number of the noun, but rather the number of the noun phrase.

6.1.1.2 Meaning and use

For the most part, the uses of number in nouns and noun phrases are straightforward. The singular is used to refer to one individual.

- (12) Guaha un patgun mamomokkat gi chalan.
 AGR.exist a child AGR.walk.PROG LCL road
 ‘There was a child who was walking on the road.’ (from a tape-recorded narrative)

³ When *siha* is attached to an adjective or relative clause, it is realized to the right of the adjective or relative clause.

The dual refers to two individuals; it generally requires the noun phrase to include the numeral *dos* ‘two’.

- (13)a. Hu chãba’ i dos pãtgun sa’ umá’achonnik.
AGR.interrupt the dos child because AGR.RECP.push.PROG
 ‘I interrupted the two children because they were pushing each other.’ (CD, entry for *chãba*)
- b. Acháma’gas i dos palão’an guini na lugãt.
equally.boss the two woman LCL.this L place
 ‘Both (lit. the two) ladies are equally ranked leaders in this place.’
 (CD, entry for *achá-*)
- c. Humãnao ham ni dos saina para bai in higif i
AGR.go we.EXCL OBL two parent FUT AGR surprise the
famagu’un.
PL.child
 ‘We (excl.) two parents went to surprise the kids.’ (CD, entry for *higif*)

The plural is used to refer to more than one individual when the conditions for using the dual are not met. Thus, the plural is used to refer to three or more individuals. The plural is also used when the speaker, for whatever reason, chooses to not to make explicit whether the noun phrase refers to two, or more than two, individuals. Compare the singular/dual *saina* ‘parents’ in (13c) with the plural *mañaina-hu* ‘my parents’ in (14).

- (14) Manmãtai esta mañaina-hu disdi mã’pus na
AGR.die already PL.parent-AGR since AGR.leave L
sãkkan.
year
 ‘My parents have passed away since last year.’ (CD, entry for *mañaina*)

It should be emphasized that for the vast majority of Chamorro nouns, number marking is optional (see 6.1.1.1). In the clause in (15), the subject, *i ma’estra* ‘the teachers (f.)’, refers to multiple teachers. The verb must show plural agreement with this subject, but neither the subject noun phrase nor its head noun is overtly marked for the plural.

- (15) Mangunfotmi i ma’estra.
AGR.agree the teacher
 ‘The teachers agreed.’

Further, the only nouns that can be marked for number are animate. Inanimates are generally marked for number only at the level of the noun phrase, with *siha*, which is optional.

- (16)a. Manma'abonuyi siha i tinanum.
AGR.PASS.fertilize PL the plant
 'The plants were fertilized.' (CD, entry for *abonu*)
- b. gi mamaila' na tiempu siha
LCL AGR.come.PROG L time PL
 'in the times to come' (CD, entry for *asosiasión*)
- c. Poddak fan ennao siha i etdun gi tatalo'-hu.
squeeze please that PL the pimple LCL back-AGR
 'Please squeeze all the pimples on my back.' (CD, entry for *poddak*)

6.1.2 Gender

Chamorro does not have a gender system for indigenous nouns. But some nouns borrowed from Spanish have related masculine and feminine forms, where the masculine forms are used to refer to males and the feminine forms, to females. These nouns include kin terms:

(17)	MASCULINE	FEMININE
'grandparent'	guellu	guella
'sibling-in-law'	kuñâdu	kuñâda
'grandchild'	nietu	nieta
'fiance(e)'	nobiu	nobia
'godparent'	patlinu	matlina
'cousin'	primu	prima
'parent-in-law'	sogru	sogra
'child-in-law'	yetnu	yetna

Terms of respect for elders:

(18)	MASCULINE	FEMININE
preceding an elder's name	Tun	Tan
term of address in <i>ngingi</i>	Ñot	Ñora

Professional nouns:

(19)		MASCULINE	FEMININE
	‘barber’	batberu	batbera
	‘teacher’	ma’estru	ma’estra
	‘servant’	muchâchu	muchâcha
	‘shopkeeper’	tinderu	tindera

And other human nouns, including agentive nouns derived by attaching the agentive suffix *-dót* to a verb (see 28.2.1.2).

(20)		MASCULINE	FEMININE
	‘widow(er)’	bi’udu	bi’uda
	‘adolescent’	hobinsitu	hobinsita
	‘stranger’	istrangheru	istranghera
	‘So-and-so’	Fulânu	Fulâna
	‘dancer’	bailadót	bailadora
	‘director’	direktót	direktora
	‘singer’	kantót	kantora

Does this mean that Chamorro has a gender system in a limited part of its lexicon? Probably not. In languages with a gender system, all nouns are classified for gender and the classification does not necessarily have a basis in real-world characteristics; it may be arbitrary. But in Chamorro, only a small number of nouns have separate masculine and feminine forms, and their use is determined by the sex of the individuals referred to: masculine forms are used to refer to males, feminine forms are used to refer to females. This suggests that although the nouns in (17-20) are borrowed from a language with a gender system (Spanish), this does not mean that there is a gender system in Chamorro. The alternations in (17-20) more closely resemble the alternations in English noun pairs such as *actor/actress*, *duke/duchess*, *giant/giantess*. See Stolz (2012) for discussion.

6.2 Determiners

Determiners are words that specify the discourse familiarity, location, or quantity of whatever the noun phrase refers to. In Chamorro, the determiners include articles, demonstratives, numerals, and quantifiers. They occur at the left edge of the noun phrase, preceding the head noun. Although determiners do not combine freely with one another, it is possible for a noun phrase to

have more than one determiner. This section surveys the form, meaning, and use of the different determiners and their combinations.

6.2.1 Articles

6.2.1.1 Form

Chamorro has three articles: the definite article *i*, the null indefinite article, and the indefinite singular article *un*. The definite article *i* and the indefinite singular *un* are phonologically dependent; they must lean on a phonological word to their right. As its name suggests, the null indefinite article is not pronounced. It is symbolized with a dash in the chart in (21) but not represented in the examples.

(21)	ARTICLES	
	<i>i</i>	‘the’
	–	‘a, any’
	<i>un</i>	‘a, one (sg.)’

The definite article and the null indefinite article can occur in noun phrases that are singular, dual, or plural. As its name suggests, the indefinite singular *un* is restricted to singular noun phrases. All three articles can occur in noun phrases that serve as predicates, arguments, or adjuncts.

The articles occur at or near the left edge of the noun phrase, preceding the head noun (represented in boldface below) and any adjectives or relative clauses.

- (22)a. *i dos na ottru **āmku** ni munā’i si*
the two L other elder COMP WH[SB].give UNM
Lucy āmut
Lucy medicine
 ‘the two other elders who gave Lucy medicinal knowledge’ (LSS 388)
- b. **balutān-ña** *i bagāsun chā*
bag-AGR the ground.leaf.L tea
 ‘any bag for the ground tea leaves’ (CD, entry for *bagāsu*)
- c. *un bagamondū na **tāotāo***
a vagabond L person
 ‘a man who is a vagabond’ (CD, entry for *bagamondū*)

The definite article can be preceded within the noun phrase by the plural particle *siha* (see 6.1.1.1), by a demonstrative, and by the quantifier *todu* ‘all’ (see 6.2.4.2).

- (23)a. siha i **ga'-hu** manåttitung na letchun
 PL the pet-AGR AGR.black L piglet
 'my black pet piglets' (*Mangadada* 5)
- b. atyu i **tumåtis** halumtånu'
 that the tomato.L forest
 'that forest tomato' (LSS 327)
- c. todus siha i guaha na **rai** guihi na tånu'
 all PL the AGR.exist L king LCL.that L land
 'all the kings that there were in the land' (Cooreman 1983: 70)

The null indefinite article can co-occur with *siha*.

- (24) siha difirentis **klåsin** botas
 PL different.L sort.L boots
 'different kinds of boots' (CD, entry for *botas*)

The indefinite singular *un* cannot co-occur with any of these elements.

6.2.1.2 Meaning and use

Broadly speaking, the articles serve to help the addressee to identify the referent of the noun phrase—the individual, thing, stuff, location, event, idea, or concept that the noun phrase refers to.

6.2.1.2.1 The definite article

The definite article *i* has a number of uses. First of all, it is used when the referent of the noun phrase is familiar to both the speaker and the addressee.⁴ The referent may be familiar because it has been mentioned previously in the discourse. In (25), an excerpt from a story, a dog has a turtle in its mouth when it notices a rabbit. After the rabbit is first introduced (by the noun phrase *un kunehu* 'a rabbit'), it is referred to later by noun phrases that contain the definite article, such as the noun phrase in boldface below.

- (25) Ha li'i' un kunehu ... Malågu para u gacha' **i**
 AGR.see a rabbit AGR.run FUT AGR.catch.up.with the
kunehu.
 rabbit
 '[The dog] saw a rabbit ... It ran to catch up with the rabbit.' (*Igu* 4)

⁴ The discussion in the text is phrased in terms of familiarity for convenience. One could equally well say that the definite article is used when the referent of the noun phrase is unique in the discourse context.

Alternatively, the referent may be familiar because it is common knowledge that it exists. That is why the sun is referred to in (26) by a noun phrase containing the definite article.

- (26) *Āppan* *i* *hanum anai* *kumahulu' i semnak.*
 AGR.evaporate the water when AGR.get.up the sun
 ‘The water evaporated when the sun came up.’ (CD, entry for *āppan*)

The definite article is also used when information known to the speaker and the addressee makes it reasonable to assume that the referent exists. In (27), from a story about Tan Amalia, her house is introduced by a noun phrase that contains the definite article. Even though the house has not been mentioned previously, it is treated as familiar because it is reasonable to assume that Tan Amalia lives in a house.

- (27) *Gaigi* *i gimã-ña* *si* *Tan Amalia* *gi kantun*
 AGR.be.at the house-AGR UNM Mrs. Amalia LCL edge.L
 gima'yu'us San Antonio.
 church.L San Antonio
 ‘Tan Amalia’s house was next to the San Antonio church.’ (*Dibota* 2)

In (28), from a story about an injured boy, the boy’s mother is introduced by a noun phrase containing the definite article, because it is reasonable to assume that the boy has a mother.

- (28) *Poddung* *un pãtgun lâhi* *gi monkey bar ... I nana*
 AGR.fall a child.L male LCL monkey bar the mother
 ha konni' para as Felipin Kapileo.
 AGR.take to OBL Felipe.L Kapileo
 ‘A boy fell down from a monkey bar...The mother took the boy to Mr. Felipe Kapileo.’ (LSS 254)

Second, the definite article can be used in generic noun phrases—noun phrases that refer to typical representatives of a kind. In (29a), the generic noun phrase *i taotão* ‘the person’ refers to a typical person; in (29b), the generic noun phrase *i eruplãnu* ‘the airplane’ refers to a typical airplane.

- (29)a. Siña lokkui' **i** **taotão** sessu ha gimin.
can also the person often AGR drink
 'A person may also drink this often.' (LSS 401)
- b. Tinaka' mäs ki dies oras **i** **eruplānu**
AGR.PASS.last more than ten hours the airplane
 para u fättu sanlagu.
FUT AGR arrive DIR.seaward
 'It takes more than ten hours for an airplane to reach the continental United States.' (CD, entry for *sanlagu*)

Third, the definite article can be used in noun phrases constructed from mass nouns—nouns that refer to substances or qualities that cannot be counted, such as *hānum* 'water' or *rispetu* 'respect, high regard'. In (30), the noun phrases referring to native medicine contain the definite article. The article is visible in (30a); it has fused with the local case marker *gi* in (30b) (see 5.1.1).

- (30)a. Anai mafaisin si Ling put **i** **amut**
when AGR.PASS.ask UNM Ling about the medicine.L
natibu pā'gu na tiempu ...
native now L time
 'When Ling was asked about the condition of native medicine today...' (LSS 159)
- b. Guaha na chacha ma'u'usa **gi** **amut**
AGR.exist L bush.sp AGR.PASS.use.PROG LCL medicine.L
natibu.
native
 'Some types of *chacha* are used in local medicine.' (CD, entry for *chacha*)

Fourth, the definite article is used in noun phrases whose head noun is a word or expression that is mentioned, meaning that the word or expression itself is what is referred to. In (31), *achâki* 'incident, trouble' does not refer to trouble or pestering, but rather to the word *achâki*.

- (31) **I** "**achâki**," putlumenus, dos kumeke'ilek-ña.
the achâki at.least two meaning-AGR
 'Achâki has at least two meanings.' (EM 122)

Fifth and finally, the definite article can be used together with the indefinite singular article *un*. In such cases, the head noun must be singular, and

the definite article precedes *un*. This combination of articles can be translated as ‘(the) one’ (as in (32a)) or ‘a certain’ (32b).

- (32)a. Kuântu bali-ña **i un kahitan** pāsas gi tenda?
how.much? worth-AGR the one box.L raisins LCL store
 ‘How much is one box of raisins at the store?’ (CD, entry for *pāsas*)
- b. Måttu esti **i un saina** yan i patgon-ña ...
AGR.arrive this the a parent and the child-AGR
 ‘A lady came with her daughter...’ (LSS 158)

6.2.1.2.2 The null indefinite article

6.2.1.2.2.1 Basics

The null indefinite article is nonspecific. This article is used, first of all, when the speaker has no particular referent in mind, and all that matters is that the referent fits the description supplied by the noun phrase. In (33), the speaker may not know or care what particular shafts were made or what particular medicinal plants were collected. What is important is that shafts were made (in (33a)) and medicinal plants were collected (33b).

- (33)a. Esta ha tutuhun mama’tinas **latgeru** para i
already AGR.begin AGR.INF.ANTIP.make shaft for the
fa’i.
rice.plant
 ‘He had already started making shafts for the rice plants.’
 (Cooreman 1983: 57)
- b. Sessu sumiha i dos mañuli’ **āmūt.**
often AGR.they the two AGR.INF.ANTIP.take medicine
 ‘The two often go together to take medicinal plants.’ (LSS 402)

In addition, the null indefinite article is used when multiple (possible) situations are described and the referent of the noun phrase could vary depending on the situation. In (34a), each situation of her needing medicinal plants might involve different plants. In (34b), what Jose wants is for a situation to occur in which he finds a wife; the exact identity of the potential wife might depend on the situation.

- (34)a. Yan kada ha nisisita **āmūt,** humânão
and whenever AGR.need medicine AGR.go
ham ya ha na’lili’i’ yu’ taimanu
we.EXCL and.then AGR.make.see.PROG me how?

ma'utotot-ña.

WH[DJ].PASS.cut-AGR.PROG

'Every time she needed some medicinal plants, we (excl.) would go together and she would show me how to break it off.' (LSS 512)

- b. Malagu' si Jose mañodda' **asaguã-ña.**
 AGR.want UNM Jose AGR.INF.ANTIP.find spouse-AGR
 'Jose wants to find a wife (lit. a wife of his).'

The null indefinite article is used in negative sentences for (non-subject) noun phrases that have no referent—in other words, when the event or state described has no participant that fits the description supplied by the noun phrase. The negative sentence in (35a) states that no two-story houses existed in the old days; the negative sentence in (35b) states that no transom was installed in the speaker's house.

- (35)a. Tāya' ha' **nikai** āntis na tiempu.
 AGR.not.exist EMP two.story.house before L time
 'There weren't any two-story houses in the old days.' (CD, entry for *nikai*)
 b. Ti ma nã'yi **trabisãñu** i gimã'-hu.
 not AGR.add.to transom the house-AGR
 'They did not put a transom in my house.' (CD, entry for *trabisãñu*)

Finally, the null indefinite article is used in three of the same contexts as the definite article. It is used in generic noun phrases—noun phrases that refer to typical representatives of a kind. The noun phrases *petroliu* 'petroleum' in (36a) and *pianu* in (36b) are generic.

- (36)a. Gof piligru **petroliu** gi kantun guãfi.
 AGR.very dangerous petroleum LCL edge.L fire
 'Petroleum is very dangerous near the fire.' (CD, entry for *petroliu*)
 b. Mabebendi **pianu** gi tendan Joeten.
 AGR.PASS.sell.PROG piano LCL store.L Joeten
 'Joeten store sells pianos.' (CD, entry for *pianu*)

It can also be used in noun phrases constructed from mass nouns, such as *āmut natibu* 'native medicine' in (37a) and *ayudu* 'help' in (37b).

- (37)a. Si Āmmi' manã'i nu i tiningo'-ña put
 UNM Āmmi' AGR.PASS.give OBL the NMLZ.know-AGR about

āmūt natibu as nanâ-ña.
medicine.L native OBL mother-AGR
 ‘Ammi’ received her knowledge of native medicine from her mother.’ (LSS 400)

- b. Binabastun i biha pues ha nisisita **ayudu**.
AGR.use.cane.PROG the old.woman then AGRneed help
 ‘The old woman was using a cane and so she needed help.’ (LSS 512)

Finally, it is used in noun phrases whose head noun is a word or expression that is mentioned, meaning that the word or expression itself is the referent. In (38), *lāgu* refers not to a direction, but to the word *lāgu*.

- (38) Giya Guåhan, **lāgu** pã’gu na tiempu, kumeke’ilek-ña
LCL Guam lāgu now L time meaning-AGR
 gi finu’ English, “north”.
LCL speech.L English north
 ‘In Guam, *lāgu* nowadays means “north” in English.’ (EM 108)

It is not known what factors determine the choice between the definite article and the null indefinite article in these contexts.

6.2.1.2.2.2 In possessive noun phrases

Like other articles, the null indefinite article can occur in possessive noun phrases—noun phrases that include a possessor. The null indefinite article is often used in possessive noun phrases that are the subject of the clause, when the predicate is an adjective or noun that describes a persistent characteristic or quality (see Chung 2008; 2018). The predicates of the clauses in (39) are the adjectives *bunitu* ‘nice’ and *mala’it* ‘bitter’; their subjects are possessive noun phrases introduced by the null indefinite article.

- (39)a. Bunitu **che’chu’-ñiha**.
AGR.nice work-AGR
 ‘Their work is nice.’ (heard in conversation)
 b. Mala’it **kurason-ña ennão na tâotão**.
AGR.bitter heart-AGR that L person
 ‘That man has a bitter heart.’ (CD, entry for *mala’it*)

This use of the null indefinite article occurs even in negative clauses, as (40) shows. This appears to be the only context in which the null indefinite article can introduce the subject of a negative clause (see 17.4).

- (40)a. Ti bulenchuk **gui'eng-hu.**
not AGR.hooked nose-AGR
 'My nose is not hooked.' (CD, entry for *bulenchuk*)
- b. Ti lâhi **patgon-ña si Rita.**
not man child-AGR UNM Rita
 'Rita's child is not male.'

In the uses just illustrated, the possessive noun phrase counts as specific.

The null indefinite article can also be used in possessive noun phrases that serve as the direct object of a transitive verb (as in (41a)) or the oblique object of an antipassive verb (41b).

- (41)a. Ti bai faggas **matã-mu.**
not AGRpunch face-AGR
 'I will not punch your face.' (CD, entry for *faggas*)
- b. Yanggin mama'tinas hão **eskobã-mu** nu i eskobiya ...
if AGR.ANTIP.make you broom-AGR OBL the plant.sp
 'If you make your broom out of *eskobiya*...' (EM 123)

In such cases, if the possessor is a pronoun that agrees with the subject in person and number, it is almost always understood as reflexive. See (34b) and the following.

- (42) Ha guesguis **addeng-ña** si tâta sa' gof
AGR scrub foot-AGR UNM father because AGR.very
fachi'.
muddy
 'Father scrubbed his (own) feet because they were very muddy.'
 (CD, entry for *guesguis*)

6.2.1.2.3 The indefinite singular article

The indefinite singular article *un* has two uses. First, it is used when the referent of the noun phrase is not familiar to the addressee. Sometimes, the speaker is familiar with the referent, as in (43a). Other times, the speaker may not have a particular referent in mind. Some cases of this last type overlap with cases in which the null indefinite article could be used. In (43d), the exact identity of the referent of *un sentimu* 'a penny' is unimportant; in (43e), *un guma* 'a house' refers to something that satisfies the description of a house; and in (43f), *un saina* 'a parent' refers to a typical parent.

- (43)a. Hu sodda' **un dăngkulu na kahita** gi kamaroti.
AGR.find a big L box LCL attic
 'I found a big box in the attic.' (CD, entry for *kamaroti*)
- b. Ha tutuhun manămti anai mătту **un palăo'an** guatu as Ling ...
AGR.begin AGR.INF.ANTIP.heal when AGR.arrive a woman to.there OBL Ling
 'He started healing when a woman came to Ling...' (LSS 156)
- c. Mamăhan yu' **un kostat suni**.
AGR.ANTIP.buy I a sack.L taro
 'I bought a sack of taro.' (CD, entry for *kostat*)
- d. Ti siňa kabălis i un pesu yanggin
not can AGR.complete the a dollar if
 făfatta **un sentimu**.
AGR.absent.PROG a cent
 'A dollar will not be complete if a penny is missing.' (CD, entry for *séntimus*)
- e. Kăo nahung un arias para mahătsa
Q AGR.enough a 100.sq.meters FUT AGR.PASS.build
un guma'?
a house
 'Is one hundred square meters enough to build a house?' (CD, entry for *arias*)
- f. Gof asiga para **un saina** para u bona unu
AGR.very salt for a parent FUT AGR.favor one
 gi famagu'on-ňa.
LCL PL.child-AGR
 'It is taboo for a parent to favor one of their children.' (CD, entry for *bona*)

The indefinite singular article cannot serve as the determiner of noun phrases that have no referent, such as *prublema* 'problem' in (44).⁵ The null indefinite article is used instead.

- (44) Tăya' (***un**) **prublema**.
AGR.not.exist a problem
 'There's no problem.'

⁵ However, the indefinite singular article can combine with the word-level negative *ni* to form the complex determiner *ni un* 'not (even) one', as in *ni un tăotăo* 'not (even) one person' or *ni un grănu* 'not a bit' (see 17.2).

Second, *un* is used to mean ‘one’, as in the following examples.

- (45)a. Mampus difikuttåt ni para bai hu na’omlat todū
so.much difficulty OBL FUT AGR make.fit all
 gi **un maleta.**
LCL one suitcase
 ‘I had difficulty fitting everything in one luggage.’ (CD, entry for *difikuttåt*)
- b. Madåggåo matå-ña si Ben ni bola
AGR.PASS.hit eye-AGR UNM Ben OBL ball
 ya bumatchit **un måtā.**
and.then AGR.blind one eye
 ‘Ben’s eye was hit by a ball and one of his eyes is blind.’ (CD, entry for *batchit*)

6.2.2 Demonstratives

Demonstratives serve to locate the referent of the noun phrase with respect to the speaker and the addressee. Chamorro has the three-way system of demonstratives shown in (46).

- (46) DEMONSTRATIVES
- | | |
|------------------|---|
| esti | ‘this’, near speaker |
| ennão | ‘that’, near addressee |
| atyū, etyū, yuhi | ‘that’, near third person (away from speaker and addressee) |

This system distinguishes three locations: near the speaker, near the addressee, and near some third party that is neither the speaker nor the addressee. Note that the third person demonstrative *atyū* is often pronounced *etyū*. The third person demonstrative *yuhi* is sometimes identified as older or archaic; today it appears to be used mainly in Rota.

Demonstratives occur at the left edge of the noun phrase. If the definite article is present, the demonstrative precedes the article.

- (47)a. Pues humånão **atyū i trosu** gi tenghon-ña.
then AGR.go that the glob LCL nape-AGR
 ‘Then the glob at the back of his neck went away.’ (LSS 338)
- b. Chuli’ mągi **ennão i donni’ sālī.**
bring to.here that the hot.pepper.sp.
 ‘Bring the small pepper here.’ (CD, entry for *donni’ sālī*)

If no article is present, the pre-head form of the linker, *na*, occurs between the demonstrative and the noun (see 7.3.1).

- (48)a. **Esti** lokkui' **na** **âmut** siña mana'setbi gi
this also L medicine can AGR.PASS.make.use LCL
 amut tabatdiyu.
medicine.L headache
 'This medicinal leaf can also be used in the *âmut tabatdiyu*.' (LSS 417)
- b. Achibão **ennão** **na** **tãotão**.
AGR.troublemaker that L person
 'That guy is a troublemaker.' (CD, entry for *achibão*)

When the noun phrase is marked for case, the case marker precedes the demonstrative, as (49) shows.

- (49)a. ... sa' hâfa na finafaisin gui' nu **atyu**
because what? COMP AGR.PASS.ask.PROG she OBL that
na kuestion.
L question
 '...why she was being asked that question.' (EM 96)
- b. Mânu diretchu gi **esti na magâgu?**
which? AGR.right.side.up LCL this L clothing
 'Which is the right side up in this skirt?' (CD, entry for *diretchu*)

However, when the noun phrase is in the local case and the demonstrative is followed by the pre-head form of the linker, the local case marker and the demonstrative typically merge to produce the local forms of demonstratives shown below.

- (50) LOCAL FORMS OF DEMONSTRATIVES
- | | |
|---------|--|
| guini | 'this, here', near speaker (local case) |
| guennão | 'that, there', near addressee (local case) |
| guihi | 'that, over there', near third person (local case) |

Some examples of the local forms of demonstratives are given in (51).

- (51)a. Intri todus ham na tres ni manmânggi'
among all us.EXCL L three COMP AGR.ANTIP.write
guini na lepblu.
LCL.this L book

- ‘Among all three of us (excl.) who wrote in this book.’ (EM 6)
- b. Bula halâhas **guihi na tenda.**
AGR.much jewelry LCL.that L store
 ‘There’s plenty of jewelry in that store.’ (CD, entry for *halâhas*)

The local forms of demonstratives also serve as locative adverbs. These adverbs can co-occur with an adjunct in the local case, as in (52).

- (52) Ya **guini** giya AsTeo ...
and.then here LCL AsTeo
 ‘And here in AsTeo [many people went strolling].’ (EM 86)

Finally, the local forms of demonstratives are used to derive the manner predicates *taiguini* ‘like this’, *taiguennâo* ‘like that (near you)’, and *taiguihi* ‘like that (near third person)’. The manner predicates can serve as predicates of clauses or as adverbs (see 18.2).

6.2.3 Numerals

The cardinal numerals are borrowed from Spanish. Some representative numerals are listed below.

- (53) SOME NUMERALS
- | | |
|------------|----------------|
| unu | ‘one’ |
| dos | ‘two’ |
| tres | ‘three’ |
| kuâttru | ‘four’ |
| singku | ‘five’ |
| otchu | ‘eight’ |
| dies | ‘ten’ |
| onsi | ‘eleven’ |
| diesisais | ‘sixteen’ |
| benti | ‘twenty’ |
| benti tres | ‘twenty three’ |
| singkuenta | ‘fifty’ |
| sientu | ‘one hundred’ |
| mit | ‘one thousand’ |

Fritz (1989[1904]: 92) and Safford (1904: 95-98) also recorded an indigenous system of cardinal numerals, but observed that it was no longer in common use. Although recent attempts have been made, especially in Guam, to revive this earlier system, for all practical purposes the cardinal numerals

of Chamorro are the numerals illustrated in (53).

The numerals occur to the left of the head noun. When the head noun names a unit of measurement, the numeral simply precedes it.

- (54)a. Manmalågu i ga'-māmi ga'lågu **singku** **añus** maloffan.
AGR.run the pet-AGR dog five years AGR.past
 'Our (excl.) pet dogs ran away five years ago.' (CD, entry for *ga'lågun machålik*)
- b. **Singku pie** **kuåttru** **putgådas** ha' si Juan
five feet four inches EMP UNM Juan
 linekkå'-ña.
height-AGR
 'Juan is only five feet four inches tall (lit. Juan's height is only five feet four inches).' (CD, entry for *putgådas*)

When the head noun does not name a unit of measurement, the numeral occurs after the definite article (if one is present) and before the head noun. The pre-head form of the linker, *na*, appears between the numeral and the noun, optionally if the numeral is *dos* 'two' and obligatorily otherwise (see 7.3.1).

- (55)a. Ha dingui **i dos** **mañaina-ña**.
AGR.leave the two PL.parent-AGR
 'She left her two parents.' (EM 45)
- b. Mañåda' i paluma **singku na** **mambunitun** **chåda'**.
AGR.lay.eggs the bird five L AGR.pretty.L egg
 'The bird laid five beautiful eggs.' (CD, entry for *mañåda'*)
- c. Tatkumu i *ma'estru* para **unu na** **ma'estru**, yan
such.as the ma'estru for one L teacher and
 i *ma'estrus* para i **mås ki unu na** **ma'estru**.
the ma'estrus for the more than one L teacher
 'Such as *ma'estru* for one teacher, and *ma'estrus* for more than one teacher.' (EM 118)

The cardinal numerals have some of the word order properties of adjectives, and can be viewed as a subtype of adjective. Like other adjectives, they can serve as the predicate of the clause.

- (56)a. **Dos** ha' botsån-ña i katsunes-su.
two EMP pocket-AGR the pants-AGR

‘My pants have only two pockets (lit. pockets of my pants are only two).’ (CD, entry for *botsa*)

- b. Si San Pedro **unu** gi disípulu.
UNM St. Peter one LCL apostles
 ‘Saint Peter is one of the apostles.’ (CD, entry for *disípulu*)

Except for *fine* ‘nena’ ‘first’, ordinal numerals are formed by attaching the prefix *mina* ‘-’ to the corresponding cardinal numerals (see 28.4.7).

- (57) Emi i **mina’tressi** na letra gi atfabetikun Chamorro.
m the thirteenth L letter LCL alphabet.L Chamorro
 ‘M is the thirteenth letter of the Chamorro alphabet.’ (CD, entry for **emi**)

6.2.4 Quantifiers

Quantifiers specify the quantity of the referent of the noun phrase. The most frequently occurring quantifiers in Chamorro are *kada* ‘each, every’, *todu* ‘all’, *bula* ‘much, many’, *meggai* ‘many’, and *palu* ‘some’. These are briefly described below. Their classification as weak or strong is discussed, very briefly, in 6.2.5.

6.2.4.1 *Kada*

Like an article, *kada* ‘each, every’ occurs at or near the left edge of the noun phrase, preceding the head noun and any modifiers.

- (58)a. Talang kada pidâsun kâtni ya u manâ’yi
weigh each piece.L meat and.then AGR PASS.add
 presiu.
price
 ‘Weigh each piece of meat so we can put a price on them.’ (CD, entry for *talang*)
- b. Debi di un difina kada palâbra ni manggaigi gi
should PRT AGR define each word COMP AGR.be.at LCL
 lista.
list
 ‘You have to define each word on the list.’ (CD, entry for *difina*)
- c. Guaha duttrina an Sâbalu gi kada guma’
AGR.exist catechism when Saturday LCL each house.L
 Yu’us.
God

‘Catechism is conducted on Saturdays at each church.’ (CD, entry for *duttrina*)

In such cases, the head noun is typically singular (e.g. *kada pátgun* ‘each child’, not **kada famagu’un* ‘each children’), but the entire noun phrase can be treated as singular or plural for the purposes of agreement and anaphora. In (59), the noun phrase *kada pátgun* can be cross-referenced by singular or plural agreement on the verb (see (59a)), and can serve as the antecedent of a singular or plural pronoun (59b).

- (59)a. *Kada pátgun kumákati / mangákati.*
each child AGR[SG].cry.PROG AGR[PL].cry.PROG
 ‘Each child is/are crying.’
 b. *Kada pátgun pumula’ gui’ / siha.*
each child WH[SB].undress him them
 ‘Each child undressed himself/themselves.’

Kada can co-occur with a numeral, as (60) shows. In such cases, the numeral determines whether the noun is singular/dual or plural.

- (60)a. *Kada unu giya hita gai abilidât.*
each one LCL us.INCL AGR.have ability
 ‘Each one of us (incl.) has a natural talent.’ (CD, entry for *abilidât*)
 b. *Na’gimin i patgun dos gota kada kuâttru oras.*
make.drink the child two drop each four hours
 ‘Make the child drink two drops every four hours.’ (CD, entry for *gota*)

Finally, *kada* is the only quantifier that also serves as a subordinating conjunction. As a subordinating conjunction it means ‘whenever, every time when’.

- (61)a. *Chatguaguahu yu’ kada ma’udai yu’ gi*
AGR.not.feel.well.PROG I whenever AGR.ride I LCL
boti.
boat
 ‘I become nauseated every time I ride on a boat.’ (CD, entry for *chatguahu*)
 b. *Gai ginagu’ si Pedro kada para*
AGR.have NMLZ.lazy UNM Pedro whenever FUT

u o'mak.

AGR shower

'Pedro has some laziness whenever it's time to shower.' (CD, entry for *ginagu*)

6.2.4.2 *Todu*

Todu 'all' occurs at the left edge of the noun phrase. Unlike other quantifiers, it combines with an entire noun phrase, which typically is definite. Thus, *todu* can combine with a noun phrase that consists of a pronoun, as in (62a), or a noun phrase introduced by the definite article or a demonstrative, as in (62b-d).

- (62)a. *Todu hami manmaigu' tâftaf gi paingi.*
all us.EXCL AGR.sleep early LCL last.night
'All of us (excl.) slept early last night.' (CD, entry for *hami*)
- b. *Madoti yu' ni todu i alâhas Nâna Maria.*
AGR.PASS.bestow I OBL all the jewelry.L mother Maria
'I inherited all of grandmother Maria's jewelry.' (CD, entry for *doti*)
- c. *Na'suha todu ennâo i tumâtampi na*
make.get.away all that the WH[SBJ].cover.PROG L
go'naf gi lamasa.
thin.coat LCL table
'Remove all the thin coating that is covering the table.' (CD, entry for *go'naf*)
- d. *Maseha mânu guatu si nanâ-hu, todu i tiempu*
at.all where to.there UNM mother-AGR all the time
tâtatti ha' si tatâ-hu gi santatti.
AGR.behind.PROG EMP UNM father-AGR LCL DIR.behind
'Wherever my mother went, all the time my father followed behind her.' (Cooreman 1982: 6)

In addition, *todu* can combine directly with a noun and its modifiers, although this appears to be less common.

- (63)a. *Sigun gi lai na debi na u fanmatrâta*
according LCL law COMP should COMP AGR.AGR.PASS.treat
todu tâotâo parehu.
all person equally
'According to the law, all people should be treated equal.' (CD, entry for *sigún*)

- b. Mama'titinas si Tun Goru todu klâsin
AGR.ANTIP.make.PROG UNM Mr. Goru all sort.L
 sakapiku para lanceru siha.
pick for farmer PL
 'Tun Goru makes all types of picks for farmers.' (CD, entry for *sakapiku*)
- c. Chinepchup todu salappe'-ña nu i poka.
AGR.PASS.absorb all money-AGR OBL the poker
 'Poker swallowed up all his money.' (CD, entry for *chinepchup*)

Finally, *todu* can apparently be used as an adverb, meaning 'entirely'.

- (64)a. Todu ebang i putserã-ña.
all AGR.crooked the bracelet-AGR
 'Her bracelet is all crooked.' (CD, entry for *ebang*)
- b. Todu gâtdun i istorian Lisa.
all AGR.entangled the story.L Lisa
 'Lisa's story is all tangled.' (CD, entry for *gâtdun*)

6.2.4.3 *Bula, meggai*, and other quantificational adjectives

Bula 'much, many' and *meggai* 'many' are quantificational adjectives that can occur inside or outside the noun phrase. Inside the noun phrase, they are modifiers that precede the head noun, which is marked with the pre-head form of the linker (see 7.3.1). (This head noun is in boldface in (65).)

- (65)a. Āntis gi tiempun militât, manmayuti' bula na
before LCL time.L military AGR.PASS.throw many L
buteyan Kok gi kantun tâsi gi San Haya
bottle.L Coke LCL edge.L ocean LCL DIR landward
 giya Tinian.
LCL Tinian
 'During the military administration, there were lots of discarded Coke bottles at the cliff area on the western part of Tinian.' (CD, entry for *Dâm Kok*)
- b. Na'iyi meggai na **gollai** i eskabetchi.
add.to many L vegetable the eskabetchi
 'Put a lot of vegetables in the *eskabetchi*.' (CD, entry for *eskabetchi*)
- c. Ma atotta i gima' siha ni bulan **simentu**.
AGR.put.cement.on the house PL OBL much.L cement
 'They put lots of cement on the houses.' (CD, entry for *atotta*)

Outside the noun phrase, *bula* and *meggai* are impersonal predicates that take a noun phrase argument that is introduced by the null indefinite article (see 14.2.3).

- (66)a. Bula tãotão nigap.
 AGR.much person yesterday
 ‘There were lots of people yesterday.’ (CD, entry for *bula*)
- b. Meggaiña salappe’-hu kini hãgu.
 AGR.many.COMPAR money-AGR than you
 ‘I have more money than you.’ (CD, entry for *-ña*)

The difference in meaning between *bula* and *meggai* is similar to the difference between English ‘much’ and ‘many’, but not the same. *Bula* is used when the referent of the noun is viewed as an undifferentiated whole; *meggai* is used when the referent of the noun is viewed as a collection of individual units. So *bula* rather than *meggai* is used with mass nouns, such as *hãnum* ‘water’, *airi* ‘air’, and *asukat* ‘sugar’.

- (67)a. Bula hãnum.
 AGR.much water
 ‘There’s a lot of water.’
- b. Bula esta airi.
 AGR.much already air
 ‘There’s already a lot of air.’
- c. *Meggai hãnum.
 AGR.many water
 (‘There’s a lot of water.’)
- d. *Meggai esta airi.
 AGR.many already air
 (‘There’s already a lot of air.’)

However, *meggai* can be used with mass nouns when the referent of the noun can be understood as a collection of individuals; for instance, when the noun ranges over different types (as in (68)) or different occasions (69).

- (68)a. Bula chà’guan.
 AGR.much grass
 ‘There is a lot of grass.’
- b. Meggai chà’guan.
 AGR.many grass
 ‘There is a lot of (different types of) grass.’

- (69)a. Bula ginimen-mu letchi.
AGR.much WH[OBJ].drink-AGR milk
 ‘You drank a lot of milk (today).’
 b. Meggai ginimen-mu letchi.
AGR.many WH[OBJ].drink-AGR milk
 ‘You drank a lot of milk (in your lifetime).’

In addition, *bula* is routinely used with count nouns when the speaker is not interested in differentiating the individuals in the set referred to. For many speakers, there is no felt difference between *bula tãotão* in (66a) and *meggai tãotão* in (70a), or between *bulan biãhi* in (70b) and *meggai na biãhi* in (70c).

- (70)a. Meggai tãotão gi panaderia.
AGR.many person LCL bakery
 ‘There are a lot of people at the bakery.’ (CD, entry for *panaderia*)
 b. Bulan biãhi ni manhãno ham guatu para
much.L time COMP AGR.go we.EXCL to.there FUT
AGR ANTIP.listen.to music
 bai in fanekkunguk dandan.
 ‘Many times we (excl.) go there to listen to music.’
 c. Meggai na biãhi yanggin mattu yu’,kumãti i neni.
many L time if AGR.arrive I AGR.cry the baby
 ‘Many times when I arrive, the baby cries.’

Note, finally, that *bula* is also an adjective meaning ‘full’.

- (71) Maguf yu’ sa’ bula i tangkek-ku ni hanum
AGR.happy I because AGR.full the tank-AGR OBL water.L
 uchan gi paingi.
rain LCL last.night
 ‘I’m happy because my water tank is full of rain water from last night.’ (CD, entry for *bula*)

Chamorro has other quantificational adjectives besides *bula* and *meggai*. For instance, *lãhyan* ‘many’ is evidently a synonym of *meggai*. *Dididi* ‘few, little, not much’, appears to be an antonym of *bula*. Both *lãhyan* and *dididi* can occur inside the noun phrase.

- (72)a. Hãspuk ha’ yu’ anai hu atan i lahyan
AGR.satiated EMP I when AGR.look.at the many.L

nengkanu’.

food

‘I was full just looking at the large amount of food.’ (CD, entry for *lâhyan*)

- b. Templa i insalâda ya un nâ’yi dididi’ ha’
mix the salad and.then AGR.add.to little EMP
na sirasimi’.

L salad.oil

‘Mix the salad and add very little oil.’ (CD, entry for *sirâsimi*)

Both can also occur outside the noun phrase, as impersonal predicates that take a noun phrase argument introduced by the null indefinite article.

- (73)a. Gef lâhyan letchon-ña yanggin mañâgu.
AGR.very many piglet-AGR if AGR.give.birth
‘There would be many of its little piglets when it gave birth.’ (EM 88)

- b. Hagas na tiempu gof dididi’ tâotâo guini giya
past L time AGR.very few person here LCL
Tinian.
Tinian
‘Long ago there were only a few people here in Tinian.’ (CD, entry for *hagas*)

Dididi’ can also serve as an adverb, meaning ‘a little’.

- (74) Baba dididi’ i bintâna ya u guaha gueha.
open a.little the window and.then AGR.exist ventilation
‘Open the window a little bit to ventilate.’ (CD, entry for *gueha*)

6.2.4.4 *Palu*

Palu means ‘some (as opposed to others)’. It occurs to the left of the head noun, which is optionally marked with the pre-head form of the linker (see 7.3.1).

- (75)a. Ma bendi palu doddu sa’ kantidâ i
AGR.sell some damsel.fish because AGR.plenty the
kinenni’-ñiha.
WH[OBJ].catch-AGR
‘They sold some damsel fish because they caught a lot.’ (CD, entry for *doddu*)

- b. Manggaigi guihi siha palu mañe'lu-hu ni
AGR.be.at over.there PL some PL.sibling-AGR COMP
 manmafahãgu antis di i gera.
AGR.born before PRT the war
 'Some of my siblings who were born before the war were there.'
 (EM 97)
- c. Manma'omiti palu na infotmasion siha gi aplikasion.
AGR.PASS.omit some L information PL LCL application
 'Some information on the application is omitted.' (CD, entry for
omiti)

Another determiner with roughly the same meaning and distribution as *palu* is *loskuãntus* (or *noskuãntus*) 'several, a few'.

- (76) Ti meppa' i trongkun lalanghita, noskuãntus grãnu
not AGR.fruitful the tree.L tangerine a.few piece
 ha' tinekchã'-ña.
EMP fruit-AGR
 'The tangerine tree is not fruitful, there are only a few fruits.' (CD,
 entry for *noskuãntus*)

6.2.5 The classification of determiners

The preceding discussion treats articles, demonstratives, numerals, and quantifiers as separate subtypes of Chamorro determiners. Now is the time to acknowledge another important dimension along which these determiners can be classified.

Certain constructions in Chamorro demand noun phrases with a particular type of determiner. Following Milsark's (1974) discussion of English, a Chamorro determiner can be classified as *weak* if it introduces noun phrases that can serve as the pivot of an existential verb (see 14.2.2), and *strong* if it introduces noun phrases that can serve as the subject of a nonverbal predicate that describes a persistent quality or characteristic. This classification cuts across the subclasses of determiners described earlier: some articles and quantifiers count as weak, whereas other articles and quantifiers count as strong.

The chart in (77) summarizes the classification of Chamorro determiners as strong or weak.⁶

⁶ Noun phrases consisting of pronouns or names are strong.

(77)	STRONG DETERMINERS	WEAK DETERMINERS
	<i>i</i> (definite article)	– (null indefinite article)
	<i>un</i> (indefinite sg. article)	<i>un</i> (indefinite sg. article)
	demonstratives	numerals
	<i>kada, todū</i>	<i>bula, meggai, dídidi', palu, etc.</i>

Note that the indefinite singular article *un* has both strong and weak uses. The null indefinite article is never strong, even though possessive noun phrases constructed from it can be the subjects of nonverbal predicates that describe a persistent quality or characteristic (see 6.2.1.2.2.2).

Determiners can be classified along still other dimensions. For instance, noun phrases constructed from the definite article *i*, the indefinite singular article *un*, a demonstrative, a numeral, or *palu* ‘some (but not others)’ are specific; noun phrases constructed from the other quantifiers or the null definite article are nonspecific. This difference is discussed further in 16.4.

6.2.6 Combinations of determiners

Noun phrases in Chamorro can be introduced by a combination of determiners. Some possible combinations have been discussed earlier in this chapter. The definite article *i* can precede the indefinite singular article *un* (see 6.2.1.2.1). A demonstrative can precede the definite article (see 6.2.2). The quantifier *todū* ‘all’ can combine with a noun phrase beginning with the definite article or a demonstrative (see 6.2.4.2).

In addition, the definite article can precede *palu* ‘some (but not all)’.

- (78) Humugāndu si Petra gi halum hatdin ya
 AGR.play UNM Petra LCL inside.L garden and.then
 ha gatcha' **i palu** tinanum.
 AGR.step.on the some plant
 ‘Petra played in the garden and she stepped on (some of) the plants.’
 (CD, entry for *gatcha* ’)

Perhaps more surprisingly, the definite article can precede the strong quantifiers *kada* ‘each’ and *todū* ‘every’.

- (79)a. Hāfa ma'a'ñāo-ñā **i kada** istudiānti?
 what? WH[OBL].afraid-AGR the each student
 ‘What is each student afraid of?’
 b. Manmabebendi **i todū** klāsin katderu siha gi as
 AGR.PASS.sell.PROG the all sort.L tub PL LCL

Joeten.

Joeten

‘Joeten sells a lot of different kind of tubs.’ (CD, entry for *katderu*)

Since the definite article can precede *todu*, and *todu* can combine with a definite noun phrase, it is possible to find noun phrases in which the definite article occurs twice, once before and once after *todu*.

- (80) Manmaripåsa i cha’guan siha nu **i** **todu** **i**
 AGR.PASS.remove the weed PL OBL the all the
 famagu’un-måmi siha.
 PL.child-AGR PL
 ‘Our (excl.) children removed all the weeds.’ (CD, entry for *ripåsa*)

In examples like (79-80), it is not obvious what the definite article at the left edge of the noun phrase contributes to the meaning.

Other combinations of determiners are better analyzed as a determiner followed by an adjective. The numerals, *bula* ‘much, many’, *meggai* ‘many’, *lâhyan* ‘many’, and *dididi* ‘few, not much’ are adjectives. Like other adjectives, they can serve as the predicates of clauses. When the definite article or *kada* ‘each’ precedes a numeral, the numeral is simply functioning as an adjective within the noun phrase (see 6.2.3 and 6.2.4.1). Similarly, when the definite article precedes *bula*, *meggai*, *lâhyan*, or *dididi*, these quantifiers are simply functioning as adjectives within the noun phrase.

- (81)a. Ti tumunuk yu’ gi giput sa’ ha ispânta yu’ **i**
 not AGR.go.down I LCL party because AGR.frighten me the
 bulan tâotâo.
 much.L person
 ‘I did not attend the party because I was frightened by the large crowd.’ (CD, entry for *ispânta*)
 b. Ná’fachi’ **i** **meggai** na letchi gi alâguan.
 AGR.watery the much L milk LCL rice.porridge
 ‘A lot of milk can cause the rice porridge to be watery.’ (CD, entry for *nâ’fachi*)
 c. Imboku ennâo **i** **dididi**’ na salâppi’.
 save that the not.much L money
 ‘Put aside that small amount of money.’ (CD, entry for *imboku*)

6.2.7 Other types of determiners

Chamorro has other types of determiners beyond those described in this chapter. In particular:

(i) The general indefinites *håyi* ‘who, anyone’, *håfa* ‘what, anything’, and *mānu* ‘where, anywhere, which’ can be used as determiners in interrogative noun phrases, negative polarity noun phrases, and free choice noun phrases (noun phrases that indicate that the choice among suitable referents is completely free). See Chapter 9.

(ii) The sentential negative *ti* can combine with *todu* ‘all’ to form the negative determiner *ti todu* ‘not all’.

- (82) **Ti todu** *mana’amti* *manparehu* *amut-ñiha*.
not all *PL.healer* *AGR.same* *medicine-AGR*
‘Not all healers have the same medicine.’ (LSS 451)

(iii) Negative determiners can also be formed by combining the word-level negative *ni* with the indefinite singular article *un*, or with a general indefinite (see 9.2.2.2).

(iv) Finally, complex determiners can be formed by combining a comparative word with a numeral, as in (83).

- (83) *Tinaka’* **mās** **ki** **dies** *oras* *i* *eruplānu*
 AGR.PASS.take *more* *than* *ten hours* *the airplane*
 para *u* *fāttu* *sanlagu*.
 FUT *AGR arrive* *DIR.seaward*
 ‘It takes more than ten hours for an airplane to reach the continental United States.’ (CD, entry for *sanlagu*)

6.3 Further reading

See Chung (2008; 2018) for discussion of the null indefinite article and its use in possessive noun phrases.

MORE ABOUT NOUN PHRASES

Besides the head noun and determiners, the noun phrase can also include a possessor, other arguments and adjuncts, adjective modifiers, noun phrase modifiers, and relative clauses. This chapter surveys the form and function of these other constituents. Noun phrase ellipsis is discussed at the end.

7.1 Possessors

7.1.1 Form

Noun phrases that are constructed from a head noun can also contain a possessor. The possessor follows the head noun and is itself a noun phrase: it can consist of a pronoun or a name, or can be constructed from a head noun. The possessors in the noun phrases in (1) are represented in boldface. (The possessor in (1a) is a null pronoun, which is signaled here by an empty set of brackets.)

- (1) a. *i* tiempok-ku [] pã'gu guini
 the time-AGR *now* *here*
 ‘my time here today’
- b. *i* mäs pãtgun na pãtgun **Ignacia Sablan Diaz**
 the most child L child.L *Ignacia Sablan Diaz*
 ‘the youngest child of Ignacia Sablan Diaz’ (EM 103)
- c. *i* atadok-ña **i** taotão
 the eye-AGR *the person*
 ‘a person’s eyes’ (LSS 78)
- d. *I* balin **i** biyeti kulang bālin **un** guaka.
 the value.L the ticket seems.like value.L a cow
 ‘The cost of the ticket is almost the price of a cow.’ (CD, entry for *biyeti*)

The possessor can be definite or indefinite, animate or inanimate; compare *i taotão* ‘the person’ in (1c) with *un guaka* ‘a cow’ and *i biyeti* ‘ticket’ in (1d). Noun phrases that contain a possessor are called *possessive noun phrases*; their head noun is called the *possessed noun*.

In a possessive noun phrase, the possessed noun is marked for the presence of the possessor in one of two ways. Either the possessed noun agrees in person and number with the possessor, or else it is marked with the Chamorro morpheme known as the linker.

In the agreement option, the possessed noun shows agreement with the possessor through the suffixes listed in (2). The dash shown in (2) is orthographic: it is used in the official orthographies to separate the suffix from the word it is attached to.

(2) AGREEMENT WITH THE POSSESSOR

1 sg.	-hu / -ku
2 sg.	-mu
3 sg.	-ña
1 incl. du./pl.	-ta
1 excl. du./pl.	(n)-mami
2 du./pl.	(n)-miyu
3 du./pl.	(n)-ñiha

The first four suffixes, which have the shape -CV, undergo the morphophonemic rule of gemination. This rule also determines the choice between the 1 sg. suffixes *-hu* and *-ku* (see 30.3). The parenthesized *n* in the last three suffixes appears when the possessed noun ends in a vowel. (In such cases, the dash in the orthographies appears between *n* and the (rest of) the suffix.)

Possessor agreement can be seen in (1a) and (1c), as well as in the examples below (with the agreement suffixes in boldface). When the possessed noun shows agreement, the possessor appears in the unmarked case, as in (3a) (see 5.1.2.1). When the possessed noun consists of coordinated nouns, as in (3b), possessor agreement generally appears on each noun.

- (3) a. Gāchu talanga-**ña** si Ken.
 AGR.sticking.out ear-AGR UNM Ken
 ‘Ken’s ears stick out.’ (CD entry for *gāchu*)
- b. put i kutturán-**ñiha** yan linguâhin-**ñiha**
 for.sake.of the culture-AGR and language-AGR
 ‘for the sake of their culture and language’ (from a conference presentation)

In the linker option, the possessed noun is marked for the presence of the possessor with the *linker*, a morpheme used more generally in Chamorro to indicate that a head has a modifier or other dependent (see 7.3.1). The realization of the linker depends on whether the dependent (which here is the

possessor) precedes or follows the head. Because the possessor follows the possessed noun, the noun is marked with the post-head form of the linker, which is *-n* if the noun ends in a vowel (including, for some speakers, *ão* when stressed), but unrealized otherwise. The post-head form of the linker literally joins the possessed noun to the possessor; it turns the noun into a phonologically dependent element that combines with material in the possessor to form a phonological word (see 2.2.1.1.2).¹ The possessor itself is caseless (see 5.1.1.3).

The linker is used in (1b), (1d), and the examples in (4). When the possessed noun consists of coordinated nouns, as in (4b), only the noun closest to the possessor is marked with the linker.

- (4) a. asaguan Antonia
 spouse.L Antonia
 ‘Antonia’s husband’
 b. put i lina’la’ yan sinientin i taotão siha
 about the life and feeling.L the person PL
 ‘about the lives and feelings of people’ (from a conference presentation)

Certain types of possessive noun phrases require possessor agreement. The possessed noun must show possessor agreement when the possessor is a pronoun.

- (5) Bai hu fanggãgão nu i pasiensian-**miyu** [] yan i
 AGR AGR.ANTIP.ask OBL the patience-AGR and the
 *atension-**miyu** [].*
 attention-AGR
 ‘I’m going to ask for your (pl.) patience and attention.’ (from a conference presentation)

In such cases, the possessor pronoun must be null, because Chamorro pronouns that are cross-referenced by agreement in person are always null (see 8.4.2).

The possessed noun must show possessor agreement when the possessor is displaced to the left edge of the sentence because it has been questioned, relativized, or syntactically focused (see 22.3.2, 23.3, and 24.2.2).

¹ More precisely, a noun suffixed with the post-head form of the linker forms a phonological word with the phonological word to its immediate right.

- (6) Kuântu na famagu'un guaha tanu'-ñiha?
how.many? L PL.child AGR.exist land-AGR
 'How many children have land (lit. how many children is there land of?)'

Certain other types of possessive noun phrases require the linker. The possessed noun is always marked with the linker when it is a noun used as a measure word (as in (7a)) or the noun *klâsi* 'kind, type, sort' (7b).

- (7) a. Yanggin un nâ'yi maseha kuâttru bâsun hânum i
if AGR.add no.matter four glass.L water the
 satten.
pot
 'If you put about four glasses of water in the pot.' (LSS 66)
 b. Ti unu ha' na klâsin âbaka na matiriât.
not one EMP L sort.L abaca L material
 'There is not just one kind of abaca fiber.' (CD, entry for *âbaka*)

The possessed noun is normally marked with the linker when the possessor is introduced by the null indefinite article (see (8a)). The rare cases in which possessor agreement occurs instead (8b) are rejected by some speakers.

- (8) a. Mannge'ña petnan chiba kini petnan babui.
AGR.delicious.COMPAR thigh.L goat than thigh.L pig
 'Goat thigh is more delicious than pig thigh.' (CD, entry for *petna*)
 b. Difirentis sabot-ña brohas.
AGR.different taste-AGR sponge.cake
 '(Each) sponge cake has a different taste.' (CD, entry for *brohas*)

When the possessed noun is a local noun and the agreement option is not required (in other words, the possessor is not a pronoun or displaced to the left edge of the sentence), the linker is used (see 5.3).

Otherwise, either possessor agreement or the linker can be used. In pairs of examples like (9), it seems to make no difference whether the linker or possessor agreement is chosen.

- (9) a. I na'ân-ña i kabesânti si Benigno.
the name-AGR the leader UNM Benigno
 'The name of the leader is Ben.' (CD, entry for *kabesânti*)
 b. Si Ana, si Lisa yan si Rita i
UNM Ana UNM Lisa and UNM Rita the

na'an i famagu'on-hu.

name.L the PL.child-AGR

'My children's names are Ana, Lisa and Rita.' (CD, entry for *si*)

Observe, finally, that possessors can be nested: a possessor that is constructed from a head noun can itself contain a possessor. In such cases, every possessed noun must show possessor agreement or be marked with the linker, but—except in the circumstances just noted—the choice between the two is free.

- (10)a. Anai ma'udai i tihu-ña [i tatan [nanã-hu
when AGR.ride the uncle-AGR the father.L mother-AGR
 []]] gi batku.
LCL ship

'When my mother's father's uncle rode in the ship.' (EM 100)

- b. Sumåga gui' Saipan gi gima' [i che'lun
AGR.stay she Saipan LCL house.L the sibling.L
 [tatã-ña [si nanã-hu []]]]
father-AGR UNM mother-AGR

'She stayed in Saipan at the home of my mother's father's brother.'
 (EM 100)

- c. i che'chu' [i fina'na'guin [i lingguåhin [Chamorro]]]
the work.L the NMLZ.teach.L the language.L Chamorro
 'the work of teaching the Chamorro language'

7.1.2 Meaning and use

The possessor can be considered the subject of the noun phrase. It is the most prominent constituent of the noun phrase, just as the subject is the most prominent constituent of the clause. And, like the subject of the clause, the possessor can bear various semantic relations to the head noun of the noun phrase.

The possessor can realize an argument of the head noun. For instance, when the possessed noun names a part, the possessor can name the whole. In (11b), *hågun* 'leaves' names a part, and *lemmai* 'breadfruit tree' names the whole.

- (11)a. Ha chopchup i neni i dama'gås-ña.
AGR.suck the baby the thumb-AGR

'The baby sucked his thumb.' (CD, entry for *chopchup*)

- b. Sen betdi / I hagin i lemmi.
AGR.extremely green the leaf.L the breadfruit

‘The leaves of the breadfruit tree are very green.’ (EM 16)

When the possessed noun names a characteristic or property (e.g. *nâ'an* ‘name’), the possessor can name what has that property (e.g. *lepblu* ‘book’).

- (12)a. Atyu na uttimon-ña humuyung i na'ân-ña i
that COMP end-AGR AGR.go.out the name-AGR the
lepblu Istreyas Mariãnas: Chamorro.
book Istreyas Marianas: Chamorro
 ‘That is why, in the end, the name of the book came to be *Istreyas Marianas: Chamorro*.’ (from a conference presentation)
- b. Anai mäs ha kumprendi si Kanãriu i
when more AGRunderstand UNM Kanariu the
difirensiã-ña i tasi yan i ichan.
difference-AGR the ocean and the rain
 ‘When Kanariu understood more the difference of (i.e. between) the ocean and rain.’ (EM 83)

When the possessed noun names an individual that bears a family relation (e.g. *nãna* ‘mother’) or some other relation (e.g. *mã'gas* ‘boss’), the possessor can name the individual at the other end of that relation.

- (13)a. Si nanã-hu ha atyik i che'lu-ña lâhi atyu
UNM mother-AGR AGRchoose the sibling-AGR male that
i mismu na infitmera ...
the same L nurse
 ‘My mother chose the brother of that same nurse...’ (EM 94)
- b. I ma'gas Josephina ha na'mamãhlão si Josephina.
the boss.L Josephina AGRmake.ashamed UNM Josephina
 ‘Josephina’s boss embarrassed her.’ (CD, entry for *atagga*)

When the possessed noun names a spatial relation, the possessor can name the reference point for that relation. Local nouns are possessed nouns that name a spatial relation (see 5.3).

- (14)a. Bula sasata gi halum kollat chã'guan.
AGR.much bee LCL inside.L fence.L grass
 ‘There are lots of bees inside the hedges.’ (CD, entry for *kollat chã'guan*)
- b. Ha li'i' na haggan gaigi gi tatten-ña.
AGRsee COMP turtle AGR.be.at LCL back-AGR

‘He saw that it was a turtle that was behind him.’ (Cooreman 1983: 102)

When the possessed noun names an event, the possessor can name a participant in the event.

- (15)a. Gof gâtbu i fandânggun Luis yan si Ana.
 AGR.very elegant the wedding.L Luis and UNM Ana
 ‘Luis and Ana’s wedding is so elegant.’ (CD, entry for *gâtbu*)
- b. Kumâtma i bongbung kurason-ña.
 AGR.calm the heartbeat.L heart-AGR
 ‘The beating of her heart calmed down.’ (EM 82)

When the possessed noun names a unit of measure, the possessor can name whatever is being measured.

- (16) Ha presta yu’ singku tâsan pugas.
 AGR.borrow me five cup.L uncooked.rice
 ‘She asked me for five cups of rice.’ (CD, entry for *presta*)

The possessor can realize other types of semantic relations. For instance, it can name the owner of the item named by the possessed noun.

- (17)a. Hu usa i payu-mu nigap.
 AGR.use the umbrella-AGR yesterday
 ‘I used your umbrella yesterday.’ (CD, entry for *usa*)
- b. Hu hunguk i karetan asaguâ-hu ya gotpi yu’
 AGR.hear the car.L spouse-AGR and.then suddenly I
 lalâlu’.
 AGR.angry
 ‘I heard my husband’s car and suddenly I got mad.’ (CD, entry for *gotpi*)

More generally, the possessor can name any individual, thing, stuff, event, or concept associated with what is named by the possessed noun.

- (18)a. Esta oran disayunu.
 already hour.L breakfast
 ‘It’s time for breakfast.’ (CD, entry for *disayunu*)
- b. Sa’ tâya’ esta tiempok-ku.
 because AGR.not.exist already time-AGR

‘Because I don’t have time (lit. there isn’t any time of mine).’ (EM 65)

7.1.3 Dependent nouns

Chamorro has three dependent nouns, *ga’-* ‘animal, pet’, *na’-* ‘food’, and *iyu-* ‘possession’, which have been called possessive classifiers by Topping and Dungca (1973: 164-165, 223-224).² These nouns are morphologically dependent: they do not occur as independent noun phrases on their own, but instead must either be possessed or else incorporated into a verb of possession (see 14.3). In (19), *ga’-*, *na’-*, and *iyu-* serve as possessed nouns within a possessive noun phrase, so they show possessor agreement (in (19a-b)) or are marked with the linker (19c).

- (19)a. Unu na be’ ga’-ña si Loling.
one L calf pet-AGR UNM Loling
 ‘One calf is Loling’s pet.’ (CD, entry for *be’*)
- b. Esti hu na’sesetbi para bai hu lânsa i na’-hu.
this AGRuse.PROG FUT AGR spear the food-AGR
 ‘This is what I use to spear my food.’ (EM 82)
- c. Lâo i mañaina, ma po’lu esti na lugât para
but the PL.parent AGRput this L place for
iyun todû i familian Tuhu’.
possession.L all the family.L Tuhu’
 ‘But the parents set this place aside as the property of the entire Tuhu’ family.’ (EM 104)

In (20), *ga’-* and *iyu-* are incorporated into *gai* ‘have’, which is a verb of possession. (As a result of incorporation, the verb of possession and the dependent noun form a single phonological word, although that is not represented in the orthographies.)

- (20)a. Hâyi gai ga’ i malingu?
who? AGR.have pet the AGR.disappear
 ‘Who owns the pet that was lost (lit. Who has as pet the one that was lost?)’
- b. Ada ti gai iyu si Juan lokkui’?
INTJ not AGR.have possession UNM Juan also
 ‘Doesn’t Juan also have it?’

² Topping and Dungca (1973: 164) list a fourth classifier, *gimin* ‘drink’, but this noun is not morphologically dependent, so it is not discussed here.

Ga'-, *na'-*, and *iyu-* can be followed by a noun that specifies the type of animal, food, or possession referred to. This extra noun is in boldface below.

- (21)a. Bula ga' -ña **guaka** si Hilario.
 AGR.much pet-AGR cow UNM Hilario
 'Hilario has a lot of cows.' (CD, entry for *guaka*)
- b. Hu chulili'i hão na'-mu **kãhit**.
 AGR bring.for.PROG you food-AGR orange
 'I am bringing oranges for you.' (CD, entry for *hão*)
- c. Istãba guaha iyun-mãmi **guma' fañotchuyan**.
 AGR.used.to.be AGR.exist possession-AGR snack.bar
 'Before we (excl.) had a snack bar.' (CD, entry for *guma' fañotchuyan*)

According to Topping and Dungca, the extra noun serves as the possessed noun from which the possessive noun phrase is constructed, and *ga'-*, *na'-*, and *iyu-* are possessive classifiers—morphemes that identify the possessed noun as belonging to one of three semantic classes. However, in the analysis adopted here, *ga'-*, *na'-*, and *iyu-* themselves are the possessed nouns from which the possessive noun phrase is constructed. The extra noun serves as the head of a noun phrase modifier.³

The claim that *ga'-*, *na'-*, and *iyu-* are nouns, even when they are followed by an extra noun, is consistent with the facts of incorporation. In Chamorro, the verbs of possession cannot incorporate a possessive noun phrase (see 14.3.2). But *ga'-*, *na'-*, and *iyu-* can be incorporated into a verb of possession even when an extra noun follows, as (22) shows.

- (22)a. I gua'ut gi halum guma' gai iyu
 the stair LCL inside.L house AGR.have possession
 pasamãnu.
 bannister
 'The stairs in the house have bannisters.' (CD, entry for *pasamãnu*)
- b. Mantai ga' **letchun** siha.
 AGR.not.have pet baby.pig they
 'They don't have any baby pigs.'

This fact reveals that *ga'-*, *na'-*, and *iyu-* are not possessive classifiers (since

³ Head nouns that are followed by a noun phrase modifier are marked with the post-head form of the linker (see 7.3.3), but this marking does not occur if the head noun shows possessor agreement, as in the examples here.

if they were, they would form part of a possessive noun phrase, and the incorporation in (22) should be ungrammatical). Instead, these forms are simply nouns with a limited distribution.

Speakers vary in the frequency with which they employ dependent nouns. When a possessive noun phrase names a domesticated animal, food, or a material possession, some speakers strongly prefer to use a dependent noun followed by a noun phrase modifier. See (21) and the following.

- (23)a. Si Lisa brumuñi i ga' Lo' ga'lāgu.
UNM Lisa WH[SBJ].scrub the pet.L Lo' dog
 'Lisa washed Lo's dog.' (CD, entry for *brumuñi*)
- b. Guaha si bihā-hu iyon-ña hotnu
AGR.exist UNM grandmother-AGR possession-AGR oven
gi sanhiyung i gimā'-ña.
LCL DIR.outside.L the house-AGR
 'My grandmother has an oven outside her house.' (CD, entry for *hotnu*)

Other speakers do not have this preference. In the examples below, the possessive noun phrase is not constructed from a dependent noun, but rather from the possessed nouns *ga'lāgu* 'dog', *kāhit* 'orange', and *hotnu* 'oven'—exactly the same nouns that serve as modifiers in the possessive noun phrases in (21b) and (23).

- (24)a. Tekchu' i ga'lagun bisinu sa'
AGR.predatory the dog.L neighbor because
mandudulalak puyitus.
AGR.ANTIP.chase.PROG chick
 'The neighbor's dog is predatory because it attacks baby chicks.'
 (CD, entry for *tekchu'*)
- b. Magutai si Ramon ni kahet-ña gi gima'.
AGR.PASS.harvest UNM Ramon OBL orange-AGR LCL house
 'Someone picked Ramon's oranges at the house.' (CD, entry for *gutai*)
- c. Guaha lokkui' hotnon-ña dos na hotnun pān.
AGR.exist also oven-AGR two L oven.L bread
 'She also had ovens (that were) two bread ovens.' (EM 92)

Finally, speakers tend to use a dependent noun followed by a noun phrase modifier when the word that describes the thing possessed is an English noun that has not yet been fully borrowed into Chamorro.

- (25) Huyung na dos yan i iyok-ku bodyguard.
 go.out L two with the possession-AGR bodyguard
 ‘Go out with my bodyguard.’ (Cooreman 1983: 113)

Further study is needed to determine what other factors might affect the use of dependent nouns.

7.1.4 Prenominal possessors

As discussed earlier (in 7.1.1), the possessor follows the possessed noun. However, when the possessive noun phrase is introduced by the null indefinite article and serves as the subject of an intransitive clause, or as a direct object, the possessor can optionally occur before the possessed noun, at the left edge of the noun phrase. Some examples of these prenominal possessors are given below (in boldface), with the possessive noun phrase in brackets.

- (26)a. Yanggin mampus atdit [i **patgun** chetnot-ña] ...
 if so.much AGR.severe the child illness-AGR
 ‘When a child has a very serious illness...’ (LSS 73)
- b. Bula [si **Leeroy** hadu-ña] Saipan.
 AGR.much UNM Leeroy godchild-AGR Saipan
 ‘Leeroy has a lot of godchildren in Saipan.’ (CD, entry for *hâdu*)
- c. I son ha bilingbingi [i **neni** talanga-ña].
 the sound AGR.buzz.at the baby ear-AGR
 ‘The sound made a buzzing noise in the baby’s ear.’ (CD, entry for *bilingbingi*)
- d. Bunitu [i **orâriun** i **rilos** kulot-ña].
 AGR.nice the hour.hand.L the watch color-AGR
 ‘The hour hand of the watch has a nice color.’ (CD, entry for *orâriu*)

In (26d), the prenominal possessor (*i orâriun i rilos* ‘the hour hand of the watch’) is itself a possessive noun phrase. Notice that this embedded possessive noun phrase shows the normal word order: the possessor (*i rilos* ‘the watch’) follows the possessed noun (*orâriu* ‘hour hand’).

When the possessor is prenominal, the possessed noun must show possessor agreement; it cannot be marked with the pre-head form of the linker. The fact that the linker cannot be used suggests that prenominal possessors are not a type of modifier (see 7.3).

Prenominal possessors do not occur in possessive noun phrases that have an overt determiner or bear some grammatical relation other than

intransitive subject or direct object. In the ungrammatical sentences below, the bracketed noun phrase contains the definite article *i* (in (27a)) or serves as an oblique object (27b), and a prenominal possessor is not possible.

- (27)a. ***Malagu'** **yu'** **bai hu** **făhan** [**si** **Carmen** **i**
AGR.want I AGR buy UNM Carmen the
gumă'-ña].
house-AGR
 ('I want to buy Carmen's house.')
- b. ***Hu** **dăggăo i** **patgun** [**si** **Francisco** **bulă-ña**].
AGR throw the child UNM Francisco ball-AGR
 ('I threw the child a ball of Francisco's.')

Instead, the possessor must follow the possessed noun.

- (28)a. **Malagu'** **yu'** **bai hu** **făhan** [**i** **gumă'-ña** **si**
AGR.want I AGR buy the house-AGR UNM
Carmen].
Carmen
 'I want to buy Carmen's house.'
- b. **Hu** **dăggăo i** **patgun** [(**ni**) **bolan** **Francisco**].
AGR throw the child OBL ball.L Francisco
 'I threw the child a/the ball of Francisco's.'

Prenominal possessors can be analyzed as possessors that have been displaced from their normal position to the left edge of the possessive noun phrase. For unclear reasons, this displacement is allowed only when the possessive noun phrase (i) is introduced by the null indefinite article, and (ii) is a direct object or intransitive subject. As in other constructions in which the possessor has been displaced (see 7.1.1), the possessed noun must show possessor agreement.

A prenominal possessor remains within the possessive noun phrase; it does not raise to become the subject or direct object of the clause. If that sort of raising had occurred, the possessor should be separable from the rest of the possessive noun phrase when the predicate is a verb or adjective (see 3.4.1.1). But this separation is not possible. Compare the possessor in (29a) and the prenominal possessor in (29b) with the ungrammatical (29c), in which the possessor has been separated from the rest of the possessive noun phrase.

- (29)a. Ti bråbu [addeng-ña si Jose] put i
 not AGR.healthy leg-AGR UNM Jose because the
 daibites-ña.
 diabetes-AGR
 ‘Jose’s leg is not strong because of his diabetes.’
- b. Ma’utut [si Andres addeng-ña] sa’ esta ha’
 AGR.PASS.cut UNM Andres leg-AGR because already EMP
 kanggrena.
 AGR.gangrenous
 ‘Andres’ leg was amputated because it had become gangrenous.’
 (CD, entry for *kanggrena*)
- c. *Ti bråbu si Jose put i daibites-ña
 not AGR.healthy UNM Jose because the diabetes-AGR
 [addeng-ña].
 leg-AGR
 (‘Jose’s leg is not strong because of his diabetes.’)

If the possessor had become the subject of the clause, it should be the noun phrase that the verb or adjective agrees with (see 2.2.2), and the constituent that must be missing in an infinitive clause (see 3.2.1 and 21.2.2). But this does not happen. Compare the ungrammatical sentences in (30), which show a possessor attempting to serve as the subject, with their counterparts in (31), in which the entire possessive noun phrase serves as the subject.⁴

- (30)a. ?*Ti un puti [ilu-mu] kumu dumiskånsa hão.
 not AGR[2SG] hurt head-AGR if AGR.relax you
 (‘Your head wouldn’t have hurt if you had rested.’)
- b. *Malagu’ si Maria lumokka’ [patgon-ña].
 AGR.want UNM Maria INF.tall child-AGR
 (‘Maria wants to have a tall child.’)
- (31)a. Ti u puti [ilu-mu] kumu dumiskånsa hão.
 not AGR[3SG] hurt head-AGR if AGR.relax you
 ‘Your head wouldn’t have hurt if you had rested.’

⁴ The judgments in (30-32) were provided by fluent speakers of Chamorro who are now over the age of 55. Very occasionally, speakers will accept examples of type (30a); the CD database contains one example of this type. All speakers who I have consulted find examples like (30b), and the weak pronouns in examples like (32), to be ungrammatical.

- b. Malagu' si Maria para u lokka' [patgon-ña].
AGR.want UNM Maria FUT AGR tall child-AGR
 'Maria wants for her child to be tall.'

Finally, if the possessor had become the subject or direct object of the clause, it should be able to be realized as a weak pronoun (see 8.3). But that is not possible.

- (32)a. Kão mahluk (*hảo) kannai-mu?
Q AGR.break you arm-AGR
 'Did your arm break?'
 b. Ha hulus (*yu') patås-su.
AGR rub me foot-AGR
 'He rubbed my foot.'

Given that pronominal possessors remain within the noun phrase, it is mysterious that they cannot occur in every type of possessive noun phrase. This is an area where further investigation is needed.

7.2 Other arguments and adjuncts

Just like the predicate of a clause, the head noun of a noun phrase can have arguments and adjuncts. These have roughly the same form and function within the noun phrase as they do within the clause.

As discussed earlier (in 7.1.2), the possessor is the most prominent constituent of the noun phrase, and can be considered to be its subject. In many types of noun phrases, the possessor realizes an argument of the head noun. Nouns do not have direct objects, so if the noun has other arguments, they are realized as obliques. Obliques associated with a head noun occur after the noun, and normally after the possessor.

Consider the noun phrases in brackets below, which are formed from the head nouns *aplikasiôn* 'utilization' and *agradesimientu* 'appreciation'. Each of these noun phrases contains a (null) possessor and an oblique. In (33a), the possessor names the one who does the utilizing, and the oblique (*i implehãu-mu* 'your employees') names the ones who are utilized. In (33b), the possessor names the one who feels appreciation, and the oblique—a nominalization formed from the causative verb *na'gimin* 'make drink'—names what is appreciated.

- (33)a. Sen mảolik [aplikasion-mu nu i implehãu-mu].
AGR.extremely good utilization-AGR OBL the employee-AGR

‘Your utilization of your employees is very good.’ (CD, entry for *aplikasión*)

- b. Put [agradesimienton-ña nu [i nina’gimen-ña
because appreciation-AGR OBL the NMLZ.make.drink-AGR
 si nanã-hu hãnum nu guiya]].
UNM mother-AGR water OBL him
 ‘Because of his appreciation for my mother’s giving him water to
 drink.’ (EM 99)

Finally, the nominalization formed from *na’gimin* is itself the head of a noun phrase that contains three arguments: the possessor, *si nanã-hu* ‘my mother’, which names the one who caused the drinking, the oblique *guiya* ‘him’, which names the one who was made to drink, and the oblique *hãnum* ‘water’, which names what was drunk. (*Hãnum* is not preceded by an overt case marker because it is indefinite; see 5.1.1.4.)

A noun phrase can also contain adjuncts: constituents that supply further information about what the noun describes. Adjuncts within the noun phrase are typically prepositional phrases or noun phrases in the local case; they follow the head noun and its arguments. The adjuncts in the noun phrases in (34) are represented in boldface.

- (34)a. Manatanun ha’ [famagu’un Vikki **gi as David**].
AGR.handsome EMP PL.child.L Vikki LCL David
 ‘Vikki’s children from David are good-looking.’ (CD, entry for *atanun*)
- b. Måolekña [piesan metât **ginin Amerika**] kini
AGR.good.COMPAR sheet.L metal from America than
Hapones.
Japanese
 ‘American metal sheets are better than Japanese.’ (CD, entry for *piesan metât*)
- c. [I istoria **put i chetnut kãnsit**] puru dinagi.
the story about the illness.L cancer AGR.full.of lie
 ‘The story about the cancer is only a deception.’ (CD, entry for *dinagi*)

7.3. Modifiers

Noun phrases can contain modifiers—constituents whose meaning serves to narrow down the referent of the noun phrase. In Chamorro, these modifiers include adjectives and adjective phrases, noun phrases, and relative clauses.

Unlike adjuncts within the noun phrase, which follow the head noun, modifiers can precede or follow the head noun. Some modifiers can also combine with names or pronouns. The form and function of different types of modifiers are surveyed here. The linker, which is characteristically used to mark heads that have modifiers, is described in 7.3.1. Then, adjectives and adjective phrase modifiers are discussed in 7.3.2, noun phrase modifiers in 7.3.3 and 7.3.4, and the placement of relative clauses in 7.3.5. The properties of the different types of modifiers are summarized in 7.3.6.

7.3.1 The linker

Like some other Austronesian languages, Chamorro employs a special marking on nouns and verbs to indicate that they have a modifier or other dependent. This marking, which involves a morpheme known as the *linker*, reveals whether the modifier precedes or follows the head. When the modifier precedes the head, the linker is realized immediately before the head, as the unstressed morpheme *na*. (*Na* leans phonologically on the head, but that is not reflected in the orthographies.) This *pre-head* form of the linker is illustrated in (35).

- (35) dikiki' **na** pâtgun
 small L child
 ‘a small child’

When the modifier follows the head and the head does not show possessor agreement, the linker is realized as a suffix on the head. This suffix has the form *-n* when the head ends in a vowel (including, for some speakers, *ão* when stressed), and is unpronounced otherwise. Whether pronounced or not, the suffix turns the head into a phonologically dependent element that leans on material in the modifier to form a phonological word (see 2.2.1.1.2). The realizations of this *post-head* form of the linker are illustrated in (36).

- (36)a. laman**n** dikiki'
 table.L small
 ‘a small table’
 b. pâtgun dikiki'
 child.L small
 ‘a small child’

Note that the linker is always realized *between* the head and the modifier, and so could be said to ‘join’ the two. However, the post-head form of the linker literally joins the head to the modifier in the phonology, whereas

the pre-head form of the linker does not have this effect. This difference is correlated with another difference: a head noun can be preceded within the noun phrase by several instances of the pre-head form of the linker, but can be marked only once with the post-head form.

Verbs in Chamorro are marked with the linker only in limited circumstances: when they are immediately followed by certain adverbs, including the reflexive adverb *maisa* ‘self’ (see 18.4). Nouns are marked with the linker in a much wider range of circumstances:

(i) When the noun is followed by a possessor and the agreement option is not chosen (see 7.1);

(ii) When the noun is preceded by a demonstrative, a numeral, or a weak quantifier (see 6.2.2, 6.2.3, and 6.2.4.3);

(iii) When the noun is preceded or followed by a modifier, where the modifiers include adjectives and adjective phrases, noun phrases, and relative clauses. This third use of the linker is discussed in more detail below.

7.3.2 Adjective and adjective phrase modifiers

Adjective modifiers follow the determiner within the noun phrase but can precede or follow the head noun. If the adjective precedes the noun, the noun is marked with the pre-head form of the linker. (The adjective modifiers are in boldface below.)

- (37)a. Guaha un **dangkulu** na kulu gi hilu’
 AGR.exist a big L trumpet.shell LCL top.L
 lamasa.
 table
 ‘There is a big kulu shell on the table.’ (CD, entry for *kulu*)
- b. I **â’paka**’ na arina ti sen maulik para i
 the white L flour not AGR.extremely good for the
 hinemlo’-ta.
 NMLZ.healthy-AGR
 ‘White flour is not good for our (incl.) health.’ (CD, entry for *arina*)
- c. i **Chamorro** na nasion
 the Chamorro L nation
 ‘the Chamorro nation’ (from a conference presentation)

If the adjective follows the noun, the noun is marked with the post-head form of the linker.

- (38)a. Tinichu’ i guihan **dikiki**’ ni hakmang lisâyu.
 AGR.PASS.devour the fish.L small OBL snake.eel

- ‘The snake eel ate the small fish.’ (CD, entry for *håkmang lisåyu*)
- b. Guaha binun **agaga’** yan binun **å’paka’**.
AGR.exist wine.L red and wine.L white
 ‘There is red wine and white wine.’ (CD, entry for *binu*)
- c. i nasion **Ispañot**
the nation.L Spanish
 ‘the Spanish nation’ (from a conference presentation)

Two details of the realization of the linker should be noted. First, when an adjective follows a noun that shows possessor agreement, the post-head form of the linker does not occur. See (39).

- (39) a. Atyu para asaguã-ña **sigundu**.
that FUT spouse-AGR second
 ‘That one would be her second husband.’ (EM 102)
- b. Ha na’puputi i addeng-hu i changkletas-su **nuebu**.
AGR.make.hurt.PROG the foot-AGR the sandal-AGR new
 ‘My new sandals are hurting my feet.’ (CD, entry for *changkletas*)

Second, when an adjective precedes the noun, speakers sometimes mark the adjective with the post-head form of the linker, rather than using the expected pre-head form. Compare (37) with the following.

- (40) a. Fina’ñagui si Frank ni **dangkulun** bikulu’ gi
AGR.PASS.frighten UNM Frank OBL big.L ghost LCL
 paingi.
last.night
 ‘Frank was frightened by the big ghost last night.’ (CD, entry for *bikulu’*)
- b. Gof **måolik** tâotão i pairåstrun i famagu’on-hu.
very good.L person the stepfather.L the PL.child-AGR
 ‘My children’s stepfather is a very good man.’ (CD, entry for *pairåstru*)

This use of the post-head form of the linker is uncommon in elicitation contexts in fieldwork, but more frequent in naturally-occurring data. In the CD database, there are 108 instances of the adjective *dangkulu* ‘big’ preceding the noun it modifies; roughly half of these (52/108) show the pre-head form of the linker (i.e. *dangkulu na*), and the other half (56/108) show the post-head form (i.e. *dangkulun*).

Chamorro allows many semantic classes of adjectives to precede or follow the noun, including adjectives that describe size, shape, age, color, and nationality. For these adjectives, the choice between the word orders adjective-noun and noun-adjective appears to be free. Both word orders occur in (41), for instance.

- (41) disdi i famagu'un **díkiki'** asta i **manámku'** na
since the PL.child.L little until the AGR.old L
 istudiánti
student
 'from little children up to mature students' (EM 8)

Under other circumstances, the adjective must precede the noun:

(i) Adjective phrases that consist of a degree morpheme plus an adjective must evidently precede the noun. The adjective phrases are in bold-face in the examples below.⁵

- (42)a. Garapan i **mās** **dāngkulu** na songsung giya
Garapan the most big L village LCL
 Saipan.
Saipan
 'Garapan is the largest village in Saipan.' (CD, entry for *Gárapan*)
 b. Mafañágu i **mās** **ámku'** na lahi-hu gi tiempun
AGR.born the most old L son-AGR LCL time.L
 Amerikánu.
American
 'My elder son was born during the American period.' (CD, entry for *mafañágu*)

(ii) Adjectives that describe properties other than size, shape, age, color, or nationality must precede the noun. Included here are evaluative adjectives (= adjectives that describe properties evaluated as good or bad), as in (43a), and adjectives that describe physiological conditions (43b).

- (43)a. Maguf i **geftáo** na biha.
AGR.happy the generous L old.woman
 'The generous old woman was happy.'

⁵ Adjectives that have complements are not realized as adjective modifiers, but instead as predicates of relative clauses.

- b. Kão un ayuda i **batchit** na pãtgun?
Q AGR help the blind L child
 ‘Did you help the blind child?’

These adjectives apparently cannot follow the noun.

- (44)a. ***Maguf** i **bihan** **geftão.**
AGR.happy the old.woman.L generous
 (‘The generous old woman was happy.’)
 b. ***Kão un ayuda i pãtgun batchit?**
Q AGR help the child.L blind
 (‘Did you help the blind child?’)

(iii) Non-intersective adjectives, such as *tétehnán* ‘last, remaining’ and *sigienti* ‘next’, must precede the noun (see Chung and Ladusaw 2006: 336-337).

- (45) Ha latchai fumãhan i **tétehnán** na aga’ gi
AGR.finish.off INF.buy the remaining L banana LCL
metkão.
market
 ‘He finished off purchasing all the remaining bananas at the market.’ (CD, entry for *latchai*)

(iv) Chamorro generally does not allow adjectives to be stacked on the same side of the noun. When a Chamorro noun has two adjective modifiers, typically one adjective precedes the noun and the other follows the noun. When this tendency is violated and adjectives are stacked on the same side of the noun, they precede the noun.⁶

- (46)a. Tumotohgi **dãngkulun** **â’paka’** na katu.
AGR.stand.PROG big.L white L cat
 ‘A great white cat was standing.’ (Cooreman 1983: 185)

⁶ Note that each adjective preceding the noun is followed by some form of the linker. This suggests that there is more internal structure to the noun phrase than is reported in the text. Suppose that the head noun combines with a modifier to form a new noun-like constituent; that new constituent can combine with a further modifier to form another noun-like constituent; and so on. If each such combination is signaled by marking with the linker, multiple linkers would be expected to appear in noun phrases like (46).

- b. Para u fanliliku' gi **difirentis** siha na
FUT AGR AGR.go.around LCL different PL L
siknifikanti siha na lugåt giya Luta.
significant PL L place LCL Luta
 '[The Preservation Office will guide whoever is interested so that]
 they might go around to the various significant places in Rota.'
 (from a conference announcement)

These patterns reveal that the default is for adjective modifiers to precede the head noun. This is perhaps unexpected, given that Chamorro is a head-initial language.

7.3.3 Noun phrase modifiers

Noun phrase modifiers consist of a head noun which can be accompanied by its own modifiers, but not by determiners. These modifiers have the same overall profile as adjective modifiers within the noun phrase: they follow the determiner but can precede or follow the head noun. If a noun phrase modifier precedes the head noun, the head noun is marked with the pre-head form of the linker, as in (47). (The noun phrase modifiers are in boldface below.)

- (47)a. put i **hinemlu'** na bānda gi kutturā-ta
about the NMLZ.healthy L area LCL culture-AGR
 'about the area of health in our (incl.) culture' (from a conference presentation)
- b. i **taotāo** **antigu** na Chamorro siha
the person.L ancient L Chamorro PL
 'the ancient Chamorro people' (from a conference presentation)
- c. Ha tutuhun fine' nena atyu kulang atyu i
AGR begin first that seems.like that the
gupu' na klasin chetnut.
ringworm L sort.L disease
 'It started first as if it were some type of ringworm (lit. it seemed like that ringworm sort of disease).' (Cooreman 1983: 178)

If the noun phrase modifier follows the head noun, the head noun is marked with the post-head form of the linker. If the head noun shows possessor agreement, the linker does not occur. This is why *che'lu-hu* 'my sibling' is not marked with the linker in (48b).

- (48)a. Bula ekspirensiāk-ku gi bandan **edukasion**.
AGR.much experience-AGR LCL area.L education
 ‘I have a lot of experience in the area of education.’ (CD, entry for *ekspirensia*)
- b. I che’lu-hu **mās āmku’ na lâhi**, guiya
the sibling-AGR more old L man he
 atministradót i tanu’-māmi giya Luta.
administrator.L the land-AGR LCL Luta
 ‘My oldest brother is the administrator of our (excl.) land on Rota.’
 (CD, entry for *atministradót*)
- c. Ta li’i’ na guaha esti i kelaguin: kelaguin
AGRsee COMP AGR.exist this the kelaguin kelaguin.L
mānnuk, kelaguin **hagāhaf...**
chicken kelaguin.L crab
 ‘We (incl.) see that there are these kelaguins: chicken kelaguin, crab kelaguin...’ (from a conference presentation)
- d. Ya-ña si tātā kumānnu’ i estufaon **sāli**.
like-AGR UNM father INF.eat the estufao.L bird.sp
 ‘Father loves to eat *estufao* made from Micronesian starling.’ (CD, entry for *sāli*)

Whatever their word order, noun phrase modifiers are phrasal: they can themselves contain modifiers, as can be seen from (47b) and (48b).

In general, noun phrase modifiers can freely precede or follow the head noun. Sometimes, the word order modifier-head seems to be chosen when the modifier is focused. Other times, the two word orders seem equivalent, as in (49).

- (49)a. I rai mās metgut na katta gi **tres sietti** na
the king more strong L card LCL tres sietti L
 huegu.
game
 ‘The king is the strongest card in the *tres sietti* game.’ (CD, entry for *rai*)
- b. Mana’sesetbi i cheggai gi huegun **chongka**.
AGR.PASS.use.PROG the small.cowrie LCL game.L chongka
 ‘The small cowrie is used in the *chongka* game.’ (CD, entry for *cheggai*)

But when frequency is considered, it becomes clearer that the default is for noun phrase modifiers to follow the head noun. Many noun phrases that

name specific types of trees or large plants are constructed from the head noun *trongku* ‘tree’ plus a noun phrase modifier. There were over 200 noun phrases of this type in the CD database in September 2012. In almost all (over 90%) of these noun phrases, the modifier follows the head noun. This remains true even when the difference between frequent modifiers (such as *niyuk* ‘coconut’) and infrequent modifiers (such as *puting* ‘barringtonia asiatica’) is controlled for. For noun phrase modifiers, that is, the word order head-modifier (as in (50a)) is overwhelmingly more common than modifier-head (50b).

- (50)a. Guaha trongkun **sibukão** gi lanchun-mãmi.
 AGR.exist tree.L tree.sp LCL ranch-AGR
 ‘We (excl.) have a *caesalpinia sappan* tree at our (excl.) ranch.’
 (CD, entry for *sibukão*)
- b. Binenu i **puting** na trongku.
 AGR.poisonous the tree.sp L tree
 ‘The *barringtonia asiatica* tree is poisonous.’ (CD, entry for *puting*)

In short, noun phrase modifiers have a different default word order than adjective modifiers.

Some nouns followed by a noun phrase modifier have been reanalyzed as compound nouns—nouns with internal structure. One such compound is *batkun airi* ‘airplane’. Although this compound can be analyzed as the head noun *bâtku* ‘ship’, marked with the linker and followed by the noun modifier *airi* ‘air’, for all practical purposes the entire expression is simply a noun. Like other nouns, it can show possessor agreement (see (51a)) and can be marked with the post-head form of the linker when an adjective follows (51b).

- (51)a. Guaha batkun airen-ña.
 AGR.exist airplane-AGR
 ‘He owns an airplane.’
- b. Ma’udai yu’ gi batkun airin dăngkulu para Amerika.
 AGR.ride I LCL airplane.L big to America
 ‘I rode on a big airplane to America.’ (CD, entry for *bâtkun airi*)

7.3.4 Modifiers of names

Names in Chamorro can have two types of modifiers. First, in nicknames, a name can be followed by an adjective or noun phrase modifier. The modifier describes something characteristically associated with the individual named, such as a physiological characteristic, a product of the individual’s work (as

in (52a)), the individual's spouse (52b), and so on. The name being modified is marked with the post-head form of the linker.

- (52)a. Tun Herman **Pån**
Mr. Herman.L bread
 'Tun Herman Pån (nickname of the baker Herman Guerrero)'
 b. Ennåogui' si Ritan **Jose**.
there.is UNM Rita.L Jose
 'There was Jose's Rita.'
 (<http://paleric.blogspot.com/2011/10/i-duendes.html>)

(The fact that the name *Rita* in (52b) is marked with the linker, not possessor agreement, suggests that *Jose* is a noun phrase modifier rather than a possessor.)

Second, a name can be followed by a modifier that is a possessive noun phrase constructed from a kin term. Once again, the name being modified is marked with the post-head form of the linker.

- (53) Mapotgi' si Ritan **chi'lu-hu**.
AGR.pregnant UNM Rita.L sibling-AGR
 'My sister Rita is pregnant.'

Modifiers like *chi'lu-hu* 'my sibling' in (53) are similar in meaning to appositives, but different in form. Unlike modifiers, appositives are noun phrases in the oblique case (see 5.1.2.2.1).

7.3.5 Relative clauses

Relative clauses are embedded clause modifiers that serve to narrow down the referent of the head noun. The structure of relative clauses and their distinctive types of agreement are described in Chapter 24. The discussion here focuses on their placement within the larger noun phrase that contains them.

Like other modifiers, relative clauses follow the determiner but can precede or follow the head noun. When the relative clause precedes the head noun, the head noun is marked with the pre-head form of the linker. (The relative clauses in the examples below are enclosed in brackets, and the head noun is in boldface.)

- (54)a. gi [asuddada'-hu giya Amerika] na
LCL WH[OBL].RECP.find-AGR.PROG LCL America L

istudiãnti siha.

student PL

‘among the students who I met in America’ (from a conference presentation)

- b. Manmatransferi mągi lokkui’ i [ginin Tinian] na
AGR.PASS.transfer to.here also the from Tinian L
tãotão.

person

‘The people who were from Tinian were also transferred over here.’
 (Cooreman 1983: 149)

- c. Gef fãhna i manyommuk na
AGR.very in.demand the AGR.fat L
 [pineksai-ña] na **babui.**
WH[OBJ].raise-AGR L pig

‘The fat pigs that he raised were very much in demand.’ (EM 89)

However, when the relative clause follows the head noun, the noun is not marked with the post-head form of the linker. In (55a), the head noun *neni* ‘baby’ ends in a vowel, but is not suffixed with *-n*.

- (55)a. Ha patcha si Doreen i **neni** [ni pã’gu
AGR.touch UNM Doreen the baby COMP now
 mafañãñagu].

AGR.born.PROG

‘Doreen touched the baby that was just born.’ (CD, entry for *patcha*)

- b. Kabãlis todū kuntodu **pugas** [ni ginin
AGR.complete all including rice COMP from
 Hapon].

Japan

‘Everything was complete, including rice that came from Japan.’
 (Cooreman 1983: 88)

The absence of the linker is surprising, given the patterns seen earlier in this chapter. Nonetheless, the fact that the relative clause follows the head noun is signaled morphologically in other ways.

Chamorro relative clauses are introduced by a complementizer whose form depends partly on the head noun’s function within the relative clause (see 24.3.2). When this function is to name a location in time or space within the relative clause, the relative clause is usually introduced by the complementizer *anai*, as in (56).

- (56) Sumåga gi atyu na **lugåt** [anai umasudda' i
 AGR.stay LCL that L place COMP AGR.RECP.find the
 dos yan i haggan].
 two with the turtle
 'He stayed in that place where he had met the turtle.' (from a tape-
 recorded narrative)

Otherwise, a relative clause that precedes the head noun is not introduced by an overt complementizer.

- (57) Ma li'i' i [hagas pumoksai siha] na **tåotåo**.
 AGR.see the past WH[SBJ].nurture them L person
 'They saw the people who nurtured them in the past.' (Cooreman
 1983: 167)

But a relative clause that follows the head noun is introduced by the complementizer *ni*.

- (58) Si nāna guaha **atkiyā-ñā** [ni ha fāhan
 UNM mother AGR.exist hairpin-AGR COMP AGR buy
 Amerika].
 America
 'Mother has a large hairpin which she bought in America.' (CD,
 entry for *atkiya*)

The fact that the complementizer *ni* occurs only when the relative clause follows the head noun suggests that it might simultaneously realize the post-head form of the linker (Chung 1998: 231-234). If so, this would be another exceptional case in which the modifier, not the head noun, is marked with the linker (see 7.3.2).

Relative clauses differ from other modifiers in that they allow a third word order option. In addition to occurring before or after the head noun, they can *surround* the head noun (see Vincent 2017). In this unusual construction, the head noun is located inside the relative clause, following the predicate but preceding other constituents. As usual, the entire relative clause follows the determiner. The relative clause is enclosed in brackets and the head noun is in boldface in (59).

- (59) Ha uma hālum i [kinenne'-ñā **guihan**
 AGR.carry.on.shoulder inside the WH[OBJ].catch-AGR fish

i rai].
the king
 ‘He carried in on his shoulder the fish that the king had caught.’
 (Cooreman 1983: 118)

See 24.2 for a little more discussion.

As might be expected, the choice among the different word order options for relative clauses is, in principle, free. One relative clause can precede the head noun and another relative clause can follow the head noun, for instance.

- (60) i [ta u’usa] na **diksiunâriu** ginin as Topping,
the AGRuse.PROG L dictionary from OBL Topping
 Ogo, yan Dungca [ni ma’imprinta gi 1975]
Ogo and Dungca COMP AGR.PASS.publish LCL 1975
 ‘the Dictionary by Topping, Ogo, and Dunga that we (incl.) use
 which was published in 1975’ (from a conference presentation)

Nonetheless, there are indications that the default for relative clauses is to follow the head noun:

- (i) In general, relative clauses can be stacked on the same side of the head noun only when they follow the head noun.

- (61)a. Guaha esta **tâotâo** [ni mañâsaga guini na
AGR.exist already person COMP AGR.stay.PROG LCL.this L
 isla siha] [ni ma tungu’ put âmut natibu].
island PL COMP AGR.know about medicine.L native
 ‘There already were people who were living on these islands who
 knew about native medicine.’ (LSS 22)
- b. Ha konni’ yuhi na **haggan** [i sinidda’-ña]
AGR.take that L turtle COMP WH[OBJ].find-AGR
 [ni díkiki’].
COMP AGR.small
 ‘He caught that turtle which he had found which was small.’
 (Cooreman 1983: 102)

- (ii) A pronoun can have a relative clause modifier, but the relative clause must follow the pronoun.

- (62)a. **Hita** [ni manlâla’la’ ha’] para ta abiba.
we.INCL COMP AGR.alive.PROG EMP FUT AGR.encourage

- ‘We (incl.) who are still living are going to encourage them.’
- b. ginin todus **ham** [ni ti mana’amtĩ]
from all.PL us.EXCL COMP not PL.healer
 ‘from all of us (excl.) who are not healers’ (LSS 39)

(iii) Names can have relative clause modifiers, as long as the relative clause follows.

- (63) Si **Tan Biriña**, [ni ti umiskuela], ti
UNM Mrs. Biriña COMP not AGR.go.to.school not
 parehu yan i doktun espitát.
AGR.same with the doctor.L hospital
 ‘Tan Biriña, who did not attend school, was not like a hospital doctor.’ (LSS 33)

7.3.6 Summary

Modifiers within the noun phrase can generally precede or follow the head noun, and their presence causes the head noun to be marked with the linker. But this broad generalization conceals some systematic differences. The three types of modifiers have different default word orders. The default for adjective (phrase) modifiers is to precede the head noun; the default for noun phrase modifiers and relative clauses is to follow the head noun. Moreover, not all types of modifiers cause the head noun to be marked with the linker. The head noun shows this marking when followed by an adjective or noun phrase modifier, but not when followed by a relative clause.

These differences are summarized below.

- (64) MODIFIERS WITHIN THE NOUN PHRASE
- | | <i>Adjective</i> | <i>Noun phrase</i> | <i>Relative clause</i> |
|-----------------------|------------------|--------------------|------------------------|
| Default word order | pre-N | post-N | post-N |
| Post-head linker on N | yes | yes | no |

The chart in (64) reveals that the three types of modifiers are distinct. That in turn suggests that it would be a mistake to try to collapse them.

To see the point, consider the following hypothetical scenario. Recalling that relative clauses are embedded clauses, and the predicate of a clause can be a verb, adjective, or noun, one might conjecture that every modifier within the noun phrase was simply a relative clause. In such a scenario, the adjective in the noun phrase *un dāngkulu na kulu* ‘a big trumpet shell’

would be a relative clause whose predicate was an adjective (as in ‘a trumpet shell that was big’); the noun phrase modifier in *kelaguin mǎnnuk* ‘chicken kelaguin’ would be a relative clause whose predicate was a noun (as in ‘kelaguin that was chicken’). What (64) shows is that such a scenario cannot be right. If all modifiers were just relative clauses, they should have a uniform word order with respect to the head noun. But every relative clause can follow the head noun, whereas some types of adjective modifiers cannot. Moreover, if all modifiers following the head noun were just relative clauses, their head noun should be marked with the linker in a uniform way. But the head noun is marked with the post-head form of the linker when the following modifier is an adjective or noun phrase, but not when it is a relative clause. In fact, the head noun *cannot* be marked with the post-head form of the linker when a relative clause follows (see (65a)); instead, the relative clause is introduced by the complementizer *ni*, as in (65b).

- (65)a. ***Bunitu** **i** **chininan** [un fǎhan].
 AGR.nice *the dress.L* *AGR buy*
 (‘The dress you bought was nice.’)
- b. Bunitu i **chinina** [ni un fǎhan].
 AGR.nice *the dress* *COMP* *AGR buy*
 ‘The dress you bought was nice.’

In summary, Chamorro has three different types of modifiers within the noun phrase.

7.4 Word order

Chamorro word order is both predicate-first and head-first. Prepositions precede their object noun phrases (see 5.2), complementizers and subordinating conjunctions precede the embedded clauses they introduce (see 20.1), and nouns precede their arguments and adjuncts.

The word order of constituents is less flexible within the noun phrase than it is within the clause. If prenominal possessors are set aside, noun phrases formed from a head noun have a fixed word order. The determiner or determiners come first, followed by the head noun, and then by the possessor, obliques, and adjuncts, as shown in the template below.

- (66) WORD ORDER OF CHAMORRO NOUN PHRASES (FIRST PASS)
 Determiners Noun Possessor Obliques Adjuncts

It is more challenging to integrate modifiers into this template, given their word order freedom and given that not all possible combinations of modifiers, obliques, and adjuncts have been investigated. Still, some preliminary observations can be made.

Modifiers preceding the head noun occur between the head noun and the determiner. When the head noun is preceded by two modifiers and one of them is a relative clause, the relative clause tends to occur farther to the left, preceding the other modifier (but see (54c) for the opposite word order).

- (67) Guaha [manggai gualu'] na manriku na **tãotão**.
AGR.exist AGR.have farm L AGR.rich L person
 'There were rich people who had farms.' (Cooreman 1983: 158)

Note that the pre-head form of the linker occurs twice, once between the adjective and the noun and again between the relative clause and the adjective-plus-noun constituent.

The word order of modifiers after the head noun is most straightforward for relative clauses. Relative clauses that follow the head noun occur at the right edge of the noun phrase, after the noun and any other dependents, including obliques and adjuncts. See (60) and the following.

- (68) sigun i **ripot** gi mes [ni ha fa'titinas
according the report LCL month COMP AGR.make.PROG
 i Dipattamentun Environmental Quality]
the Department.L Environmental Quality
 'according to the monthly report (lit. the report by month) made by
 the Department of Environmental Quality' (Marianas Variety
 November 6, 1979)

The word order of the possessor with respect to adjective or noun phrase modifiers following the head noun is determined by the marking on the head noun. If the head noun shows possessor agreement, the possessor can precede or follow the modifier.

- (69)a. i **che'lu-ña** si Juan palão'an
the sibling-AGR UNM Juan female
 'Juan's sister'
 b. i **che'lu-ña** palão'an si Juan
the sibling-AGR female UNM Juan
 'Juan's sister'

If the head noun is marked with the post-head form of the linker, it is phonologically dependent on the possessor, which must occur immediately after it; the modifier occurs farther to the right.

- (70) **i** **che'lun** Juan palão'an
 the sibling.L *Juan* *female*
 'Juan's sister'

Some of these observations are integrated into the word order template for noun phrases in (71), where *x* is used to mark the most common locations for modifiers. (The template does not specify exactly which types of modifiers occur in these locations.)

- (71) WORD ORDER OF CHAMORRO NOUN PHRASES (FINAL VERSION)
 Determiner x Noun x Possessor x Obliques Adjuncts x

7.5 Noun phrase ellipsis

Like many other languages, Chamorro has an ellipsis process that affects noun phrases. This optional process deletes the head noun, along with the possessor, arguments, and adjuncts, as long as certain other elements of the noun phrase are left behind. The fact that the head noun is deleted means that any marking associated with it—notably, the linker—does not appear. The fact that the head noun is deleted along with the possessor, arguments, and adjuncts suggests that these elements form a constituent within the noun phrase that excludes determiners and modifiers.⁷ The deleted material is understood to mean 'one' or 'thing'. In generative grammar, this ellipsis process is known as noun phrase ellipsis or N-bar ellipsis. It is called *noun phrase ellipsis* here.

Noun phrase ellipsis in Chamorro can occur only if the part of the noun phrase that is left behind—the part that is actually pronounced—contains a demonstrative, numeral, quantifier, adjective, or relative clause. Some of the possibilities are illustrated below. In (72), ellipsis has left behind a demonstrative (represented in boldface).

⁷ From a crosslinguistic perspective, the fact that the possessor must be deleted in noun phrase ellipsis might be viewed as unexpected. Note, though, that the marking that signals the presence of a possessor is realized on the head noun, and therefore is always removed by the ellipsis. That may be why the possessor is deleted as well.

- (72) Tai tiempu yu' humassu **ennão.**
AGR.not.have time I INF.think that
 'I have no time to think about that.' (from a conference presentation)

In (73), ellipsis has left behind a numeral, preceded by the definite article.

- (73) Mañãñakki **i dos** maseha hãfa ni siña
AGR.ANTIP.steal.PROG the two at.all any COMP can
 ma bendi.
AGR.sell
 'The two (habitually) stole whatever they could sell.' (from a tape-recorded narrative)

In (74), ellipsis has left behind the quantifier *todu* 'all, every'.

- (74) Bai danchi i tamma' siha ya bai biba **todu**
AGR.hit the marble PL and.then AGR.scatter all
 huyung gi aridondu.
outside LCL circle
 'I'm going to hit the marbles and I'm going to scatter them all out of the circle.' (CD, entry for *biba*)

In (75), it has left behind an adjective, preceded by the definite article.

- (75) Unu ha' atyu **i â'paka'.**
one EMP that the white
 'There's just one white [car] (lit. that white (one) is just one).'

In (76), finally, ellipsis has left behind a relative clause, preceded by the definite article (in (76a)) or a demonstrative (76b).

- (76)a. **I [pumenta esti na guma']** ti mǎolik chi'cho'-ña.
the WH[SB].paint this L house not AGR.good work-AGR
 'The one who painted this house didn't do a good job.'
- b. Kada mǎnggi' yu' gi **atyu i [mafa'na'an**
whenever AGR.ANTIP.write I LCL that the AGR.PASS.name
Facebook].
Facebook
 'Whenever I write in that thing called Facebook.' (from a conference presentation)

8

PRONOUNS

Chamorro has three sets of personal pronouns: independent pronouns, weak pronouns, and null pronouns. Their form and distribution are described here, along with their grammatical relations, possible word orders, and interaction with agreement.

8.1 Overview

Personal pronouns are expressions that serve as noun phrases and pick out different individuals depending on the discourse context. Chamorro has three sets of personal pronouns: independent pronouns, weak pronouns, and null pronouns.

All three sets of pronouns are organized along the same lines. Each set consists of seven pronouns differing in person and number. There are three persons: *first* (referring to the speaker), *second* (referring to the addressee), and *third* (referring to individuals other than the speaker and the addressee). There are two numbers: *singular* (referring to one individual) and *dual/plural* (referring to more than one individual). As in many other Austronesian languages, the first person dual/plural pronouns—which refer to the speaker and at least one other individual—distinguish between *inclusive* and *exclusive*. Inclusive pronouns refer to the addressee(s) as well as the speaker; exclusive pronouns do not refer to the addressee(s). The pronouns do not differ in gender. But in one way or another, they are sensitive to whether or not the individual(s) referred to are animate (or, perhaps, human). Finally, the pronouns have both reflexive and nonreflexive uses. The discussion here focuses on nonreflexive uses; the reflexive use is discussed later, in Chapter 13.

All Chamorro pronouns are noun phrases. The three sets of pronouns differ in their sound structure, the grammatical relations they can bear, their possible word orders, and their interaction with agreement.

8.2 Independent pronouns

As their name suggests, the independent pronouns are phonologically and syntactically independent. They are phonological words, and have the same

word order flexibility as other noun phrases.¹ These pronouns are listed below.

(1)	INDEPENDENT PRONOUNS	
	1 sg.	guǎhu
	2 sg.	hǎgu
	3 sg.	guiya
	1 incl. du./pl.	hita
	1 excl. du./pl.	hami
	2 du./pl.	hamyu
	3 du./pl.	siha

The English translations provided by Safford (1903: 308) and Topping and Dungca (1973: 110) for the third person independent pronouns (i.e. ‘he, she, it, they’) imply that these forms can refer to humans, other living beings, and inanimate objects or concepts. However, the independent pronouns are used only in very limited contexts to refer to nonhumans—notably, in narratives when an animal, bird, turtle, insect, etc. can speak or think, or is otherwise personified. There are few if any contexts in which independent pronouns are used to refer to inanimate objects or concepts. Among the best candidates:

(i) The 3 sg. independent pronoun *guiya* can combine with a demonstrative to create a focused demonstrative that occurs in noun phrases that are syntactically focused (see 23.3). This focused demonstrative can combine with inanimate nouns. It is unclear what *guiya* means in this use: whether it functions as a pronoun that can refer to an inanimate or is merely part of the demonstrative.

(2)	Kão	guiya	esti na	lumut	i	mana’sesetbi	gi
	<i>Q</i>	<i>it</i>	<i>this L</i>	<i>moss</i>	<i>the</i>	<i>AGR.PASS.use.PROG</i>	<i>LCL</i>
	gualu’?						
	<i>farm</i>						
	‘Is this the type of moss they use at the farm?’ (CD, entry for <i>lumut</i>)						

¹ Chamorro pronouns cannot serve as noun phrase modifiers and cannot combine with the incorporating verbs *gai* ‘have’ or *tai* ‘not have’. In these respects, they resemble noun phrases that contain a determiner. In generative syntax, the resemblance is handled by analyzing pronouns as determiners—more specifically, as determiners that do not combine with (a nominal constituent containing) a head noun.

(ii) *Guiya* can be used as a predicate in *ti guiyaya* ‘not really so, not really like that’. Here, too, it is unclear whether it functions as a pronoun that can refer to an inanimate or instead has the meaning suggested by its English translation (i.e. ‘really so, really like that’).

- (3) Gi halatcha na tiempu abundansia atulai, pã'gu ti
LCL past L time AGR.plenty fish.sp now not
guiyaya.
very.like.that
 ‘In the past there were a lot of skipjack, but not now.’ (CD, entry for *halatcha*)

Outside these narrow contexts, the independent pronouns refer only to humans. Note that the 3 du./pl. pronoun *siha* apparently is not used to refer to inanimate objects or concepts. The *siha* that occurs commonly in inanimate noun phrases is not a pronoun, but rather the plural morpheme (see 6.1.1.1).

More generally, as far as the reference of Chamorro pronouns is concerned, the main divide is between humans—the prototypical animates—and inanimate objects or concepts. Nonhuman animates fall somewhere in-between: they are normally treated like inanimates, but can be treated like humans when personified. Inanimate objects and concepts are rarely, if ever, personified. These observations introduce some unclarity into the issue of whether the independent pronouns in Chamorro should be thought of as human pronouns or animate pronouns—an unclarity that will not be resolved here.

The independent pronouns cannot serve as subjects, direct objects, or possessors unless they are topics or syntactically focused. Aside from this, they can occur in all the other contexts in which noun phrases can occur. Specifically, independent pronouns are used:

- (i) When the pronoun is in the oblique or local case.
- (4) a. Bula rispetun-ñiha nu **hãgu.**
AGR.much respect-AGR OBL you
 ‘They have lot of respect for you.’ (CD, entry for *nu*)
 b. Na'guaha amistã giya **hãgu.**
make.exist integrity LCL you
 ‘Have integrity (within you).’ (CD, entry for *amistã*)

- (ii) When the pronoun is the object of a preposition.

- (5) Yanggin un tungu' ginin **hãgu** mismu.
if AGR.know from you same
 'When you know it from yourself.' (EM 132)

(iii) When the pronoun is a topic or syntactically focused, and therefore occurs at the left edge of the sentence, preceding the predicate.

- (6) a. Si Chungi', **guiya** lokkui' mafañãgu guini mismu
UNM Chungi' he also AGR.born LCL.this same
na trongku.
L tree
 'As for Chungi' [a bird], he too was born in this very same tree.'
 (EM 81)
- b. Ti bai fanggãgão dispensasion sa' ti **guãhu**
not AGR.AGR.ANTIP.ask forgiveness because not I
lumachi.
AGR.wrong
 'I will not apologize because it's not me who did wrong.' (CD,
 entry for *fanggãgão dispensación*)

(iv) When the pronoun occurs in isolation—for instance, because it has been stranded by ellipsis.

- (7) Meggai na tãotão hu litrãtu, lão ti **guiya**.
many L person AGR photograph but not her
 'I took pictures of many people, but not her.'

(v) When the pronoun serves as one conjunct of a coordinate noun phrase, as in (8a), or as the head of the plural pronoun construction (8b) (see 19.7.2). In such cases, the entire noun phrase can bear any grammatical relation at all, including subject or direct object.

- (8) a. Guaha ha' tiempu ni para u matatpãngi
AGR.exist EMP time COMP FUT AGR.PASS.baptize
[guiya yan i lahi-ña].
she and the son-AGR
 'There was still time in which she and her son could be baptized.'
 (Cooreman 1982: 40)
- b. Guaha ginatdun gi intri **[hami** yan i
AGR.exist complication LCL between us.EXCL with the

asagua-hu].

spouse-AGR

‘There was a complication between me and my husband.’ (CD, entry for *ginatdun*)

Finally, the dual/plural independent pronouns can be used as collective verbs—verbs whose meaning is ‘be or do together (said of the individuals referred to by the pronoun)’. Some examples of this distinctive use, which is quite frequent in Chamorro, are given below.

- (9) a. Pues gaigi ha’ si nanã-hu ya
 so AGR.be.at EMP UNM mother-AGR and.then
 sumisiha yan i che’lu-hu neni gi espitãt.
 AGR.they.PROG with the sibling-AGR baby LCL hospital
 ‘So my mother was there and was together with my baby brother at the hospital.’ (EM 91)
- b. Ya hami yan i pumalu mañe’lu-hu,
 and.then we.EXCL with the some PL.sibling-AGR
 manhahami yan si tatan-mãmi gi gima’.
 AGR.we.EXCL.PROG with UNM father-AGR LCL house
 ‘And my other brothers and sisters and I were together with our (excl.) father at home.’ (EM 91)

8.3 Weak pronouns

The weak pronouns are unstressed morphemes that lean on phonological material to their left. These pronouns are listed below.

- (10) WEAK PRONOUNS
- | | |
|-----------------|------------|
| 1 sg. | yu’ |
| 2 sg. | hão |
| 3 sg. | gui’ |
| 1 incl. du./pl. | hit / hita |
| 1 excl. du./pl. | ham / hami |
| 2 du./pl. | hamyu |
| 3 du./pl. | siha |

Safford’s (1903: 308) and Topping and Dungca’s (1973: 107) English translations for the third person weak pronouns (i.e. ‘he, she, it, they’) imply that these forms can refer to humans, other living beings, and inanimate objects

or concepts. But, as with the independent pronouns, the actual situation is more complicated.

First of all, a demonstrative can combine with the 3 sg. weak pronoun *gui* to create a form that serves as a presentational predicate (e.g. *esti gui* ‘here is, this is (near speaker)’). These presentational predicates can introduce a noun phrase that is inanimate. In (11), the presentational predicate *ennão gui* ‘there is, that is (near addressee)’ introduces the inanimate noun phrase *na’-mu* ‘your lesson (lit. your food)’.

- (11) Ennã **gui** na’-mu sa’ inamti hã, no?
that it food-AGR because AGR.PASS.cure you right?
 ‘That should be a good lesson for you, isn’t that so?’ (CD, entry for *inamti*)

The unresolved issue is whether *gui* in this use functions as a pronoun that can refer to an inanimate or merely as part of the presentational predicate. The second possibility seems more likely, given that there are speakers in Rota and Saipan who use these presentational forms more generally as demonstratives within the noun phrase.

Second, the third person weak pronouns in their reflexive use can refer to inanimates (see 13.2.1.1). In the clause in (12), the 3 sg. weak pronoun *gui*, which serves as the reflexive direct object of *tutuhun* ‘begin’, refers to the typhoon season.

- (12) I tiempun pãkyu ha tutuhun **gui** gi Agostu na mes.
the time.L typhoon AGR begin it LCL August L month
 ‘Typhoon season begins (lit. begins itself) in August.’ (CD, entry for *pãkyu*)

In other respects, the weak pronouns have the same range of meanings as the independent pronouns. They can be used to refer to nonhuman animates that are personified; otherwise, they refer only to humans. (Recall from 6.1.1.1 that the *siha* that occurs in inanimate noun phrases is not a pronoun, but rather the plural morpheme.)

The 2 du./pl. and 3 du./pl. weak pronouns, *hamyu* and *siha*, have the same form as the corresponding independent pronouns. The forms cited by Safford (1903: 309) and Topping and Dungca (1973: 110-111) suggest that this is the only overlap between the two paradigms. But in the Chamorro now spoken in the CNMI, many speakers permit *all* the dual/plural independent pronouns to be used as weak pronouns. For these speakers, the 1 incl.

du./pl. weak pronoun can be realized as *hit* or *hita*, and the 1 excl. du./pl. weak pronoun can be realized as *ham* or *hami*.

The weak pronouns have a tightly restricted distribution. Their main use within the clause is to serve as subjects or direct objects that are not topics or syntactically focused; see (13). Note, though, that null pronouns, not weak pronouns, are used to represent subjects that are cross-referenced by agreement in person (see 8.4).

- (13)a. Esta ha senti ha' atyu i amut na
already AGRfeel EMP that the medicine COMP
 gaigi hão.
AGR.be.at you
 'The [medicinal] plants already sensed that you are there.' (LLS 332)
- b. Châlik yanggin ma kadidak hão.
laugh if AGR tickle you
 'Laugh if they tickle you.' (CD, entry for *yanggin*)

A weak pronoun can serve the head of the plural pronoun construction (see 19.7.2), but usually not as the left conjunct of a coordinate noun phrase (see 19.5). In (14), the 1 excl. du. pronoun *ham* is the head of the plural pronoun construction (which is enclosed in brackets).

- (14) Umalaisin [ham yan si Pâli'] gi
AGR.RECP.fail.to.meet we.EXCL with UNM priest LCL
 kapiyu.
chapel
 'Father and I (lit. we (excl.) with Father) failed to meet each other at the chapel.' (CD, entry for *laisin*)

Within the noun phrase, weak pronouns are used when the quantifier *todu* 'all, every' has combined with a pronoun.

- (15) Hâyi mäs ekspirensiâo gi kontra [todus hit]?
who? more AGR.experienced LCL against all us.INCL
 'Who is the most experienced amongst us (incl.) all?' (CD, entry for *ekspirensiâo*)

Weak pronouns are not used in other contexts; independent pronouns or null pronouns are used instead.

The placement of weak pronouns is determined phonologically. A weak pronoun that serves as a subject or direct object occurs in ‘second position’ in the clause, where the material in ‘first position’ forms a phonological phrase (see Chung 2006).² For practical purposes, this means that:

(i) A weak pronoun can occur immediately after the word that serves as the predicate. The predicate is a verb in (16a-b), an adjective in (16c), and a noun in (16d).

- (16)a. Sigi umatalak **yu’** guatu as Andre sa’ put
keep.on AGR.stare I to.there OBL Andre because about
meme’mi’.
AGR.urinate.PROG
 ‘I’m staring at Andre because of the fact that he’s urinating.’ (CD, entry for *atalak*)
- b. Ha bisisita **hit** i Ñiñu Jesus gi gimã’-ta gi
AGR.visit.PROG us.INCL the child Jesus LCL house-AGR LCL
durãntin i Krismas.
during.L the Christmas
 ‘The Infant Jesus visits us (incl.) at our (incl.) homes during Christmas.’ (CD, entry for *Ñiñu Jesus*)
- c. Mampus disatentu **hão.**
so.much AGR.disrespectful you
 ‘You are very disrespectful.’ (CD, entry for *disatentu*)
- d. Ma’estron-ña **gui’** si Carmen.
teacher-AGR he UNM Carmen
 ‘He is Carmen’s teacher.’

When the predicate is phonologically dependent, the weak pronoun occurs immediately after the larger phonological word containing it. This phonological word is enclosed in brackets below.

- (17)a. Ti [patgun Dolores] **yu’.**
not child.L Dolores I
 ‘I’m not Dolores’s child.’
- b. Kuentât ki humihita, [para hãfa] **yu’** ni
as.long.as PRT AGR.we.INCL.PROG for what? I OBL
ottru.
other

² More precisely, a weak pronoun occurs immediately after the phonological phrase at the left edge of the intonational phrase corresponding to the clause.

‘So long as we (incl.) are together, I don’t care about others.’ (CD, entry for *kuentat ki*)

(ii) A weak pronoun can occur to the left of the predicate, but immediately after an auxiliary (e.g. *siña* ‘can’ in (18a)), a degree word (e.g. *mampus* ‘so much’ in (18b)), or an adjective modifier of the predicate (e.g. *mansuetti* ‘lucky (pl.)’ in (18c)).

- (18)a. *Siña hao manli’i’ chubåsku yanggin un*
can you AGR.ANTIP.see storm.over.water if AGR
atan huyung gi tasi.
look.at out LOC ocean
 ‘You can see an ocean storm if you keep looking out at the sea.’
 (CD, entry for *chubåsku*)
- b. *Dispåsiu, sa’ mampus hão gekpan.*
slow because so.much you AGR.jumpy
 ‘Slow down, because you are moving too fast.’ (CD, entry for *gekpan*)
- c. *Mansuetti hit na tãotãoguis guini giya Notti*
AGR.lucky we.INCL L people here LCL Northern
Mariãnas.
Marianas
 ‘We (incl.) are very lucky people here in Northern Marianas.’ (CD, entry for *ginéfsaga*)

(iii) Finally, a weak pronoun can occur even farther to the left, immediately after (the first phonological word of) an interrogative phrase or syntactically focused constituent that occurs at the left edge of the sentence. The interrogative phrase in (19a) is *hãyi na famalão’an* ‘which women?’; the syntactically focused constituent in (19b) is *pã’gu ha’* ‘just now’, which occurs at the left edge of an adverbial clause.

- (19)a. *Hãyi hão na famalão’an [gai che’lu]?*
who? you L PL.woman AGR.have sibling
 ‘Which women have you as a sibling?’
- b. *Tãy’a sa’ pã’gu ha’ yu’ ni mắttu.*
AGR.not.exist because now EMP I COMP AGR.arrive
 ‘She doesn’t have [a chart] because it’s just now that I’ve come [to the hospital].’ (LSS 70)

The placement of weak pronouns that do not serve as subjects or direct objects is less flexible. When a weak pronoun serves as the head of the plural pronoun construction, the entire complex noun phrase occurs right after the predicate. Within the noun phrase, a weak pronoun that has combined with *todu* ‘all, every’ occurs immediately after *todu*.

A weak pronoun can co-occur with other unstressed morphemes that lean on material to their left, such as the emphatic particle *ha’* (see 23.2) or the politeness particle *fan* (see 18.3 and 18.4).

- (20)a. Kǎo ti siña ha’ **hǎo** kumetu guennǎo?
Q not can EMP you AGR.quiet there
 ‘Can’t you just keep still there?’ (CD, entry for *ha’*)
- b. Sigi **hǎo** ha’ di mama’baba esta ki
keep.on you EMP PRT AGR.ANTIP.deceive until PRT
 poddung nanning **hǎo** ha’.
AGR.fall.L ripe.nut you EMP
 ‘You keep fooling around until you fall down like a ripe almond nut.’ (CD, entry for *nanning*)

But weak pronouns do not co-occur with other weak pronouns. Notably, a clause cannot have both a weak pronoun subject and a weak pronoun direct object. One reason for this is discussed in 8.4.2.

8.4 Null pronouns

8.4.1 Basics

Chamorro is a null argument language: it allows the subject, the direct object, and certain other noun phrases to be unpronounced if their reference can be determined from the context. These null arguments pick out different individuals depending on the discourse context, and can therefore be called null pronouns.

Like the independent pronouns and the weak pronouns, the null pronouns distinguish three persons, two numbers, and inclusive versus exclusive. Consider the sentences below. The null pronouns represented by the empty sets of brackets in (21) refer to the speaker in (21a), the addressee in (21b), an individual other than the speaker or addressee in (21c), and more than one such individual in (21d).

- (21) a. Ti hu lili’i’ [] esti gi ottru siha.
not AGR.see.PROG this LCL other PL
 ‘I do not see this done in other places.’ (LSS 513)

- b. Chamorro []?
Chamorro
 ‘Are you Chamorro?’ (heard in conversation)
- c. Kumu mana’gimin [] ya masahalum
if AGR.PASS.make.drink and.then AGR.perspire
 [], mǎpǎo ha’ i kalenturã-ña [].
AGR.cool EMP the fever-AGR
 ‘When s/he is given it to drink and s/he perspires, his/her fever goes away.’ (LSS 203)
- d. Lǎo gi presenti, manhobin [] — ti maninteresǎo [].
but LCL present AGR.young not AGR.interested
 ‘But at the present time, they are young—they’re not interested.’
 (LSS 190)

The null pronouns in (22) are first person pronouns which include (22a) or exclude (22b) the addressee.

- (22)a. Kalan mapput para ta sǎngan [] hǎfa
seems.like AGR.difficult FUT AGR.say what?
 gaigi gi hinassot-ta [].
AGR.be.at LCL thought-AGR
 ‘It is kind of difficult for us (incl.) to say what is in our (incl.) thoughts.’ (from a conference presentation)
- b. ... para bai in fanmanǎmti [] tǎotǎo.
FUT AGR AGR.ANTIP.treat person
 ‘[... when] we (excl.) are going to treat people.’ (LSS 183)

The null pronouns differ from the other types of (nonreflexive) pronouns in that they can be animate or inanimate. They are routinely used to refer to humans, other living beings, and inanimate objects or concepts. The null pronoun in (23a) refers to the illness being treated; the null object pronouns in brackets in (23b) refer to the book under discussion.

- (23)a. Tres biǎhi ha’, yanggin ti sasala’ [].
three time EMP if not AGR.incurable.PROG
 ‘Only three times, if it is not that severe.’ (LSS 183)
- b. Siña ta chuli’ [] ya ta tataitai [] gi
can AGR.take and.then AGR.read.PROG LCL
 hilu’ batkun airi.
top.L airplane
 ‘We (incl.) can take it and be reading it on the airplane.’ (EM 8)

The syntactic distribution of null pronouns is restricted in ways that arguably flow from the fact that they are not pronounced. These pronouns cannot serve as topics, syntactically focused constituents, or noun phrases in isolation. Moreover, they cannot serve as objects of prepositions, and cannot be possessors when the head noun is marked with the linker.³ They can, however, be used to represent all other noun phrase arguments, where the term *argument* is understood broadly enough to include the various functions of possessors described in 7.1.2. Null pronouns can be used to represent any and all of the following:

- (i) The subject. See (21-22).
- (ii) The direct object. The clauses in (23b) and (24) contain a null pronoun direct object as well as a null pronoun subject.

- (24) Dos biãhi ha' di hu lasa yan hu na'gimin
two time EMP PRT AGR massage and AGR make.drink
 âmut.
medicine
 'I massaged him two times and I made him drink native medicine.'
 (LSS 168)

(iii) Obliques. The sentences in (25) contain multiple null pronouns, including some that are obliques. The null pronoun oblique in (25a), which refers to the medicine that was given, is the oblique argument of a concealed applicative (see 11.5). The null pronoun oblique in (25b), which refers to the fire that did the burning, is a passive agent.

- (25)a. Pues hu nã'i.
then AGR give
 'Then I gave it to her.' (LSS 243)
- b. ... kosa ki siña sinenggi todû i sanpapa'-ña.
so.that can AGR.PASS.burn all the DIR.below-AGR
 'So that all the underside of it [= the breadfruit] can be burned by it.' (from a tape-recorded narrative)

(iv) Possessors, when the head noun shows possessor agreement. The possessive noun phrase *hinassot-ta* 'our (incl.) thoughts' in (22a) contains a

³ The last two restrictions are probably phonological. Prepositions and nouns that are marked with the linker are phonologically dependent: they must lean on material to their right. But a null pronoun—because it is not pronounced—contains no material for a dependent element to lean on.

null pronoun possessor; so do the possessive noun phrases *i kalenturã-ña* ‘his/her fever’ in (21c) and *todu i sanpapa’-ña* ‘all the underside of it’ in (25b).

8.4.2 Null pronouns and agreement

Morphological agreement in Chamorro interacts with pronoun form. The interaction can be characterized as follows: a pronoun cross-referenced by agreement *in person* must be null. In other words, when an agreement affix registers the person of a noun phrase, that noun phrase can be realized as a null pronoun, but not as a weak or independent pronoun.

Transitive verbs in Chamorro agree with their subjects in person and number (see 2.2.2.1). Consequently, the subject of a transitive verb can be realized as a null pronoun, but not as a weak or independent pronoun. This pattern is illustrated in the sentences below. (In this subsection, the person and/or number of the agreement is indicated explicitly in the morpheme-by-morpheme glosses.)

- (26)a. Ha fãhan (*gui') i lepblu.
 AGR[3SG] buy he the book
 ‘He bought the book.’
- b. Kão para en taitai (*hamyu) i lepblu?
 Q FUT AGR[2PL] read you.PL the book
 ‘Are you (pl.) going to read the book?’

Similarly, possessor agreement registers the person and number of the possessor (see 7.1.1). As a result, when a possessed noun shows possessor agreement, the possessor can be realized as a null pronoun, but not as a weak or independent pronoun. (Recall that when the possessor is a pronoun, the head noun *must* show possessor agreement.)

- (27) Nigap i kumpliaños-su (*yu').
 yesterday the birthday-AGR[1SG] I
 ‘Yesterday was my birthday.’

In contrast, intransitive verbs and adjectives in the realis mood do *not* agree with their subjects in person, although they do agree with them in number (see 2.2.2.2.1). The subjects of these types of predicates can be realized by null pronouns *or* weak pronouns. Compare (28a), in which the adjective *malãngu* ‘sick’ and the passive verb *mapo’lu* ‘be put’ have null pronoun subjects, with (28b-c), in which *malãngu* and the passive verb *inistotba* ‘be disturbed’ have weak pronoun subjects.

- (28)a. Mumalångu ya mapo'lu gi espitåt.
AGR[SG].sick and.then AGR[SG].PASS.put LCL hospital
 'He became sick and was put in the hospital.' (EM 91)
- b. Sa' mampus malångu gui'.
because so.much AGR[SG].sick he
 'Because he was so sick.' (EM 94)
- c. Esta ti inistototba gui'.
already not AGR[SG].PASS.disturb.PROG he
 'He was no longer disturbed by it.' (EM 144)

A more complicated picture is presented by intransitive verbs or adjectives in the *irrealis* mood. These predicates agree with the subject through forms chosen from two agreement paradigms: one paradigm registers person and number and the other registers number alone (see 2.2.2.3). The paradigm that registers person and number neutralizes many distinctions in the *irrealis* mood; in particular, it employs the same realization, /u/, for the 1 sg., 3 sg., and 3 du./pl. forms. (The 1 sg. form is written *hu*, but usually its pronunciation is the same as the 3 sg. *u* and the 3 du./pl. *u*.⁴) Perhaps as a result, when the subjects of these predicates are 1 sg., 3 sg., or 3 du./pl., they are typically realized as null pronouns. But they are also, very occasionally, realized as weak pronouns.

- (29)a. Para u pinatmada (gui') as Dolores.
FUT AGR[3SG] AGR[SG].PASS slap he OBL Dolores
 'He is going to be slapped by Dolores.'
- b. Håyi para u fankinenni' (siha) para
who? FUT AGR[3PL] AGR[PL].PASS take they to
 iya siha?
UNM them
 'By whom are they going to be taken to their place?'

Subjects of other types of predicates behave as expected in the *irrealis* mood. If they are pronouns, they must be null.

- (30)a. Para bai in fanmåttu (*ham) agupa'.
FUT AGR[1EXCL.PL] AGR[PL].arrive we.EXCL tomorrow
 'We (excl.) are going to arrive tomorrow.'

⁴ The discussion in the text glosses over the fact that the 1 sg. /u/ can optionally be preceded by *bai*.

- b. Ngai'an na para en fanmattu (*hamyu)?
when? COMP FUT AGR[2PL] AGR[PL].arrive you.PL
 'When will you (pl.) arrive?'

Agreement neutralization may well play a role in the optional appearance of weak pronouns in (29). But that cannot be the whole story, since there are other agreement neutralizations that have no such effect. For instance, in the realis mood, the agreement paradigm for transitive verbs employs the same realization, /in/, for 1 excl. du./pl. and 2 du./pl. agreement. (The orthography represents these forms as *in* and *en*, respectively, but they have the same pronunciation; see 2.2.2.1.1.) A subject that is 1 excl. du./pl. or 2 du./pl. must be realized by a null pronoun; it cannot be realized by a weak pronoun.

- (31) Mānu nai en sedda' (*hamyu) i patgun?
where? COMP AGR[2PL] find you.PL the child
 'Where did you (pl.) find the child?'

In summary, the generalization that governs the interaction between agreement and pronoun form has some exceptions that cannot be fully rationalized at this point. Still, it remains largely true that a pronoun that is cross-referenced by agreement in person must be null.

8.4.3 Further issues

The fact that null pronouns are unpronounced raises some further issues that are noted briefly here.

First, are these unpronounced constituents really *pronouns*? Some relevant evidence comes from their patterning with respect to the person-animacy restriction. As observed in 16.2, not every combination of subject and direct object can occur in a transitive clause in Chamorro. Some combinations are systematically excluded. For instance, no transitive clause can have a nonpronoun as its subject and a (nonreflexive) pronoun that refers to a human (or personified animate) as its direct object. This can be seen from the ungrammatical clauses in (32), in which the subject is a name and the direct object is a weak pronoun—the 3 sg. *gui'* in (32a) and the 3 du./pl. *siha* in (32b).

- (32)a. *Halalâtdi gui' si Maria.
AGR scold him UNM Maria
 ('Maria scolded him.')

- b. ***Para u bisita siha si Juan agupa**.
FUT AGR visit them UNM Juan tomorrow
 ('Juan is going to visit them tomorrow.')

Null pronouns behave like other types of pronouns for the purposes of this restriction. A null pronoun that refers to a human (or personified animate) cannot serve as the direct object when the subject is a nonpronoun. See (33).

- (33) ***Ha lalâtdi i ma'estra**.
AGR scold the teacher
 ('The teacher scolded him/them.')

This is evidence that null pronouns are indeed pronouns. (Note that (33) is grammatical if the null pronoun is taken to be the subject and the nonpronoun *i ma'estra* 'the teacher' is taken to be the direct object. This is unsurprising, since that combination of subject and direct object is not excluded by the restriction that excludes (32) and (33); see 16.2.)

Second, in contexts in which a pronoun must be null because it is cross-referenced by agreement in person, could the *agreement* be analyzed as a pronoun form?

Topping and Dungca (1973: 106-108) took this approach. They analyzed possessor agreement and the person-and-number forms of agreement with the subject as separate sets of pronouns, which they called (respectively) possessive pronouns and *hu*-type pronouns. Here are some reasons why their analysis is not adopted here:

- (i) If the morphemes that realize agreement in person were pronouns, one might expect them not to be doubled by noun phrases constructed from a name or head noun. But this 'doubling' systematically occurs. For instance, if the 3 sg. *ha* were taken to be a (subject) pronoun, then it would be doubled by the noun phrase *i patgun* 'the child' in (34).

- (34) **Ha na'ma'âsi' yu' i patgun**.
AGR[3SG] make.pity me the child
 'The child made me feel sorry.' (LSS 243)

Similarly, if the 3 sg. *u* and the 3 du./pl. *u* were taken to be (subject) pronouns, they would be doubled by a weak pronoun in sentences like those in (29). It is not clear what would explain such doubling.

- (ii) The forms that Topping and Dungca call *hu*-type pronouns also realize mood. Crosslinguistically, morphemes that realize subject-predicate

agreement often realize tense, aspect, or mood as well. But mood is rarely, if ever, realized by pronouns.

(iii) Even if the morphemes that realize agreement in person *were* pronouns, it would still be necessary to recognize the existence of null pronouns in Chamorro. Recall that null pronouns can represent noun phrase arguments that are cross-referenced only by agreement in number (as in (28a)), or not cross-referenced by any agreement at all (as in (24-25)). This means that an analysis like Topping and Dungca's would not succeed in completely eliminating null pronouns from Chamorro grammar. It would merely restrict their distribution to contexts in which the possessive pronouns and the *hu*-type pronouns did not occur—a counterintuitive result.

In the approach adopted here, there is no doubling to explain, and null pronouns can be used to represent all noun phrase arguments: subjects, direct objects, obliques, and possessors.

Observe, finally, that the null pronouns resemble the weak pronouns and the independent pronouns in that they refer to specific individuals. In these ways, they differ from the implicit arguments discussed in 9.3.2.

8.5 Further reading

See Chung (1982; 1985; 1989) for discussion of null pronouns in Chamorro, and Chung (2006) on the placement of weak pronouns.

9

INDEFINITE PRONOUNS

Chamorro has general indefinites—indefinite forms similar to pronouns that serve as noun phrases or determiners, but only in certain constructions. General indefinites serve as interrogative words in constituent questions and as negative indefinites in negative sentences. Noun phrase ellipsis and implicit arguments are also used to convey the meaning of indefinite pronouns.

9.1 Overview

Although Chamorro has no set of indefinite pronouns, it has indefinite forms that serve some of the same functions. These forms, which are called *general indefinites* here, occur only in constituent questions, negative sentences, and certain other constructions. They do not occur in sentences that describe single, one-time events that occurred or are occurring. The meaning of an indefinite pronoun can also be conveyed by noun phrase ellipsis in existential sentences, and by implicit arguments in other constructions. The form, meaning, and uses of general indefinites are documented in 9.2. Then, other mechanisms that can be used to convey the meaning of indefinite pronouns are described in 9.3.

9.2 General indefinites

9.2.1 Form

The general indefinites in Chamorro are indefinite forms that serve as interrogative words in questions and can be used to form negative indefinites in negative sentences. They can also occur in the antecedent clause of conditionals and in the standard of comparative sentences. Finally, they can be used as free-choice indefinites—indefinites that imply that it does not matter at all which referents are chosen; any suitable referent will do.

The general indefinites are listed in (1), along with the restrictions on their use. See 9.2.2 on their meanings in the different constructions in which they occur.

(1)	GENERAL INDEFINITE	RESTRICTED TO
	<i>hăyi</i>	humans
	<i>hăfa</i>	nonhumans
	(a)mănu	locations in space (as pronoun); pre-established sets (as determiner)
	<i>ngai'an</i>	locations in time
	<i>kuântu</i>	quantities
	<i>taimanu</i>	manners, means, or degrees

These forms are indefinite in that they do not pick out a particular referent. They can be considered pronouns in that their meaning, divorced from context, consists of just their indefiniteness plus the restrictions listed in (1).

Some general indefinites have the syntactic distribution of phrases:

The general indefinites *hăyi* (human) and *hăfa* (nonhuman) have the distribution of noun phrases. Like other noun phrases, they can be marked for the plural with the particle *siha* (see 6.1.1).

- (2) a. Tinani' ha' manatan **hăyi** siha
AGR.occupied EMP AGR.INF.ANTIP.watch who? PL
manhohosmi misa.
AGR.attend.PROG mass
'He was busy observing who (pl.) were attending mass.' (CD, entry for *kómutgan*)
- b. Ni **hăfa** para suettem-mu.
not anything FUT WH[OBL].lucky-AGR
'Nothing will you be lucky at.' (Cooreman 1983: 5)

The general indefinites (a)mănu (location in space) and *ngai'an* (location in time) have the distribution of noun phrases in the local case that name locations in time or space.

- (3) a. **Mănu** na un făhan i painetă-mu?
where? COMP AGR buy the comb-AGR
'Where did you buy your comb?' (CD, entry for *paineta*)
- b. Yanggin ti mañañu si tâta, **ni ngai'an** na
if not AGR.bribed UNM father not anytime COMP
u sedi hit manhăno.
AGR allow us.INCL AGR.INF.go
'If Dad isn't bribed, he would never allow us (incl.) to go.' (CD, entry for *mañañu*)

Over and above this, *hayi*, *hâfa*, *(a)mânu*, and *ngai'an* can serve as determiners within the noun phrase. In this use, they precede the noun, which is marked with the pre-head form of the linker (see 7.3.1). Note that when *(a)mânu* serves as a determiner, it is not restricted to noun phrases that name locations; instead, it signals that whatever referent is picked out is chosen from a pre-established set.

- (4) a. Si Juan mās ânimu kinu **hâyi** na
 UNM Juan more AGR.courageous than any L
 atungo'-hu.
 friend-AGR
 'Juan has more courage than any of my friends.' (CD, entry for *ânimu*)
- b. **Mânu** na tumu para un usa gi ko'ku' papâya?
 which? L coloring FUT AGRuse LCL pickle.L papaya
 'Which coloring are you going to use in the papaya pickle?' (CD, entry for *tumu*)
- c. Si Rosa ha prometi si Jesus para u nenggui
 UNM Rosa AGRpromise UNM Jesus FUT AGRwait
 gui' maseha **ngai'an** na tiempu tinaka' ...
 him at.all whenever L time AGR.PASS.take.up
 'Rosa promised Jesus to wait for him for however long it takes...' (CD, entry for *nenggui*)

Like other determiners, *hâyi* and *hâfa* can be preceded by the definite article *i* (see 6.2.6).

- (5) i **hâfa** na salâppi' ni ta u'usa
 the any L money COMP AGRuse.PROG
 'whatever money we (incl.) are using' (heard in conversation)

The other general indefinites are *kuântu* (quantity) and *taimanu* (manner, means, degree). *Kuântu* is a quantificational adjective (see 6.2.4.3). Like other quantificational adjectives, it can appear within the noun phrase (as in (6a)) or serve as a predicate (6b).

- (6) a. Tutât **kuântu** na tâotâo para u fansâonão.
 add.up how.many? L person FUT AGR AGR.participate
 'Add up how many people will participate.' (CD, entry for *tutât*)
- b. **Kuântu** famagu'on-mu?
 AGR.how.many? PL.child-AGR

‘How many children do you have (lit. children of yours are how many)?’

When *taimanu* refers to manner or means, it has the distribution of a manner or means adjunct, as in (7a-b) (see 3.3.5); when it refers to degrees, it serves as a predicate (7c).

- (7) a. Si tatã-hu fuma'nã'gui yu' **taimanu** pumeska.
 UNM father-AGR WH[SB].teach me how? AGR.fish
 ‘My father taught me how to fish.’ (CD, entry for *peska*)
- b. Goddi i chiba maseha **taimanu** na gineddi.
 tie the goat at.all any.way COMP AGR.PASS.tie
 ‘Tie the goat any way it can be tied.’ (CD, entry for *maseha taimanu*)
- c. Ti ha tungu' para u **taimanu** ni dinangkulon-ña.
 not AGR.know FUT AGR.how? OBL NMLZ.big-AGR
 ‘She didn’t know how big it would be.’ (CD, entry for *abiridão*)

Note finally that when the subject of the clause is a general indefinite, or has a general indefinite as its determiner, it must be syntactically focused—displaced to the left edge of the clause by wh-movement (see 23.3).

9.2.2 Meaning and use

General indefinites occur only in constituent questions, negative sentences, the antecedent clause of conditionals, the standard of comparative sentences, and free choice contexts. Each of these constructions makes its own contribution to the general indefinite’s meaning and dictates certain aspects of its distribution. 9.2.2.1 describes the meaning and use of general indefinites in constituent questions. 9.2.2.2 describes their patterning in negative sentences. 9.2.2.3 deals with general indefinites in conditionals and comparative sentences, and 9.2.2.4, with free choice contexts. Finally, 9.2.2.5 briefly describes concealed conditionals.

9.2.2.1 In questions

General indefinites serve as interrogative words in constituent questions. In this use, they can be translated into English as follows: *hãy* ‘who?’, *hãfa* ‘what?’, *(a)mãnu* ‘where?’, *ngai'an* ‘when?’, *kuãntu* ‘how much, how many?’, and *taimãnu* ‘how?’. Interrogative phrases in Chamorro are displaced to the left edge of the question by wh-movement (see 22.3). This is why the general indefinite—that is, the interrogative word—appears at the

beginning of the constituent questions below. (The questions in (8b) and (8d) occur in embedded clauses, which are enclosed in brackets.)

- (8) a. **Hâyi** tumutuhun i mimu?
who? WH[SBJ].begin the fight
 ‘Who started the fight?’ (CD, entry for *tutuhun*)
- b. Na’tungu’ yu’ [**hâfa** malago’-mu].
make.know me what? WH[OBL].want-AGR
 ‘Let me know what you want.’ (Cooreman 1983: 192)
- c. **Mânu** nai un po’lu i kucharon?
where? COMP AGRput the ladle
 ‘Where did you put the ladle?’ (CD, entry for *kucharón*)
- d. Si Chungi’ ha sangani si Kanâriu para u
UNM Chungi’ AGRsay.to UNM Kanâriu FUT AGR
 atan [**taimanu** gui’ umo’mak].
watch how? he AGR.swim
 ‘Chungi’ told Kanâriu to watch how he swam.’ (EM 83)

The general indefinite *hâfa* has some further uses in constituent questions. It combines with the prepositions *sa* ‘because of’ and *para* ‘for’ to form the interrogative phrases *sa’ hâfa* ‘why?’ and *para hâfa* ‘what for, what is the point of?’. (*Para hâfa* is also a fixed expression meaning ‘never mind, forget it, don’t bother’.) In addition, it combines with the general indefinite *taimanu* to form the interrogative phrase *hâfa taimanu*, ‘how? (manner, means)’, which has the same meaning and distribution as the interrogative word *taimanu* ‘how? (manner, means)’.

As mentioned earlier, interrogative phrases formed with the indefinite determiner (*a*)*mânu* range over a pre-established set. (*A*)*mânu* in this use can be translated ‘which?’ (see (9a)). Interrogative phrases formed with the indefinite determiners *hâyi* (human) or *hâfa* (nonhuman) can range over pre-established sets, but need not do so. *Hâyi* and *hâfa* in this use can be translated ‘what?’ or ‘which?’ (see (9b-d)).

- (9) a. **Mânu** na lupis para un hâtmi?
which? L skirt FUT AGRput.on
 ‘Which skirt are you going to wear?’ (CD, entry for *lupis*)
- b. **Hâfa** na klâsin pepeska hâo, ni haguít
what? L sort.L fisherman you even fishhook
 tâya’ guinaha-mu!
AGR.not.exist possession-AGR

‘What kind of a fisherman are you, you don’t even have hooks!’
(CD, entry for *pépeska*)

- c. Hekkua’ [hăyi na pătgun gumomgum esti i
dunno who? L child WH[SB].pry.loose this the
pettan sanme’na].
door.L DIR.front

‘I don’t know what child pried loose my front door.’ (CD, entry for *gomgum*)

- d. Hăyi na păli’ para u sâonăo gi interu?
who? L priest FUT AGRparticipate LCL funeral

‘Which priest will participate in the funeral?’ (CD, entry for *păli*)

In polar questions (see 22.2), general indefinites can serve as nonspecific indefinites. In such cases, *hăyi* can be translated ‘any(one)’, *hăfa* can be translated ‘any(thing)’, and so on.

- (10) Kăo siňa hăfa bai hu cho’guiyi hăo?
Q can anything AGR do.for you
‘Can I do anything for you?’ (EM 84)

9.2.2.2 In negative sentences

A general indefinite can combine with the word-level negative *ni* to form a negative indefinite, such as *ni hăyi* ‘no (one)’, *ni hăfa* ‘no(thing)’, *ni mănu* ‘no(where)’, *ni ngai’an* ‘never’, *ni kuântu* ‘in no quantity’, and *ni taimanu* ‘in no way, to no degree’. These negative indefinites can serve as arguments, adjuncts, or determiners within the noun phrase. They often undergo reduplication to indicate degree (see 25.2.1) or are followed by the emphatic particle *ha*’ (see 23.2), as in *ni hăyiyi ha*’ ‘no one’.

Negative indefinites occur only in negative sentences. They supply the sentence negation when they are syntactically focused—displaced to the left edge of the sentence by wh-movement (see 23.3). Some examples of syntactically focused negative indefinites are cited below.

- (11)a. Ni hăyiyi ha’ na patgon-ňa si Dolores âguaguat.
not any.EMPEMP L child-AGR UNM Dolores AGR.naughty
‘No child of Dolores’ is naughty.’
b. Pues ni hăfa siňa ha apagăyi.
so not anything could AGR carry.on.shoulder
‘So he could carry nothing.’ (CD, entry for *apagăyi*)
c. Ni ngai’an nai ta fanmaleffa.
not anytime COMP AGR AGR.forget

‘We will never forget (it).’ (*Ginen i Obispo* March 20, 2011)

Negative indefinites that are not syntactically focused serve as negative concord items—nonspecific indefinites that agree in form with the element that expresses sentence negation (see 17.3).¹ In Chamorro, sentence negation can be expressed by the sentential negative *ti* ‘not’, a syntactically focused negative indefinite, or a negative verb (e.g. *tâya* ‘not exist’; see 17.2). Negative concord items agree in form with one of these elements; they do not have negative meaning, but instead have the meaning of nonspecific indefinites. Compare the form of the negative concord items in (12) with the English translations of the sentences in which they occur.

- (12)a. *Ti manhonggi ni hâyi na espiritu fuera di i*
not AGR.ANTIP.believe not any L spirit except PRT the
guella yan guellun Chamorro ha’.
grandmother and grandfather.L Chamorro EMP
 ‘He does not believe in any spirit except his Chamorro ancestors.’
 (CD, entry for *moru*)
- b. *Para guâhu tâya’ ni hâfa na sinienti.*
for me AGR.not.exist not any L feeling
 ‘For me there isn’t any feeling.’ (EM 78)
- c. *Taya’ nengkanu’ ni amânunu.*
AGR.not.exist food not anywhere.EMP
 ‘There’s no food anywhere.’

Two restrictions on negative concord items should be noted. First, if no element expresses sentence negation, then the sentence cannot contain a negative concord item (= a negative indefinite that is not syntactically focused). Compare (13a) with the ungrammatical (13b).

- (13)a. *Chumochotchu gui’.*
AGR.ANTIP.eat.PROG he
 ‘He is eating.’

¹ At least some negative indefinites can apparently serve as predicates; see (a) below. In such cases, it is not clear whether the negative indefinite expresses negation or has an idiomatic meaning.

- (a) *Ni hâyi ha’ si Kita ni tilifón alaihai.*
not anyone.EMP EMP UNM Kita OBL gossip
 ‘Kita is very good in gossiping.’ (CD, entry for *tilifón alaihai*)

- b. ***Chumochotchu** **gui'** **ni hãfafa** **ha'**.
 AGR.ANTIP.eat.PROG he not anything.EMP EMP
 ('He is eating nothing.')

Second, a negative concord item cannot serve as the subject of a negative sentence (see 17.3).

A negative sentence can contain general indefinites that have not combined with the word-level negative *ni*. General indefinites in this use are called *negative polarity items*. They have meanings and distributions that are similar to negative concord items, although their form is different, as can be seen from (14).

- (14) Tai inangokku yu' nu **hãiyi** ha'.
 AGR.not.have NMLZ.trust I OBL anyone.EMP EMP
 'I am not dependent on anyone.' (CD, entry for *tái inangokku*)

General indefinites in Chamorro are not used as negative polarity items very often. More typically, a general indefinite combines with *ni* to produce a negative indefinite that can serve as a negative concord item.

9.2.2.3 In conditionals and comparatives

General indefinites can serve as nonspecific indefinites in the antecedent clause of a conditional sentence or the standard of a comparative sentence. In these constructions, they can be translated into English as follows: *hãyi* 'any(one)', *hãfa* 'any(thing)', *mãnu* 'any(where)', *ngai'an* 'anytime', *kuântu* 'in any quantity', and *taimanu* 'in any way, to any degree'.

In Chamorro, the antecedent clause of a conditional sentence is usually introduced by one of the subordinating conjunctions *yanggin*, *anggin*, *an*, or *kumu*, all of which mean 'if' (see 20.2.2). Like other adverbial clauses, the antecedent clause can precede or follow the clause in which it is embedded. The antecedent clause can contain a general indefinite. In the antecedent clauses of the conditional sentences below, the general indefinite serves as part of the predicate in (15a) and as the subject in (15b-c).

- (15)a. [Yanggin **hãfa** na distrosu], i Red Cross
 if any L disaster the Red Cross
 manakukudi.
 AGR.ANTIP.assist.PROG
 'The Red Cross helps whenever there is disaster.' (CD, entry for *distrosu*)

- b. [Yanggin **hăyi** para u hănăo], siempri manayu'us.
if anyone FUT AGR go indeed AGR.ANTIP.wave
 'When someone is going, she will wave good-by.' (CD, entry for *ayu'us*)
- c. Mungnga yu' malakuenta [yanggin **hăfa**
don't me AGR.held.responsible if anything
masusedj].
AGR.PASS.experience
 'I don't want to be held responsible if anything happens.' (CD, entry for *malakuenta*)

If a general indefinite is the subject of the antecedent clause, as in (15b-c), it is syntactically focused—displaced by *wh*-movement to the left edge of the embedded clause, immediately following the subordinating conjunction (see 23.5.1). General indefinites that bear other grammatical relations within the antecedent clause are typically not syntactically focused.

- (16)a. Mana'kăkati i busina [yanggin guaha
AGR.PASS.make.cry.PROG the siren if AGR.exist
hăfa na ira].
any L disaster
 'The siren is sounded when there is any disaster.' (CD, entry for *busina*)
- b. [Yanggin guaha dinanña' gi put **hăfa** na
if AGR.exist NMLZ.gather LCL about any L
achăki], siempri u guaha asembli.
incident indeed AGR.exist assembly
 'If there is a gathering for whatever reason, then there will be an assembly.' (CD, entry for *asembli*)

In Chamorro, the standard of a comparative sentence is a prepositional phrase or adverbial clause formed with one of the prepositions *ki*, *kinu*, or *kini*, all of which mean 'than' (see 5.2). The standard can contain a general indefinite. In the comparative sentences below, the general indefinite is the object of *kini* 'than' in (17a), the determiner of the object of *kinu* 'than' in (17b), and the object of the adverbial clause in (17c).

- (17)a. Hu apela hăo măs [kini **hăyi**].
AGR.depend.on you more than anyone
 'I depend on you more than anyone.' (CD, entry for *apela*)

- b. Si Juan mäs ânimu [kinu hâyi na
UNM Juan more AGR.courageous than any L
 atungo'-hu].
friend-AGR
 'Juan is more courageous than any of my friends.' (CD, entry for
ânimu)
- c. ... [kini un cho'gui ha' mo'na pat un sângan ha'
than AGR do EMP ahead or AGR say EMP
hâfa [achuk ha' ti gef siguru hâo]].
anything although EMP not AGR.very sure you
 '[It's better for you to take time to ask...] than that you just go ahead
 and do or just say anything even though you're not very sure.' (EM
 132)

9.2.2.4 In free choice contexts

In certain contexts, a general indefinite can serve as a free-choice indefinite—an indefinite that suggests that it does not matter at all which referent is chosen. General indefinites in this use can be translated into English as follows: *hâyi* 'whoever, any(one) at all', *hâfa* 'whatever, any(thing) at all', *mânu* 'wherever, any(where) at all', *ngai'an* 'whenever, any (time) at all', *kuântu* 'however much, however many', *taimanu* 'however'. Free-choice indefinites in Chamorro are often preceded by *maseha* 'at all, (which)ever, no matter', a word that makes it explicit that the choice among suitable referents is completely free.²

The constructions in which free-choice indefinites occur have a modal or conditional flavor. For instance:

- (i) Free-choice indefinites can occur in clauses containing a modal, such as the auxiliary *siña* 'possible, can'.

- (18)a. Esta maseha hâyi siña mannâ'i kumuñon.
already at.all anyone can AGR.ANTIP.give communion
 'Now anyone can give the communion.' (CD, entry for *kumuñon*)
- b. Siña un usa maseha hâfa na klâsin aga' para
can AGR use at.all any L sort.L banana for
buñelus aga'.
doughnut.L banana
 'You can use any kind of banana for banana doughnuts.' (CD, entry
 for *buñelus aga'*)

² *Maseha* also routinely occurs with general indefinites that serve as negative polarity items (see 9.2.2.2).

(ii) Free-choice indefinites can occur in irrealis clauses, including imperative clauses.

- (19) Na'galilik ha' **håfa** i listu para na'-ta.
make.roll EMP any the AGR.ready for food-AGR
 'Just stir over whatever is ready for our (incl.) food.' (CD, entry for *na'gålilik*)

(iii) Finally, free-choice indefinites can occur in generic or habitual sentences. The generic clause in (20a) makes a statement about a natural kind (the cochineal cactus); the habitual clauses in (20b-d) make statements about the dispositions, habits, or typical states of individuals or locations.

- (20)a. Måolik i hila' guaka para maseha **håfa** na
AGR.good the cochineal.cactus for at.all any L
 chetnut.
sickness
 'The cochineal cactus is good for any kind of sickness.' (CD, entry for *hila' guaka*)
- b. Ya-hu gumimin maseha **håfa** na gimin.
like-AGR INF.drink at.all any L drink
 'I like to drink any kind of beverage.' (CD, entry for *gimin*)
- c. Si Andresina ha po'lu maseha **månu** i
UNM Andresina AGR.put at.all anywhere the
 sapatos-ña.
shoes-AGR
 'Andresina puts her shoes anywhere.' (CD, entry for *maseha månu*)
- d. Åntis na tiempu gof bula ginias gaddu'
before L time AGR.very many slip.L wild.yam
 maseha **månu** na halumtånu' Tinian.
at.all any L jungle.L Tinian
 'There used to be a lot of wild yam that was ready to plant all around Tinian's jungle.' (CD, entry for *gias*)

In most respects, free-choice indefinites have the same distribution as general indefinites in other uses. They can serve as noun phrases or determiners; when subjects, they must be syntactically focused; otherwise, they can be focused but need not be. In addition, a free-choice indefinite can serve as the head of a special type of complex noun phrase called a free relative. In Chamorro, a free relative consists of a general indefinite followed by a relative clause. This relative clause has the complementizer

agreement of a constituent question rather than an ordinary relative clause (see 24.4).

Free relatives can occur only where a free-choice indefinite can occur; namely, in sentences containing a modal:

- (21) Ohala' mohon na [maseha **hăyi** manggâna
hopefully UNREAL COMP at.all anyone AGR.ANTIP.win
 para gubietnu] siña ha na'mâolik i sichuasion i
for governor can AGR make.good the situation.L the
 gubietnamentu.
government
 'I'm wishing that whoever wins as governor can make the situation
 in the government better.' (CD, entry for *óhala'*)

In irrealis sentences, including imperatives:

- (22)a. [Maseha **hăfa** un gâgâo] ti un nina'i.
at.all anything AGR ask.for not AGR PASS.give
 'Whatever you ask for he won't give to you.' (CD, entry for
meskinu)
- b. Para u baila si Dora [maseha **ngai'an**
FUT AGR dance UNM Dora at.all anytime
 na malagu'].
COMP AGR want
 'Dora will dance anytime she wants.' (CD, entry for *maseha*
ngai'an)
- c. Sigi ha' ya un adingan [maseha
keep.on EMP and.then AGR converse at.all
hăfa malago'-mu].
anything WH[OBL].want-AGR
 'Go ahead and say whatever you want.' (CD, entry for *ádingan*)

And in generic or habitual sentences:

- (23) [Maseha **mănu** hu hanâgui], ha tattiyi yu' i
at.all anywhere AGR go.to AGR follow me the
 anineng-hu.
shadow
 'Wherever I go, my shadow follows me.' (CD, entry for *ânining*)

9.2.2.5 In concealed conditionals

In Chamorro, free-choice indefinites and negative indefinites can occur in a special type of embedded clause that serves as the antecedent clause of a concealed conditional. Like the antecedent clause of an ordinary conditional (see 9.2.2.3), this embedded clause can precede or follow the higher clause, and its meaning imposes a condition or restriction on the meaning of the higher clause. But unlike other antecedent clauses, the embedded clause is not introduced by a subordinating conjunction such as *yanggin* ‘if’. (This is the sense in which the conditional is concealed.) Instead, the embedded clause contains a free-choice indefinite or negative indefinite that is syntactically focused—displaced to the left edge of the embedded clause by *wh*-movement. The result resembles a free relative in form, but differs in that the general indefinite does not bear any grammatical relation in the higher clause.

Some examples of concealed conditionals are given below, with the antecedent clause enclosed in brackets. In (24), the antecedent clause contains a free-choice indefinite that is syntactically focused.

- (24)a. [Maseha **håfa** masusedi], chume’lu hit
at.all anything AGR.PASS.experience DU.sibling we.INCL
 na dos.
L two
 ‘No matter what happens, the two of us (incl.) are siblings.’ (CD,
 entry for *che’lu*)
- b. Todu tiempu ya [**håfa** hu cho’gui gi
every time and.then anything AGR.do LCL
 che’chu’], bula ginatdun.
work AGR.much complication
 ‘Every time and whatever I do at work, there is a problem.’ (CD,
 entry for *håfa*)

In (25), the antecedent clause contains a negative indefinite that is syntactically focused.

- (25)a. [Ni **håfa** guaha], i nana siempri u ampåra i
not anything AGR.exist the mother indeed AGR.protect the
 patgon-ña.
child-AGR
 ‘No matter what there is, a mother will surely protect her child.’
 (CD, entry for *ampåra*)

- b. [Ni **kuântu** tinakkilo'-mu], siempri ha' un tunuk.
not in.any.quantity WH[OBL].high-AGR indeed EMPAGR descend
 'No matter how high you are, somehow you'll come down.' (CD, entry for *ni kuântu*)
- c. [Ni **taimanu** chinago'-mu], bai hu hanâgui hão ha'.
not any.degree WH[OBL].far-AGR AGR go.to you EMP
 'No matter how far you are, I will still come to you.' (CD, entry for *ni taimanu*)

Further investigation of this construction is needed.

9.3 Other ways to express indefiniteness

As noted earlier, general indefinites do not occur in sentences that describe single, one-time events that occurred or are occurring. Chamorro has other ways of conveying the meaning of indefinite pronouns in such sentences. Noun phrase ellipsis can remove the head noun of the pivot of an existential sentence, leaving behind material in which the deleted head noun corresponds to an indefinite pronoun. Moreover, several types of Chamorro clauses allow an indefinite implicit argument—an argument that has no syntactic realization at all. The use of noun phrase ellipsis in existential sentences is described in 9.3.1; two types of clauses that allow an indefinite implicit argument are discussed in 9.3.2.

9.3.1 Noun phrase ellipsis in existential sentences

Existential sentences in Chamorro are formed from the existential verbs *guaha* 'exist' and *tãya* 'not exist' (see 14.2.2). Both verbs are impersonal verbs that have two arguments: one argument that names what exists, and another argument that names the location in time or space where it exists. (In addition, *tãya* expresses sentential negation.) The argument that names what exists is realized as a noun phrase, known as the *pivot*, which must have a weak determiner (see 6.2.5). In the existential sentences below, the pivot's weak determiner is the null indefinite article.

- (26)a. Hunggan, guaha tãotãomo'na.
yes AGR.exist ancient.spirits
 'Yes, there are ancient spirits.' (Cooreman 1982: 2)
- b. Na'siguru na guaha ga'chong-mu.
make.sure COMP AGR.exist partner-AGR
 '[When you go fishing,] make sure you have a partner (lit. there is a partner of yours).' (EM 17)

- c. Tãya' uchan ya kulang ãppan i
 AGR.not.exist rain and.then seems.like AGR.dry.up the
 hagoi.
 lake
 'There is no rain and the lake is dry.' (CD, entry for *hagói*)

Like other Chamorro noun phrases, the pivot can undergo noun phrase ellipsis. This process optionally deletes the head noun along with any possessor, arguments, or adjuncts, as long as certain other elements of the noun phrase—for instance, an adjective or relative clause—are left behind (see 7.5). The deleted material is understood to mean 'one' or 'thing'. In existential sentences, when noun phrase ellipsis affects the pivot, the result can sometimes be given an English translation in which the material left behind in the pivot corresponds to the main clause and the deleted head noun corresponds to an indefinite pronoun (e.g. *someone, anything*). Consider the existential sentences in (27) and their free English translations. The pivot in these sentences has undergone noun phrase ellipsis, leaving behind a relative clause (enclosed in brackets).

- (27)a. Ha huhunguk guaha [umu'ugung].
 AGR.hear.PROG AGR.exist AGR.moan.PROG
 'She was hearing (that there was) someone moaning.' (EM 98)
- b. Yanggin mãttu hão manbisita, siempri
 if AGR.arrive you AGR.INF.ANTIP.visit indeed
 guaha [inefresi hão].
 AGR.exist AGR.PASS.offer you
 'If you come to visit, he will surely offer you something (lit. there is surely something that you'll be offered by him).' (EM 89)
- c. Tãya' [hu li'i' gi uriyan guma'], pues
 AGR.not.exist AGR.see LCL around.L house so
 sigi yu' di humoi'.
 keep.on I PRT AGR.call
 'I didn't see anyone (lit. there wasn't anyone that I saw) around the house, so I started calling out *hoi*.' (CD, entry for *hoi*)

Noun phrase ellipsis often occurs in the pivot of an existential sentence when the head noun indicates location in time within the relative clause. The practical result is that in sentences of this type, *guaha na* can be translated 'sometimes, ever', and *tãya' na* can be translated 'never'. See (28).

- (28)a. Si bihã-hu guaha [na ilek-ña
 UNM grandmother-AGR AGR.exist COMP say-AGR
 “girrim”].
 get.him
 ‘At times (lit. there were (times) when) my grandmother would say
 “get him”.’ (CD, entry for *girrim*)
- b. Kão guaha [na un chagi kumãnnu’ aga’,
 Q AGR.exist COMP AGR try INF.eat banana
 mângga, pat âbas]?
 mango or guava
 ‘Have you ever tried (lit. was there (a time) when you tried) eating
 bananas, mangos, or guavas?’ (EM 82)
- c. Tãya’ magãhit [na hu li’i’ i tinanum asension].
 AGR.not.exist truly COMP AGR see the plant.L milkweed
 ‘I have really never seen (lit. there hasn’t really been (a time) when
 I saw) a milkweed plant.’ (CD, entry for *asensión*)

Finally, a curious property of the pivot of an existential sentence should be noted: unlike other noun phrases, the pivot can be eliminated entirely by noun phrase ellipsis. It is not necessary for any audible element of the noun phrase to be left behind. This pattern is illustrated in the dialogues below.

- (29)a. Kão manmalãti’ mañe’lun Mariano? — Guaha ha’.
 Q AGR.smart PL.sibling.L Mariano AGR.exist EMP
 ‘Are any of Mariano’s brothers and sisters smart? — Some are.’
- b. Hãyi mamomokkat gi kantun tãsi? — Tãya’.
 who? AGR.walk.PROG LCL edge.L ocean AGR.not.exist
 ‘Who is walking on the beach? — Nobody.’

It is unclear why noun phrase ellipsis can have this effect on the pivot, but not on other noun phrases whose determiner is the null indefinite article.

9.3.2 Indefinite implicit arguments

Chamorro has several types of clauses in which the predicate can have an implicit argument—an argument with no syntactic realization at all. In the two types of clauses discussed here, the implicit argument is understood as a nonspecific indefinite.

9.3.2.1 In antipassive clauses

In antipassive clauses, the prefix *man-/fan-* is attached to a transitive verb to form an antipassive verb (see 10.3). Antipassive verbs are intransitive: they

have no direct object. Instead, the argument corresponding to the direct object of the original transitive verb is either implicit or else realized as a noun phrase in the oblique case. Some examples of implicit arguments associated with antipassive verbs are cited below, with the antipassive verb in boldface. The relevant point is that the implicit argument—a nonspecific indefinite—can be translated into English with an indefinite pronoun (e.g. *someone, anything*).

- (30)a. *Todu i imfitmera debi di uma tungu'*
all the nurse should PRT AGR know
manmanggraduha.
INF.ANTIP.take.temperature.of
 'All the nurses should know how to take someone's temperature.'
 (CD, entry for *graduha*)
- b. *Intri todus ham na tres ni manmånggi'*
among all us.EXCL L three COMP AGR.ANTIP.write
guini na lepbilu ...
LCL.this L book
 'Among all three of us (excl.) who wrote (anything) in this book...'
 (EM 6)
- c. *Yanggin ti manmane'kunguk i famagu'un ...*
if not AGR.ANTIP.listen.to the PL.child
 'If the children didn't listen (to anything)...' (EM 138)

Although antipassive verbs can have an implicit argument, the transitive verbs from which they are derived cannot. When the direct object of a transitive verb is 'missing', it is treated as a null pronoun—a pronoun that refers to a specific individual (or object, stuff, event, etc.), but happens not to be pronounced (see 8.4). Compare the implicit arguments in (30) with the null direct objects of the transitive verbs *konni* 'take' and *ripåra* 'notice' in the sentences below.

- (31)a. *Si Maria ha disonra i familiån-ña anai ha*
UNM Maria AGR disgrace the family-AGR when AGR
konni' para i kotti.
take to the court
 'Maria disgraced her family when she took them to court.' (CD, entry for *disonra*)
- b. *Ti ha ripåra ya måspuk gui' gi*
not AGR notice and.then AGR.step.accidentally he LCL

halum fachi'.
inside.L mud
 'He did not realize it and he stepped into the mud.' (CD, entry for *måspuk*)

9.3.2.2 In passive clauses

In passive clauses, the infix *-in-* or the prefix *ma-* is attached to a transitive verb to form a passive verb (see 10.2). Passive verbs are intransitive; their subject corresponds to the direct object of the original transitive verb. The argument corresponding to the subject of the original transitive verb is either unrealized, or else realized as a noun phrase in the oblique case (the passive agent). When the passive agent is syntactically realized, its number generally determines which passive affix appears on the verb: the *-in-* passive is used when the agent is singular, and the *ma-* passive is used otherwise (see 10.2.2.3 for the full details). Interestingly, the distribution of the *-in-* passive and the *ma-* passive is different when the agent is *not* syntactically realized. The unrealized agent of the *ma-* passive can be interpreted as an implicit argument—a nonspecific indefinite whose number is unknown.³ In the sentences below, the passive verb is in boldface. Note that the passive agent is implicit both in Chamorro and in the English translation.

- (32)a. Dos na turiyu **manmapunu'** para i fandånggu.
two L young.bull AGR.PASS.kill for the wedding
 'Two young bulls were slaughtered for the wedding celebration.'
 (CD, entry for *turiyu*)
- b. **Machiku** yu' gi paingi.
AGR.PASS.kiss I LCL last.night
 'I was kissed last night.'
- c. Låmlalam i kareta anai munhåyan
AGR.very.shiny the car when AGR.finished
mafa'gåsi.
AGR.PASS.wash
 'The car was very shiny after being washed.' (CD, entry for *låmlalam*)

The unrealized agent of the *-in-* passive cannot be an implicit argument, but is instead interpreted as a singular null pronoun—a pronoun that has a specific referent. Compare the implicit arguments in (32) with the null

³ The unrealized agent of the *ma-* passive can also be interpreted as a plural null pronoun that has a specific (plural) referent (see 10.2.2.3).

passive agents in (33), which are translated into English with singular pronouns ('it' and 'she').

- (33)a. I kanggrena piligru sa' siña ha'
the gangrene AGR.dangerous because can EMP
pininu' hảo.
AGR.PASS.kill you
'Gangrene is dangerous because it can kill you (lit. you can be killed by it).' (CD, entry for *kanggrena*)
- b. Kuinentutusi hảo.
AGR.PASS.speak.to.PROG you
'She's speaking to you (lit. you are being spoken to by her).' (heard in conversation)

10

PASSIVE AND ANTIPASSIVE

Almost every transitive verb in Chamorro has a passive form and an antipassive form. This chapter describes the form of passive verbs, the form of antipassive verbs, and the structure of the clauses in which they occur.

10.1 Overview

Almost every transitive verb in Chamorro has a passive form and an antipassive form. These have the same arguments as the original transitive verb, but realize them with different grammatical relations. For instance, the transitive verb *kassi* ‘tease’ has two arguments, one that names the teaser and another that names the one who is teased. In the transitive clause in (1), the argument that names the teaser (*Kika*’) is realized as the subject, and the argument that names the one teased (*Kindu*’) is realized as the direct object.

- (1) Ha kassi si Kika’ si Kindu’.
 AGR *tease* *UNM* *Kika*’ *UNM* *Kindu*’.
 ‘Kika’ teased Kindu’.

Compare the passive clause in (2), in which the verb *kassi* is in its passive form (*kinassi*). Here, the argument that names the one teased is realized as the subject, and the argument that names the teaser is realized as an oblique (called the *passive agent* below).

- (2) Kinassi si Kindu’ as Kika’.
 AGR.PASS.tease *UNM* *Kindu*’ *OBL* *Kika*’
 ‘Kindu’ was teased by Kika’. (CD, entry for *kinassi*)

The realization of arguments is different again in the antipassive clause in (3), in which the verb *kassi* is in its antipassive form (*mangassi*). Here, the argument that names the teaser is realized as the subject, but the argument that names the one teased is realized as an oblique (called the *antipassive oblique* below).

- (3) Mangassi si Kika' as Kindu'.
AGR.ANTIP.tease UNM Kika' OBL Kindu'
 'Kika' (was one of those who) teased Kindu'.'

Both passive verbs and antipassive verbs are intransitive: they have no direct object (see 3.2.2).

This chapter documents the form of passive verbs and antipassive verbs, and the structure of the clauses in which they occur.

10.2 Passive

10.2.1 Passive verbs

The passive of a transitive verb has two realizations: one formed with the infix *-in-* and the other, with the prefix *ma-*. Some representative verbs and their passives are cited below.

(4)	VERB		-IN-PASSIVE	MA-PASSIVE
	patmâda	'slap'	pinatmâda	mapatmâda
	bisita	'visit'	binisita	mabisita
	tattiyi	'follow'	tinattiyi	matattiyi
	konni'	'take'	kinenni'	makonni'
	sugun	'drive'	sinigun	masugun
	hâlla	'pull'	hinalla	mahâlla
	li'i'	'see'	lini'i', nili'i'	mali'i'
	atan	'look at'	inatan	ma'atan
	istotba	'disturb'	inistotba	ma'istotba

The infix *-in-* is inserted before the first vowel of the verb. This morpheme activates umlaut: it causes the vowel of the immediately following syllable to be realized as a front vowel (see 30.2). If the verb begins with *ñ*, *ng*, or a liquid (*l*, *r*), some speakers allow *-in-* to be realized as the prefix *ni-*. The prefix *ma-* is attached to the left of the verb. In careful speech, when *ma-* is attached to a verb that begins with a vowel, this vowel is separated from the vowel of the prefix by glottal stop.

Almost all transitive verbs in Chamorro have passive forms. (One exception: transitive verbs that show agreement with the subject as if they were nouns generally do not have passive forms; see 14.4.) Various factors determine the distribution of the *-in-*passive and the *ma-*passive. In simple sentences, the determining factor is usually the number of the passive agent: the *-in-*passive is used when the passive agent is singular, and the *ma-*

passive is used otherwise. But there are circumstances in which other factors are more important (see 10.2.2.3).

10.2.2 Passive clauses

Passive clauses differ systematically from transitive clauses in the grammatical relations used to realize the arguments of the verb. These differences are discussed in 10.2.2.1. Then, 10.2.2.2 briefly discusses the word order of passive clauses. 10.2.2.3 returns to the factors that determine the distribution of the *-in*-passive and the *ma*-passive. Finally, 10.2.2.4 surveys the uses of passive in discourse.

10.2.2.1 Grammatical relations

A passive verb has the same arguments as the original transitive verb, but realizes them differently. The internal argument—the argument that would be the direct object of the original transitive verb—is realized as the subject, and the external argument—the argument that would be the subject of the original transitive verb—is realized as an oblique (the *passive agent*). Chamorro grammar provides many indications that these are indeed the grammatical relations found in passive clauses.

To begin with, the internal argument of passive has the form of a subject. When this argument is a noun phrase, it is in the unmarked case (see 5.1.2.1), and the passive verb agrees with it in person and/or number (see 2.2.2). As expected if passive clauses are intransitive, the agreement morphemes are chosen from the paradigms for intransitive verbs and adjectives (see 2.2.2.2). Note that in the realis mood, singular/dual agreement is indicated by no special morphology.

Consider the passive clauses below, which have their internal argument represented in boldface. The internal argument is singular or dual in (5) but plural in (6), and this difference is registered by the agreement on the passive verb.

- (5) a. Rinimâta **si** **Joey** ni ma'gâs-ña gi
 AGR.PASS.kick.out *UNM* *Joey* *OBL boss-AGR* *LCL*
 chi'cho'-ña.
 work-AGR
 'Joey was kicked out from his job by his boss.' (CD, entry for *rimâta*)
- b. Mayamak **i** **batalan** ni napu.
 AGR.PASS.break *the plank* *OBL wave*
 'The plank was broken by the waves.' (CD, entry for *bâtalán*)

- c. Dispues di dies âñus na kasamentu ni madibutsia
after PRT ten years L marriage L AGR.PASS.divorce
i dos taotão.
the two person
 ‘The couple (lit. the two people) were divorced after ten years of marriage.’ (CD, entry for *dibutsia*)
- (6) a. Manriniimãta **siha i famalão’an** ni taotão ginin
AGR.PASS.kick.out PL the PL.woman OBL person from
i lanchun-ñiha.
the ranch-AGR
 ‘The women had been chased away from their farm by the man.’
 (CD, entry for *rimãta*)
- b. Manmayamak **todu i tinanum.**
AGR.PASS.break all the plant
 ‘All the plants were ruined.’ (Cooreman 1983: 50)

Moreover, the internal argument of passive functions like a subject: it is the most prominent constituent of the clause (see 3.2.1). It is the constituent that must be missing in a passive infinitive clause (see 21.2.2).

- (7) a. Ti malagu’ [ma’ãmti].
not AGR.want AGR.INF.PASS.cure
 ‘She doesn’t want to be treated.’ (CD, entry for *ãmti*)
- b. Kumu ti ya-mu [ma’antula], pues
if not like-AGR AGR.INF.PASS.ridicule then
cha’-mu chocho’gui giya ottru.
better.not-AGR do.PROG LCL other
 ‘If you do not like to be ridiculed, then do not do it to another.’
 (CD, entry for *antula*)

Unlike other arguments and adjuncts, it cannot be a negative concord item (see 17.3).

- (8) ?*Ti yinilang ni un guma’ pãtdit nu i
not AGR.PASS.destroy not a house.L concrete OBL the
taifun.
typhoon
 (‘Not even one concrete house was destroyed by the typhoon.’)

And it must have wide scope with respect to sentence negation (see 17.4).¹

- (9) Ti manmakastiga **tres** **na famagu'un.**
not AGR.PASS.punish three L PL.child
 'There were three children who weren't punished.' (Not: There weren't (even) three children who were punished.)

The same considerations reveal that the passive agent is *not* the subject of a passive clause. When the passive agent is a noun phrase, it has the form of an oblique: it appears in the oblique case, and the passive verb does not show agreement with it. (The choice of *-in-* versus *ma-* does not always reflect the number of the passive agent; see 10.2.2.3.)

Moreover, the passive agent is *not* the most prominent constituent of the clause. Unlike the subject, it cannot be the constituent that must be missing in a passive infinitive clause.

- (10)a. ***Gof** **ya-ña** **[chinatgi** **si** **Juan].**
very like-AGR AGR.INF.PASS.laugh.at UNM Juan
 ('She likes laughing at Juan (lit. she likes for Juan to be laughed at by her).')
- b. ?***Manma'** **â'ñão i** **ma'estra** **[manmasohyu'** **i**
AGR.afraid the teacher AGR.INF.PASS.persuade the
istudiântis].
students
 ('The teachers are afraid to influence the students.')

And, like all arguments and adjuncts except the subject, it can be a negative concord item.²

- (11) Ti ya-ña na u mali'i' **ni hăyi.**
not like-AGR COMP AGR.PASS.see not anyone
 'He didn't want her to be seen by anyone.' (Cooreman 1983: 139)

Antecedent-pronoun relations provide additional evidence that the most prominent constituent of a passive clause is the internal argument, not the

¹ Chamorro does not allow imperatives to be formed from passive clauses (see 15.2.1). For this reason, imperatives are not included in the discussion in the text.

² The negative concord item *ni hăyi* 'no one' is indefinite, so it is not preceded by an overt oblique case marker in (11) (see 5.1.1.4).

passive agent. In Chamorro, a pronoun can precede its antecedent only when the antecedent is more prominent than the pronoun (see 26.3.1). As expected, a pronoun in a passive clause can precede its antecedent when the antecedent is the internal argument. This is because the internal argument is the subject of the passive clause—its most prominent constituent. In the passive clause in (12), for instance, the null pronoun possessor (‘his’) of *man’atungo’-ña* ‘his friends’ precedes its antecedent, which is the internal argument, *atyu na lâhi* ‘that boy’. (The pronoun and its antecedent are underlined in the English translation of this example.)

- (12) Siempri makassi [ni manatungo’-ña] atyu na lâhi.
indeed AGR.PASS.tease OBL PL.friend-AGR that L boy
 ‘That boy will be teased by his (own) friends.’

But in (13), the null pronoun possessor of *i karetâ-ña* ‘his/her car’ cannot have *Juan* as its antecedent, because the pronoun precedes *Juan*, but *Juan*—the passive agent—is *not* more prominent than the pronoun.³ (Here, the absence of underlining in the translation indicates that the pronoun has no antecedent within the clause.)

- (13) Mafa’mâolik [i karetâ-ña] as Juan.
AGR.PASS.repair the car-AGR OBL Juan
 ‘His/her (= someone else’s) car was repaired by Juan.’

Some other Austronesian languages have so-called ‘passive’ clauses in which there is no single most prominent constituent. In Tagalog, for instance, the characteristics of the most prominent constituent are divided between the external argument and the internal argument (see Schachter 1976 and many others since). Chamorro differs from these other languages: in its passive clauses, the internal argument is the subject, and the external argument (the passive agent) is *not* the subject.

The arguments of a passive clause can be noun phrases of any type: definite or indefinite, quantified or not quantified, strong or weak. (They can also be embedded clauses or infinitives; see Chapters 20 and 21.) Some of the possibilities are illustrated below. The passive clauses in (14) have various types of noun phrases as the subject.

³ In fact, neither the passive agent nor the pronoun in (13) is more prominent than the other (see Chung 1998: 69-80).

- (14)a. Gi prisienti, ti ma'u'usa esta **talak**.
LCL present not AGR.PASS.use.PROG already grooved.sinker
 'At present, grooved cone-shaped sinkers are no longer used.' (CD, entry for *talak*)
- b. Mayulang **singku na bintanan-måmi**.
AGR.PASS.destroy five L window-AGR
 'Five windows of ours (excl.) were ruined.' (from a letter)
- c. Manyinamak **todu i makineriha** nu i pakyu gi
AGR.PASS.break all the machinery OBL the storm LCL
dipattamentun gubetnu.
department.L government
 'All the machinery in the government departments was destroyed by the storm.' (CD, entry for *måkineriha*)

The clauses in (15) have various types of noun phrases as the passive agent.

- (15)a. *Chikun påkpak* kumeke'ilek-ña *chiku ni*
kiss.L exploded meaning-AGR kiss COMP
tinattitiyi **påkpak na sunidu.**
AGR.PASS.follow.PROG exploded L sound
 'Chikun påkpak means a kiss that is followed by a smacking sound.'
 (CD, entry for *chikun påkpak*)
- b. Magululumu *yu' ni bulan sasata* gi *halumtånu*.
AGR.PASS.surround I OBL many.L bee LCL forest
 'I was surrounded by a group of bees in the forest.' (CD, entry for *gululumu*)
- c. Manisisita *ni kada unu* na *u fannanånalu*.
AGR.PASS.need OBL each one COMP AGR.AGR.angry.PROG
 'Everyone needs to be angry.'

Speakers of the Guam and Rota dialects allow the passive agent to have no overt case marker when it is weak (indefinite in some sense, see 6.2.5). This pattern, which is attested in early twentieth-century grammars of Chamorro (e.g. Safford 1904: 506), assimilates passive agents to other noun phrases in the oblique case (see 5.1.1.4). However, for some speakers of the Saipan dialect, the passive agent is always preceded by an overt case marker, even when it is weak. Compare (15a) and (16a), in which a weak passive

agent is not preceded by any case marker, with (15b) and (16b), in which the oblique case marker appears.⁴

- (16)a. Na'ma'asi' i palão'an sa'
AGR.pitiful the woman because
 fina'isklâlabu **asaguã-ña.**
AGR.PASS.make.into.slave.PROG spouse-AGR
 'The woman is pitiful because she is treated like a slave by her husband.' (CD, entry for *isklâbu*)
- b. Mannina'yi siha i taotão ni **un chetnut** na
AGR.PASS.infect PL the person OBL a disease COMP
 mafa'nana'an kabongku.
AGR.PASS.name.PROG kabongku
 'The people were infected by a disease called *kabongku*.'
 (Cooreman 1983: 146)

Passive clauses have the expected structure when formed from transitive verbs that have more than two arguments. The argument that would be realized as the direct object of the original transitive verb is realized as the subject, and the argument that would be realized as the subject of the original transitive verb is realized as the passive agent. Other arguments have the same grammatical relations as in the original transitive clause. Consider the clauses below, which are formed from the verb *nâ'i* 'give', a concealed applicative that has three arguments (see 11.5).

- (17)a. Anai ha nâ'i yu' i tindera ni sepblâ-hu ...
when AGR.give me the shopkeeper OBL leftover-AGR
 'When the cashier gave me my change...' (CD, entry for *átulaika*)
- b. Nina'i si Lucia as Dorothy ni fíngkâs-ña
AGR.PASS.give UNM Lucia OBL Dorothy OBL goods-AGR
 siha.
PL
 'Dorothy gave all of her belongings to Lucia.' (CD, entry for *fengkas*)

In the transitive clause in (17a), the giver (*i tindera* 'the shopkeeper') is realized as the subject, the recipient (*yu* 'me') as the direct object, and the thing given (*ni sepblâ-hu* 'my change') as an oblique. In the passive clause

⁴ Typically, a passive agent that is introduced by the null indefinite article and has no overt case marker occurs immediately after the verb.

in (17b), the giver (*Dorothy*) is realized as the passive agent and the recipient (*Lucia*) is realized as the subject. Just as in a transitive clause, the thing given (*ni fíngkås-ña* ‘her belongings’) is realized as an oblique.

10.2.2.2 Word order

Passive clauses have the same word order possibilities as other intransitive clauses. Usually the subject occurs immediately after the verb. But the subject can also occur at the right edge of the clause, as in (12) and the following.

- (18) Nina’yi ni suspetchu i bisinu-hu.
 AGR.PASS.infect OBL tuberculosis the neighbor-AGR
 ‘My neighbor contracted (lit. was infected by) tuberculosis.’ (CD,
 entry for *suspetchu*)

Other word orders are possible. For instance, the subject can precede the passive agent but follow another argument of the verb. In (19), the other argument names the thing given (*agradesimentu* ‘thanks’).

- (19) Manã’i agradelementu kada palão’an ni i
 AGR.PASS.give thanks each woman OBL the
 pali’ i sengsung.
 priest.L the village
 ‘Each woman was thanked by the priest of the village.’

The passive agent can also precede or follow another argument of the verb. In (20), the other argument names the thing thrown: *atchu* ‘rocks’ in (20a) and *ni bola* ‘the ball’ in (20b).

- (20)a. Măffak ha’i-ña si Maria annai
 AGR.crack forehead-AGR UNM Maria when
 dinaggão as Jose átchu’.
 AGR.PASS.throw OBL Jose rock
 ‘Maria cracked her forehead when Jose threw rocks at her.’ (CD,
 entry for *ha’i*)
 b. Kão dinaggão hão tâtti ni bola gi as Rita?
 Q AGR.PASS.throw you back OBL ball OBL Rita
 ‘Did Rita throw you back the ball (lit. were you thrown back the ball by Rita)?’

These options reflect the fact that the word order of arguments following the predicate is flexible when the predicate is a verb (see 3.4.1.1).

10.2.2.3 More on *-in-* versus *ma-*

Almost every transitive verb has two realizations of passive, one formed with *-in-* and the other with *ma-*. Which form is used is determined by various factors that are ranked in importance. Although there is some variation across speakers in the details, the overall situation is as follows:

(i) The *ma*-passive is used to form passive infinitive clauses in the control construction (see 21.2.1).

- (21)a. Un diha o'o'sun si Ålu [masangãni
one day AGR.tired.PROG UNM Alu AGR.INF.PASS.say.to
 na metgotña si Pan ki guiya].
COMP AGR.strong.COMPAR UNM Pan than him
 'One day Alu got tired of being told that Pan was stronger than him.' (Cooreman 1982: 31)
- b. Ti manmalagu' [manmahãtmi lokkui'] esti i antigu.
not AGR.want AGR.INF.PASS.invade also this the ancient
 'These ancient people did not want to be invaded.' (Cooreman 1983: 53)

The *ma*-passive is also used in nominalizations of passive clauses. In such cases, the internal argument of passive is realized as a possessor.

- (22) Ma nutisia si Pedro yan i mangga'chong-ña ni
AGR.report UNM Peter and the PL.partner-AGR OBL
 todú i manmasangãnin-ñiha.
all the WH[OBJ].AGR.PASS.say.to-AGR
 'They reported briefly to Peter and those with him all that they had been told.' (NT 97)

(ii) The *-in-* passive is generally used in questions, relative clauses, and the focus construction when the passive verb is irrealis and the passive agent is questioned, relativized, or focused. (Most speakers do not allow a passive agent to be questioned, relativized, or focused when the passive verb is realis; see 22.4.1.1.)

- (23)a. Tieneki ti humãnão yu' sa' tâya' [para
probably not AGR.go I because AGR.not.exist FUT

u fanpinilan i famagu'un].
 AGR AGR.PASS.watch the PL.child

'I am probably not going because there is no one to watch the children.' (CD, entry for *tiéneki*)

- b. Hâyi siha na famalão'an para un kinenni' para
 who? PL L PL.woman FUT AGR PASS.take to
 i giput?
 the party
 'Which women are going to take you to the party?'

Otherwise, if neither (i) nor (ii) is relevant (i.e. the clause does not involve an infinitive in the control construction, or a nominalization, and the passive agent is not questioned, relativized, or syntactically focused), then:

(iii) The *ma*-passive is used when the passive agent is higher in animacy than the subject. This happens, for instance, when the passive agent is human but the subject is inanimate.

- (24)a. Manachagu' nifin i hagã-hu ya para
 AGR.far.apart tooth.L the daughter-AGR and.then FUT
 u ma'arekla nu i dentista.
 AGR PASS.fix OBL the dentist

'There are gaps between my daughter's teeth and the dentist will work on it.' (CD, entry for *áchagu*)

- b. Mahãtsa i gima'-mãmi ni as tatã-hu yan i
 AGR.PASS.build the house-AGR OBL father-AGR and the
 che'lu-hu lâhi.
 sibling-AGR male
 'My father built our (excl.) house with my brother.'

It also happens when the passive agent names an adult human but the subject names a child.

Finally, if none of (i-iii) is relevant, then:

(iv) The *-in*-passive is used when the passive agent is singular, and the *ma*-passive is used when the passive agent is dual/plural or unknown.

Practically speaking, the result is that the choice between *-in*- and *ma*- is usually determined by the number of the passive agent. Some examples of clauses with a singular passive agent are given below (see also 10.2.2.1). Note that it does not matter whether the passive agent is animate (see (25a)) or inanimate (25b).

- (25)a. Pues **sinedda**'i gi as tatã-ña un ga'lagitu.
then AGR.PASS.find.for OBL father-AGR a puppy
 'So then his father found him a puppy (lit. he was found a puppy by his father).' (Cooreman 1983: 108)
- b. Adahi na un **sinaolak** nu i dadalak i afula'.
careful COMP AGR.PASS.spank by the tail.L the manta.ray
 'Be careful not to be whipped by the tail of the manta ray.' (CD, entry for *afula*)

Nor does it matter whether the passive agent is an overt (pronounced) noun phrase (as in (25)) or a null pronoun (26). As long as it is singular, the *-in-* passive is used.

- (26)a. Si Ana, si Rhonda, yan si Bell
UNM Ana UNM Rhonda and UNM Bell
 mañeha anai mattu si Thomas para u
AGR.move.back when AGR.arrive UNM Thomas FUT AGR
faninanña.
AGR.PASS.beat.up
 'Ana, Rhonda, and Bell moved backwards when Thomas came to beat them up (lit. so they would be beaten up by him).' (CD, entry for *seha*)
- b. Hãfa umistototba i patgun ni
what WH[SBJ].disturb.PROG the child COMP
 kumeha, esta ti **inistototba** gui'.
AGR.complain already not AGR.PASS.disturb.PROG he
 'Whatever was disturbing the child who complained, he was no longer disturbed (by it).' (EM 144)

Some examples of clauses in which the passive agent is dual, plural, or unknown are given in (27) (see also 10.2.2.1).

- (27)a. Pues i mangginin Pis, mangginin Mual, ginin iya
then the AGR.from Pis AGR.from Mual from UNM
 Truk man**mapo**'lu giya Tinian ni Alimân.
Truk AGR.PASS.put LCL Tinian OBL German
 'So the ones from Pis, from Mual, from Truk were placed in Tinian by the Germans.' (Cooreman 1983: 148)
- b. Ume'kakat ha' i dos putno u **masienti**.
AGR.walk.slowly EMP the two so.that.not AGR.PASS.feel
 'The two [children] walked very slowly so that they would not be

- noticed [by the two thieves].’ (from a tape-recorded narrative)
- c. *Åntis na tiempu, bula na åbas manmatånum guini*
before L time many L guava AGR.PASS.plant LCL.this
na lugåt, atyu na mafa’na’an Åbas.
L place that COMP AGR.PASS.name Åbas
 ‘In the early days, a lot of guavas were planted in this place, and
 that’s how it got its name, Åbas.’ (CD, entry for *Åbas*)

The contrast between (26b) and (27b-c) illustrates a further point. When the agent of the *-in*-passive is syntactically unrealized, it is understood as a singular null pronoun with a specific referent (equivalent to English ‘he, she, it’). But when the agent of the *ma*-passive is syntactically unrealized, it can be understood as a dual or plural null pronoun, as in (27b), or as an implicit argument—a nonspecific indefinite whose referent is unknown, as in (27c) (see 9.3.2.2).

10.2.2.4 Passive clauses in discourse

Transitive and passive clauses in Chamorro have different functions in discourse. According to Cooreman (1987: 58), transitive clauses are much more frequent than passive clauses: 72% of the transitive verbs in the transcribed Chamorro narratives she studied were used to form transitive clauses, whereas just 20.3% were used to form passive clauses (16.1% with the *-in*-passive and 4.2% with the *ma*-passive). Cooreman found a correlation between these types of clauses and which argument of the verb serves as the discourse topic (where the *discourse topic* is what the current part of the discourse is about). Generally, transitive clauses are used when the discourse topic is the external argument; passive clauses are used when the discourse topic is the internal argument. This amounts to saying that transitive and passive clauses are deployed so that the discourse topic is generally the subject. In this respect, the Chamorro passive is like the English passive, but unlike the ‘symmetric’ passives found in Tagalog and some other Austronesian languages.

Chamorro’s person-animacy restriction also contributes to the use of passive clauses in discourse (see 16.2 and Clothier-Goldschmidt 2015). This restriction relies on the person-animacy hierarchy, which is a ranking of types of noun phrases—animate pronouns, animate noun phrases, inanimate noun phrases—according to salience or inherent topicality. In Chamorro, a transitive clause cannot have a direct object that is higher than the subject on the person-animacy hierarchy. This means, among other things, that a transitive clause cannot have an animate direct object but an inanimate subject, or an animate pronoun as direct object but a noun phrase that is not

a pronoun as subject. When a transitive clause would violate this restriction, the most common remedy is for an intransitive clause to be used instead—typically, the corresponding passive clause.

The factors just described favor the use of passive but do not require it. Consequently, it is not always obvious what motivates the use of a given passive clause in discourse. For instance, in (28)—from a homily about the parable of the blind man—it is plausible that the clauses formed from *sodda* ‘find’ and *na’fanli’i* ‘cause to see’ are passive because that ensures that the discourse topic—the blind man—remains the subject. (The passive verbs are represented in boldface in these examples.)

- (28) Låla’la’ gui’ benti kuâttru oras gi halum
 AGR.live.PROG *he* *twenty four hours* *LCL inside.L*
 homhum ... Dispues un diha **sinedda’** gui’ as
 dark *then one day* *AGR.PASS.find* *he* *OBL*
 Jesukristu ya **nina’fanli’i’**.
 Jesus.Christ and.then *AGR.PASS.make.ANTIP.see*
 ‘He was living 24 hours in darkness...Then one day he was found by
 Jesus Christ and was caused to see.’ (*Ginen i Obispo* April 3, 2011)

However, it is also plausible that the clause formed from *sodda* ‘is passive because the corresponding transitive clause would violate the person-animacy restriction: it would have an animate pronoun as direct object (*gui* ‘him’) but a nonpronoun as subject (*Jesukristu* ‘Jesus Christ’).

In (29), from a story about two birds, the clause formed from *istotba* ‘disturb’ is probably passive because the corresponding transitive clause would violate the person-animacy restriction. Note that the bird that is the addressee (‘you’) seems not to be the discourse topic, since the immediately surrounding discourse is about the bird that is the speaker (‘I’).

- (29) Yanggin ti un **inistotba**, malagu’ yu’ na bai hu
 if *not AGR.PASS.disturb AGR.want* *I* *COMP* *AGR*
 sâga guihi na trongku anai un hâhatsa i
 live *LCL.that L* *tree* *COMP* *AGR.build.PROG* *the*
 chemchom-mu.
 nest-AGR
 ‘Oh, if you won’t be disturbed by it, I want to live in that tree where
 you are building your nest.’ (EM 84)

Finally, in (30), from a transcribed narrative, it is unclear why the first clause (formed from *nâ’i* ‘give’) is transitive but the second clause (formed

from *sangani* ‘tell’) is passive. Both clauses have the exactly same (null) pronouns as external and internal arguments, and the larger discourse context suggests no change in discourse topic. Nonetheless, one clause is passive and the other is not.

- (30) Ha nã'i guatu ni na'-ña ya **sinangãni**
AGR give to.there OBL food-AGR and.then AGR.PASS.say.to
 na para u chotchu.
COMP FUT AGR ANTIP.eat
 ‘He_i gave him_j his_j food and he_j was told by him_i that he_j should eat.’ (Cooreman 1983: 79-80)

10.3 Antipassive

10.3.1 Antipassive verbs

The antipassive of most transitive verbs is formed with a prefix that is realized as *man-* in the realis mood or following the plural agreement prefix, and as *fan-* elsewhere (see 2.2.3.1 on the *m/f* alternation). Some representative transitive verbs and their realis antipassive forms are cited below.

(31)	VERB		ANTIPASSIVE (REALIS)
	patmãda	‘slap’	mamatmãda
	bisita	‘visit’	manbisita
	taítai	‘read’	manaitai
	tungu’	‘know’	manungu’
	konni’	‘take’	mangonni’
	fãhan	‘buy’	mamãhan
	chagi	‘try’	mañagi
	sugun	‘drive’	mañugun
	gãgão	‘request’	manggãgão
	ngingi’	‘sniff, smell’	manngingi’
	hãlla	‘pull’	manhãlla
	li’i’	‘see’	manli’i’
	atan	‘look at’	manatan
	istotba	‘disturb’	manistotba

The final *n* of the antipassive prefix undergoes the morphophonemic alternation known as nasal substitution (see 30.4): this *n* assimilates in place of articulation to an immediately following voiceless obstruent (*p, t, k, f, ch, s*), and the voiceless obstruent deletes.

A small number of transitive verbs form their antipassive in other ways. A few transitive verbs beginning with *t* form their antipassive with *man-/fan-* but, in addition, delete the stressed vowel of the root and shift the primary stress to the prefix; see (32). Evidence that these antipassives do indeed contain the antipassive prefix comes from the fact that they show the *m/f* alternation; e.g. the irrealis counterpart of *māmfi* ‘pick (fruit)’ is *fāmfi*, the irrealis counterpart of *mānggi* ‘write’ is *fānggi*, and so on.

(32)	VERB		ANTIPASSIVE (REALIS)
	tifi’	‘pick (fruit)’	māmfi’
	tufuk	‘weave’	māmfun
	tufung	‘count’	māmfun, māngfun
	tugi’	‘write’	mānggi’

A small number of transitive verbs have an antipassive that does not differ from their transitive form. (Note, though, that the two forms take their agreement from different paradigms; see below and 2.2.2.)

(33)	VERB		ANTIPASSIVE
	ayão	‘borrow’	ayão
	dandan	‘play (music)’	dandan
	gimin	‘drink’	gimin
	māma’	‘chew (betelnut)’	māma’
	tilifón	‘telephone’	tilifón

Finally, the antipassive of *kānnu* ‘eat’ is *chotchu*.⁵ The antipassive of verbs formed with the causative prefix *na’-* ‘cause, make, let’ simply shifts the primary stress to the causative prefix (see 12.3.3.2). In the causative verbs in (34), primary stress is indicated by an acute accent.

(34)	VERB		ANTIPASSIVE
	kānnu’	‘eat’	chotchu
	na’ ^h ókka	‘cause to pick up’	ná’ ^h ókka
	na’ ^s úgun	‘cause to drive’	ná’ ^s ugun
	na’ ^l āgu	‘cook’	ná’ ^l agu

⁵ More precisely, *chotchu* ‘eat’ is the antipassive form of *kānnu* ‘eat’ in its literal meaning. There are nonliteral uses of *kānnu* (e.g. in the expression ‘eat one’s words’) that have no analogue involving *chotchu*.

Antipassive verbs are intransitive, so their agreement with the subject is chosen from the paradigms for intransitive verbs and adjectives. The morphological make-up of the antipassive verb determines how agreement is realized with a singular/dual subject in the realis mood. For antipassive verbs formed with the prefix *man-/fan-*, as in (31) and (32), singular/dual agreement is indicated by no special morphology. For other antipassive verbs, as in (33) and (34), singular/dual agreement is indicated by *-um-*. See the examples below.

(35)	VERB		ANTIPASSIVE (SG./DU. REALIS)
	bisita	‘visit’	manbisita
	fāhan	‘buy’	mamāhan
	tugi’	‘write’	mānggi’
	ayāo	‘borrow’	umayāo
	kānnu’	‘eat’	chumotchu
	na’lāgu	‘cook’	muná’lāgu

A handful of transitive verbs apparently have no antipassive form; these include the verb *nisisita* ‘need’, transitive verbs that show agreement with the subject as if they were nouns, and transitive verbs derived by attaching the applicative suffix *-i* to an intransitive verb or adjective (such as *ekgu’i* ‘be jealous of’, *omlati* ‘fit into’; see 11.2.2.3 and Cooreman 1987: 125-126).

10.3.2 Antipassive clauses

Antipassive clauses differ systematically from transitive clauses in their realization of the verb’s internal argument. This is discussed in 10.3.2.1. Then, 10.3.2.2 briefly discusses word order, and 10.3.2.3 surveys how antipassive clauses are used in discourse.

10.3.2.1 Grammatical relations

An antipassive verb has the same arguments as the original transitive verb, but realizes the internal argument differently. This argument is not realized as the direct object, but instead is implicit—not syntactically realized at all—or else realized as an oblique (the *antipassive oblique*). In contrast, the external argument is realized as the subject, just as it is for the original transitive verb.

The external argument is clearly the subject of an antipassive clause. When this argument is a noun phrase, it is in the unmarked case (see 5.1.2.1), and the antipassive verb agrees with it in person and/or number (see 2.2.2). Consider the realis antipassive clauses below. The external argument

(in boldface) is singular in (36) but plural in (37), and the agreement on the verb registers this difference in number.

- (36)a. Mama'tinas **si** **Tāta** ā'if para inan i
 AGR.ANTIP.make UNM Father torch for light.L the
 kareran-ñiha guatu gi liyang.
 trip-AGR to.there LCL cave
 'Father made a torch to light their way into the cave.' (CD, entry for
 ā'if)
- b. Chatta' chumotchu **i** **taotāo**.
 barely AGR.ANTIP.eat the person
 'The man barely ate.' (CD, entry for *chatta'*)
- (37)a. Manmama'tinas **i** **istudiānti** tilintinis para i
 AGR.ANTIP.make the student trinkets for the
 nanan-ñiha.
 mother-AGR
 'The students made trinkets for their mothers.' (CD, entry for
 tilintinis)
- b. Mañotchu **ham** kelaguin ti'āo yan titiyas.
 AGR.ANTIP.eat we.EXCL kelaguin.L goatfish and tortillas
 'We (excl.) ate goatfish kelaguin and tortillas.' (CD, entry for *man-*)

In the irrealis antipassive clauses enclosed in brackets in (38), the agreement on the verb registers both person and number.

- (38)a. Ge'halum gi gima' ya [un chotchu].
 go.further.inside LCL house and.then AGR.ANTIP.eat
 'Do come inside the house and eat.' (CD, entry for *gé'halum*)
- b. Plānta i nengkanu' ya [ta fañotchu].
 set.up the food and.then AGR.AGR.ANTIP.eat
 'Serve the food so we (incl.) can eat.' (CD, entry for *néngkanu'*)

This is the agreement pattern characteristic of intransitive verbs and adjectives (see 2.2.2.2).

As expected from its form, the external argument of an antipassive verb functions like a subject: it is the most prominent constituent of the clause. It is the constituent that must be missing in an infinitive clause (see 21.2.2).

- (39)a. Tai ganas yu' [chumotchu].
 AGR.not.have appetite I AGR.INF.ANTIP.eat
 'I have no appetite to eat.' (CD, entry for *gānas*)

- b. I famagu'un manmafa'nâ'gui [manmaninsâtta kulâlis
the PL.child AGR.PASS.teach AGR.INF.ANTIP.string bead
 para kadena].
for necklace
 'The children were taught to string beads for necklaces.' (CD, entry
 for *insâtta*)

And, unlike other arguments and adjuncts, it cannot be a negative concord item (see 17.3).

- (40) ***Ti mananaitai** **ni unu** **nu i** **newspaper.**
not AGR.ANTIP.read.PROG not one OBL the newspaper
 ('No one reads the newspaper.')

Just as clearly, the internal argument of antipassive is not a direct object. When this argument is syntactically realized, it is in the oblique case, not the unmarked case.

- (41)a. Hassânña si Pedro manbisita as **nâna**
AGR.seldom.COMPAR UNM Pedro AGR.ANTIP.visit OBL mother
 kini si Kindu'.
than UNM Kindu'
 'Pedro visits mother less than Kindu'.' (CD, entry for *kini*)
 b. Mâolik manadda' si Frank nu **i**
AGR.good AGR.ANTIP.imitate UNM Frank OBL the
kakanta.
singer
 'Frank is good at imitating the singer.' (CD, entry for *adda*)

Unlike a direct object, it cannot be realized as a weak pronoun (see 8.3), and it cannot be questioned or relativized.

- (42)a. ***Hâfa** **mamâhan** **si** **Maria** **gi** **tenda?**
what? AGR.ANTIP.buy UNM Maria LCL store
 ('What did Maria buy at the store?')
 b. ***Manisipipiha** **yu' lepblu** **ni** **siña manaitai**
AGR.ANTIP.look.for.PROG I book COMP can AGR.ANTIP.read
yu'.
I
 ('I'm looking for a book that I can read.')

The fact that the agreement of antipassive verbs is chosen from the paradigms for intransitive verbs and adjectives provides more evidence that the internal argument is not a direct object, but rather an oblique.

Because the subject of antipassive is an external argument, it must be specific (see 16.4). If it occurs within the clause, after the predicate, it cannot be a quantified noun phrase, a general indefinite, or any other nonspecific noun phrase.

- (43)a. ***Manaitai kada palão'an lepblu.**
AGR.ANTIP.read each woman book
 ('Each woman read a book.')
- b. ***Yanggin mamamaisin hăyi kuestion, guăhu**
if AGR.ANTIP.ask.PROG anyone question I
bai hu oppi siha.
AGR answer them
 ('If anyone is asking a question, I will be the one to answer them.')

The antipassive oblique is not similarly restricted. It can be implicit (not syntactically realized at all), in which case it is understood as a nonspecific indefinite (see 9.3.2).

- (44)a. **Yuti' i basula sin un famaisin.**
discard the trash without AGR.ANTIP.ask
 'Just throw away the trash without asking (anyone).' (CD, entry for *sin*)
- b. **Gof prisisu na un tungu' manaitai**
AGR.very important COMP AGR.know AGR.INF.ANTIP.read
gi linguahi-mu yan gi finu' Englis.
LCL language-AGR and LCL speech.L English
 'It's very important for you to know how to read in your language as well as in English.' (CD, entry for *prisisu*)
- c. **Pumeska si Ramon gi paingi lão ti**
AGR.fish UNM Ramon LCL last.night but not
mangonni', sa' gâtdun i kutdet-ña.
AGR.ANTIP.catch because AGR.entrangled the fishing.line-AGR
 'Ramon went fishing last night, but he didn't catch (any) because his line got entangled.' (CD, entry for *gâtdun*)

When it is syntactically realized, the antipassive oblique can be any type of noun phrase—definite or indefinite, quantified or not quantified, strong or

weak. (It can also be an embedded clause or infinitive.) This can be seen from (37), (41), and the following.

- (45)a. Mungnga mamatcha ni **iyun** **ottru** **tãotão**.
don't AGR.ANTIP.touch OBL possession.L other person
 'Don't touch the things of other people.'
- b. Manli'i' **yu' un suttera**.
AGR.ANTIP.see I a single.woman
 'I saw a young woman.' (EM 72)
- c. Manãnum i lanceru **meggai simiyan** **kamuti**.
AGR.ANTIP.plant the farmer many.L seedling.L sweet.potato
 'The farmer planted a lot of sweet potato stems.' (CD, entry for *risiembra*)

However, when the event named by the verb has a lasting effect on the internal argument and this argument is definite, most speakers do not use the antipassive (see 10.3.2.3 and Cooreman 1987: 121-124).

Finally, when a transitive verb has more than two arguments, the verb's morphological make-up determines the structure of the corresponding antipassive. There are two patterns:

(i) Chamorro has applicative verbs that are derived by attaching the suffix *-i* to a transitive verb (see 11.3.1). One applicative verb of this type is *sangãni* 'say to, tell', from *sangan* 'say'. Applicative verbs of this type have a third argument that usually names a goal, recipient, or beneficiary and is realized as their direct object. (The original verb's internal argument is realized as an oblique.) In the antipassive of an applicative derived with *-i*, the additional argument serves as the antipassive oblique. It is almost always implicit, as in (46) (see 11.3.2.3).

- (46) Mañangãni si Juan na mǎttu si
AGR.ANTIP.say.to UNM Juan COMP AGR.arrive UNM
 Jose.
Jose
 'Juan told (people) that Jose arrived.'

(ii) Chamorro also has *concealed* applicatives—verbs that lack applicative morphology, but resemble applicatives formed from transitive verbs in certain other ways (see 11.5). One such concealed applicative is *gãgão* 'ask for, request'. Concealed applicatives are verbs of transfer that have three arguments: an argument that names the one who did the transfer, another argument that names the recipient, and a third argument that names

what was transferred. The argument that names the recipient is realized as the direct object. (The argument that names what was transferred is realized as an oblique.) In (47), for instance, the recipient of the request (*si Peling*) is realized as the direct object.

- (47) Hu gǎgǎo si Peling salǎppi' para i gima'.
AGR.request UNM Peling money for the house
 'I asked Peling for money for the house.' (CD, entry for *gǎgǎo*)

In the antipassive of a concealed applicative, it is not the recipient, but rather the object of transfer, that serves as the antipassive oblique. (The recipient is realized as a noun phrase in the local case or as the object of a preposition.) Thus, in (48), the object of transfer (*kalamendu* 'tamarind') is the antipassive oblique, and the recipient is realized as a noun phrase in the local case (*gi bisinu* 'at the neighbor').

- (48) Manggǎgǎo yu' kalamendu' gi bisinu.
AGR.ANTIP.request I tamarind LCL neighbor
 'I asked for tamarind from the neighbor.' (CD, entry for *kalamendu*)

See 11.5 for further discussion.

10.3.2.2 Word order

Antipassive clauses have the same word order options as other intransitive clauses. Usually, the subject occurs immediately after the verb, as in (36), (37), and many other examples cited earlier. The subject can also occur at the right edge of the clause, as in (49).

- (49)a. Manispipiha sapatos-ña si Susana.
AGR.ANTIP.look.for.PROG shoes-AGR UNM Susana
 'Susana is looking for (a pair of) shoes.'
- b. Mamumulan famagu'un pǎ'gu gi egga'an
AGR.ANTIP.watch.PROG PL.child now LCL morning
 si Antonio.
UNM Antonio
 'Antonio is watching the children this morning.'

In addition, the subject can follow the antipassive oblique but precede other arguments or adjuncts.

- (50)a. Mamumulan famagu'un si Antonio pã'gu
 AGR.ANTIP.watch.PROG PL.child UNM Antonio now
 gi egga'an.
 LCL morning
 'Antonio is watching the children this morning.'
- b. Manrisibi katta si Juan ginin as Maria.
 AGR.ANTIP.receive letter UNM Juan from OBL Maria
 'Juan received a letter from Maria.'

And there are other word order possibilities. All these options are expected, given that the word order of arguments after the predicate is flexible when the predicate is a verb (see 3.4.1.1).

10.3.2.3 Antipassive clauses in discourse

Antipassive clauses have different functions in discourse from transitive clauses and passive clauses. To begin with, they occur less often. According to Cooreman (1987: 58), just 7.7% of the transitive verbs in the Chamorro narratives she investigated were used to form antipassive clauses. Cooreman (1987: 72) found that most of these antipassive clauses (61.4%) had an internal argument that was implicit—not syntactically realized at all, and understood as a nonspecific indefinite. In other words, the typical antipassive clause in discourse resembles English clauses of the type *She's reading* or *They wrote*.⁶ Cooreman (1987: 69) also found that when the internal argument was syntactically realized, it was almost always indefinite. She concluded (1987: 132-135) that the antipassive is used when the activity described by the predicate is foregrounded and the identity of the internal argument is unimportant.

The character of the verb's internal and external arguments has an impact on the choice between a transitive clause and the corresponding antipassive clause. According to Topping and Dungca (1973: 239-241), the antipassive must be used when the 'object' of a transitive verb—that is, the internal argument—is indefinite. This is clearly a strong preference, but not an absolute requirement. When the internal argument is indefinite, the clause can be passive, as can be seen from the following.

- (51)a. Mahåtsa dångkulun måkina para i tupu.
 AGR.PASS.build big.L machine for the sugar.cane

⁶ One difference between the antipassive in Chamorro and so-called object deletion in English is that the Chamorro antipassive occurs with a much wider range of verbs.

- ‘A big machine was built for the sugar cane.’ (Cooreman 1983: 36)
- b. Lão esta manmatomba palu.
but already AGR.PASS.knock.down some
 ‘But some [latte stones] have been knocked over.’ (Cooreman 1983: 8)

It is also possible for the clause to be transitive, although this is considerably less common.

- (52)a. Si tatã-hu ha chagi ya ha sufa’
UNM father-AGR AGR try and.then AGR rush.at
 trongkun gãgu.
tree.L ironwood
 ‘My father tried [tuba] and he crashed into an ironwood tree.’ (EM 84)
- b. Po’lu monumentu siha gi kantun chãlan.
put monument PL LCL edge.L road
 ‘Put monuments along the road.’ (CD, entry for *monumentu*)

Cooreman (1987: 121-126) observes that the antipassive cannot be used when the internal argument is definite and the event named by the verb has a lasting effect on it. This observation appears to be correct, but is hard to verify on the basis of naturally-occurring data, given that most antipassive clauses in discourse have internal arguments that are implicit or indefinite.

Finally, many speakers report that the antipassive is used when the event is performed, caused, or instigated by more than one individual, including the individual named by the subject (see Cooreman 1987: 126-128). This is why (3)—repeated below as (53)—is sometimes translated as ‘Kika’ was among those who did the teasing of Kindu’, or ‘One person teased Kindu’, another person teased Kindu’...and then Kika’ did the teasing’.

- (53) Mangassi si Kika’ as Kindu’.
AGR.ANTIP.tease UNM Kika’ OBL Kindu’
 ‘Kika’ (was one of those who) teased Kindu’.

10.4 Further reading

See Gibson (1980), Baker (1988), and Chung (1998; 2013) on the structure of transitive, passive, and antipassive clauses in Chamorro, and Cooreman (1987) for a detailed study of the uses of these types of clauses in Chamorro discourse.

11

APPLICATIVES

Applicatives are transitive verbs derived by adding a direct object to a verb or adjective. They can be derived from many types of verbs and adjectives. This chapter describes the details of how they are formed and the structure of the clauses in which they occur.

11.1 Overview

Applicatives are transitive verbs derived from a verb or adjective. An applicative verb has the same subject as the verb or adjective from which it is derived, but a different direct object. Sometimes this direct object is an argument of the original predicate; other times not.

Consider the intransitive verb *suha* ‘go away, get away’. This verb has an argument that names what goes away and another argument that names what is gone away from. In (1), the first of these arguments is realized as the subject; the second is realized as an oblique in the local case.

- (1) Sumuha gi fi'on-ña.
 AGR.go.away LCL near-AGR
 ‘[The lights] moved away from him.’ (Cooreman 1982: 23)

The applicative derived from *suha* is *suhâyi* ‘go away from, avoid’, a transitive verb whose direct object realizes the argument that names what is gone away from. Compare (1) with the last clause of (2), which is enclosed in brackets.

- (2) Maila' ya esti hit guatu ya [ta
 come and.then this we.INCL to.there and.then AGR
 suhâyi i ispikadot].
 go.away.from the speaker
 ‘Let’s (incl.) go over there and get away from the speaker.’ (CD,
 entry for *guatu*)

This chapter describes the form of applicatives and the structure of the clauses in which they occur. Applicatives derived from intransitive verbs or

adjectives are described in 11.2; applicatives derived from transitive verbs are described in 11.3. Then, two more idiosyncratic types of applicatives are discussed: *false applicatives*, which have applicative morphology but the same direct object as the verb they were derived from (11.4), and *concealed applicatives*, which lack applicative morphology but are similar to applicatives in other ways (11.5).

11.2 Derived from intransitive verbs or adjectives

11.2.1 Applicative verbs

Applicative verbs can be created from many intransitive verbs or adjectives by adding the suffix *-i*. This suffix is realized as *-yi* after a vowel and as *-gui* in some other, less predictable cases.¹ Some representative intransitive verbs or adjectives and the applicatives derived from them are listed below.

(3)	VERB OR ADJECTIVE	APPLICATIVE
	châlik ‘laugh’	chatgi ‘laugh at’
	ekgu’ ‘jealous’	ekgu’i ‘jealous of’
	essitan ‘joke’	essitani ‘joke with’
	fata’chung ‘sit’	fata’chungi ‘sit on’
	guput ‘have a party’	guputi ‘have a party for’
	keha ‘complain’	kihâyi ‘complain about’
	kuentus ‘speak’	kuentusi ‘speak to’
	liliku’ ‘go in circles’	liliku’i ‘encircle’
	ma’â’ñão ‘afraid’	ma’a’ñâgui ‘afraid of’
	mamâhlão ‘embarrassed’	mamahlâgui ‘embarrassed about’
	mumu ‘fight’	mumuyi ‘fight with’
	pâyun ‘accustomed’	payuni ‘accustomed to’
	suha ‘go away’	suhâyi ‘go away from’
	tâtiti ‘behind’	tattiyi ‘follow’
	to’la’ ‘spit’	to’lâ’i ‘spit at’

Some of the intransitive predicates in (3) (e.g. *ekgu’* ‘jealous’, *ma’â’ñão* ‘afraid’, and *tâtiti* ‘behind’) have two arguments: one that is realized as the

¹ The suffix *-i* is realized as *-gui* after *ão* (/aw/), in which case the /w/ often deletes; e.g. *essalâgui* ‘shout to’ (from *essalão* ‘shout’). It is also realized as *-gui* in a handful of other cases; e.g. *chefflâgui* ‘whistle at’ (from *cheffla* ‘whistle’), *falâggi* ‘go and get’ (from *falak* ‘go to’), *fattoigui* ‘pay a visit to; haunt’ (from *fâttu* ‘arrive’), *fo’naigui* ‘precede’ (from *fo’na* ‘before, front’), and *kahulo’gui* ‘climb on top of’ (from *kahulu* ‘get up, climb up’).

subject and another that is realized as an oblique. Applicatives derived from these predicates have the same arguments, but realize the original oblique argument as their direct object. Other verbs and adjectives (e.g. *chålik* ‘laugh’, *guput* ‘have a party’, *liliku* ‘go in circles’) have just one argument. Applicatives derived from these predicates have an additional argument that is realized as their direct object. The meaning of the additional argument is fixed arbitrarily by the original verb or adjective; e.g. *kuentusi* means ‘speak to’, not ‘speak for’ or ‘speak about’, and *kihåyi* means ‘complain about’, not ‘complain to’ or ‘complain for’.

Very occasionally, an applicative has a more specialized meaning than the verb or adjective it is derived from. For instance, the applicative *håtimi* (from *hålum* ‘go inside, enter’) means ‘attack, invade’, and the applicative *fattoigui* (derived from *fåttu* ‘arrive’) means ‘visit, haunt’.

Applicatives can be created from a large number of intransitive verbs and adjectives, including some that are morphologically complex. For instance, the applicative *finu’ Chamorrui* ‘speak Chamorro to’, is derived from the intransitive verb *finu’ Chamorro* ‘speak Chamorro’, which is itself derived from the compound noun *finu’ Chamorro* ‘Chamorro language’ (by conversion; see 28.4.9). However, not all intransitive predicates can be used to create applicatives, and speakers do not always agree about which applicatives derived from intransitive predicates are words of the language. (Some speakers recognize e.g. *omlati* ‘fit into’ and *ma’a’ñañgui* ‘afraid of’ as Chamorro words, but others do not.) Among the intransitive predicates that apparently cannot be used to form applicatives are *gaigi* ‘be at (a place)’, *poddung* ‘fall’, and *yayas* ‘tired’.

11.2.2 Applicative clauses

Generally, a clause constructed from an applicative verb derived from an intransitive predicate is an ordinary transitive clause with two arguments. 11.2.2.1 discusses the grammatical relations of these clauses. 11.2.2.2 mentions their word order. 11.2.2.3 points out two respects in which applicatives derived from intransitive predicates differ from other transitive verbs.

11.2.2.1 Grammatical relations

Applicative verbs have the same subject as the verb or adjective from which they are derived, but a different direct object. When the original predicate is intransitive, the sense in which the applicative has a different direct object is that it has a direct object *at all*. It is transitive, in other words.

It is very clear that applicative clauses in Chamorro are transitive. First of all, the applicative verb agrees with the subject using forms chosen from

the agreement paradigms for transitive verbs (see 2.2.2.1). These morphemes are represented in boldface below.

- (4) a. Tâya' magâhit na **hu** chatgi, sa' kumu
 AGR.not.exist *truly* *COMP* *AGR laugh.at* *because if*
 hu chatgi, siempri manpåra.
 AGR laugh.at *indeed* *AGR.stop*
 ‘In fact, I never laugh at them, because if I laughed at them, they would stop [speaking Chamorro].’ (from a panel discussion at a conference)
- b. Ti **ha** payuyuni trabiha i ga'lâgu i sagâ-ña.
 not *AGR accustomed.to.PROG* *yet* *the dog* *the place-AGR*
 ‘The dog is not accustomed to his place yet.’ (CD, entry for *payuni*)

The nonsubject argument of the applicative, which is referred to here as the *applicative object*, has the form of a direct object. Like other direct object noun phrases, it appears in the unmarked case (see 5.1.2.1).

- (5) a. Suhâyi **i** **ichan** / Yanggin gaigi hâo
 go.away.from *the rain* *if* *AGR.be.at* *you*
 sanlichan.
 DIR.south
 ‘Avoid the rain / When you’re in the south.’ (EM 14)
- b. Mientras mäs un essalâgui **si** **Ton**, mäs
 while *more* *AGR shout.to* *UNM* *Ton* *more*
 guinafi.
 AGR.PASS.make.angry
 ‘The more you shouted to Ton, the more angry he got.’ (CD, entry for *guâfi*)

And it can be realized as a weak pronoun (see 8.3).

- (6) a. Mampridika i suruhâna na para bai hu
 AGR.ANTIP.predict *the healer* *COMP* *FUT* *AGR*
 fattoigui **gui'** pã'gu.
 arrive.at *her* *now*
 ‘The native healer predicts that I will visit her today.’ (CD, entry for *pridika*)
- b. Ha kuentusi **ham** pã'gu gi iskuela si Siñot
 AGR speak.to *us.EXCL* *now* *LCL school* *UNM* *Mr.*

Villagomez.

Villagomez

‘Mr. Villagomez talked to us (excl.) at school today.’ (CD, entry for *siñót*)

Moreover, the applicative object functions like a direct object in the structure of the clause. It realizes the argument that would be realized as the subject of the corresponding passive (see 10.2.2.1). To see this, compare the transitive clauses in (7) with the passive clauses in (8), which are constructed from the same applicative verbs.

- (7) a. Ti bai **fo’naigui** hao.
 not AGR ahead.to you
 ‘I will not go before you.’ (CD, entry for *fo’naigui*)
- b. Hu **essitani** si Maria gi giput.
 AGR joke.to UNM Maria LCL party
 ‘I joked with Maria at the party.’ (CD, entry for *essitani*)
- (8) a. **Manfine’naigui** i istudiántis ni i ma’estra.
 AGR.PASS. ahead.to the students OBL the teacher
 ‘The students were preceded by the teacher.’
- b. **Ma’essitani** si Tony ni mangga’chong-ña.
 AGR.PASS. joke.to UNM Tony OBL PL.companion-AGR
 ‘Tony was joked with by his friends.’ (CD, entry for *essitani*)

Finally, the applicative object acts like a direct object for the purposes of the person-animacy restriction (see 16.2). In Chamorro, a transitive clause cannot have a direct object that is higher than the subject on the person-animacy hierarchy. This means, among other things, that a clause cannot have an animate direct object but an inanimate subject, or an animate pronoun as direct object but a nonpronoun as subject.² Applicative clauses obey this requirement. The applicative clause in (9) is ungrammatical because the applicative object is animate (*si Carmen*) but the subject is inanimate (*i katta* ‘the letter’). Compare the intransitive clause in (10), which has the same meaning but is grammatical, because *si Carmen* is not a direct object, but rather the object of a preposition.

- (9) ***Ha** hanâogui i katta si **Carmen**.
 AGR go.to the letter UNM Carmen

² Note that first person pronouns are not regulated by the person-animacy restriction (see 16.2).

- (10) ('The letter went to Carmen.')
- | | | | | | |
|---------------|---|-------------------|-----------|------------|---------------|
| Humånão | i | katta | para | si | Carmen. |
| <i>AGR.go</i> | | <i>the letter</i> | <i>to</i> | <i>UNM</i> | <i>Carmen</i> |
- 'The letter went to Carmen.'

The applicative clause in (11) is grammatical, but only in the meaning in which the subject is a null pronoun and the direct object is the noun phrase *si Juan*, not the reverse.

- (11) Ha tattiyi si Juan para i kareta.
- | | | | | |
|----------------------|------------|-------------|-----------|----------------|
| <i>AGR.behind.to</i> | <i>UNM</i> | <i>Juan</i> | <i>to</i> | <i>the car</i> |
|----------------------|------------|-------------|-----------|----------------|
- 'He followed Juan to the car.' (Not: Juan followed him to the car.)

Like other subjects of transitive clauses, the subject of an applicative clause must be specific (see 16.4). When it occurs after the verb, it cannot be a quantified noun phrase, a general indefinite, or any other nonspecific noun phrase. Like other direct objects, the direct object of an applicative clause can be a noun phrase of any type: definite or indefinite, quantified or not quantified, strong or weak. It can also be a finite embedded clause or an infinitive clause. In (12), the direct object of the applicative *malagu'i* 'want' is an infinitive clause (enclosed in brackets).

- (12) I katni ni hu malagu'i [kumånnu'], taigui
- | | | | | |
|-----------------|-------------|--------------------|----------------|----------------------|
| <i>the meat</i> | <i>COMP</i> | <i>AGR.want.to</i> | <i>INF.eat</i> | <i>AGR.not.be.at</i> |
|-----------------|-------------|--------------------|----------------|----------------------|
- guihi.
there
- 'The meat that I wanted to eat was not there.'

11.2.2.2 Word order

Clauses formed from the applicative verbs described in 11.2.1 have the word order of ordinary transitive clauses (see 3.4.1.1). See e.g. (4b) and (6b).

11.2.2.3 Antipassive and wh-agreement

Though applicatives derived from intransitive predicates are transitive, they differ from other transitive verbs in two curious respects.

- (i) Almost every transitive verb in Chamorro has a passive form and an antipassive form (see Chapter 10). As expected, applicatives derived from intransitive predicates can occur in the passive. This can be seen from (8) and the sentences below, in which the passive forms of applicative verbs are represented in boldface.

- (13)a. Mananña i ma'estru unu na pãtgun iskuela
 AGR.ANTIP.beat.up the teacher one L child.L school
 ya **makihãyi** ni mañaina.
 and.then AGR.PASS.complain.about OBL PL.parent
 'The teacher hit one of the school children and he was reported on
 by the parents.' (CD, entry for *kihãyi*)
- b. ... **manhinatmi** hit bula tãotão ginin
 AGR.PASS.enter.into we.INCL much person from
 sanhiyung.
 DIR.outside
 'We (incl.) were invaded by an influx of people from outside.' (CD,
 entry for *kumu mohon*)
- c. **Pinayuni** as nanã-ña si Manuel.
 AGR.PASS.accustomed.to OBL mother-AGR UNM Manuel
 'Manuel's mother is used to him (i.e. Manuel is known by his
 mother).'

However, applicatives derived from intransitive predicates generally do not occur in the antipassive. Speakers reject the antipassive forms of applicatives such as *fatkiluyi* 'not respond to, ignore' (from *fãtkilu* 'silent'), *ma'a'ñãgui* 'afraid of' (from *ma'a'ñão* 'afraid'), *omlati* 'fit into' (from *omlat* 'fit'), *payuni* 'be accustomed to' (from *payun* 'accustomed'), and so on; moreover, antipassives of this sort are not found in corpus data. Just a handful of applicatives are exceptions to this generalization. One such applicative is *kuentusi* 'speak to' (from *kuentus* 'speak'), which occurs in the antipassive in (14).³

- (14) Kumu pinilan si Ana, mampus
 if AGR.menstruate UNM Ana so.much
 matã'pang ya ni u **fanguentusi**.
 AGR.unfriendly and.then not.even AGR.ANTIP.speak.to
 'When Ana has her menstruation, she's so grouchy and won't even
 talk to anybody.' (CD, entry for *pinilan*)

It is unclear why applicatives derived from intransitive predicates generally have no antipassive. Given that an applicative creates a direct object whereas an antipassive removes the direct object, it is tempting to speculate that the two functions are incompatible. But that cannot be right overall,

³ Other applicatives that exceptionally have antipassive forms are *tatti* 'follow' (from *tãtti* 'behind') and—for some speakers—*fattoigui* 'visit, haunt' (from *fãttu* 'arrive').

since applicatives derived from transitive verbs can occur in the antipassive under some circumstances (see 11.3.2.3).

(ii) In Chamorro, when an argument of the verb is questioned, relativized, or syntactically focused, the verb shows wh-agreement (see 22.4.1). This special agreement, which replaces the normal agreement with the subject, registers the grammatical relation of the constituent that has been questioned, relativized, or focused—henceforth, the *displaced constituent*. For instance, when the displaced constituent is the subject of a transitive verb in the realis mood, the verb shows the subject form of wh-agreement, which is realized as the infix *-um-*. When the displaced constituent is the direct object, the verb optionally shows the object form of wh-agreement, which is realized as the infix *-in-* plus nominalization of the verb.

Like other transitive verbs in the realis mood, an applicative shows the subject form of wh-agreement when the displaced constituent is the subject. This can be seen from the constituent questions in (15).

- (15)a. Hâyi **chumatgi** hão?
 who? WH[SBJ].laugh.at you
 ‘Who laughed at you?’
 b. Hâyi **pumayuni** ennão?
 who? WH[SBJ].accustomed.to that
 ‘Who is used to that?’

However, an applicative cannot show *the object form* of wh-agreement when the displaced constituent is its direct object. Compare the ungrammatical questions in (16) with their grammatical counterparts in (17), which show the ordinary forms of agreement with the subject.

- (16)a. *Hâyi **chinatgem-mu / chinatgi-mu?**
 who? WH[OBJ].laugh.at-AGR
 (‘Who did you laugh at?’)
 b. *Hâfa **na klâsin nengkanu’ pinayunin-miyu?**
 what? L sort.L food WH[OBJ].accustomed.to-AGR
 (‘What sort of food are you (pl.) accustomed to?’)
 (17)a. Hâyi **un** chatgi?
 who? AGR laugh.at
 ‘Who did you laugh at?’
 b. Hâfa **na klâsin nengkanu’ en** payuni?
 what? L sort.L food AGR accustomed.to
 ‘What sort of food are you (pl.) accustomed to?’

Just as with the ungrammatical antipassives that were mentioned earlier, speakers do not recognize the verbs with object wh-agreement in (16) as legitimate verb forms of the language.

This generalization has a handful of exceptions. For instance, the applicative *tattiyi* ‘follow’ (from *tatti* ‘behind’) can show the object form of wh-agreement, as in (18).⁴

- (18) Hãyi **tinattiyin-ñiñiha?**
 who? *WH[OBJ].follow-AGR.PROG*
 ‘Who are they following?’

But overall, applicatives derived from intransitive predicates cannot show wh-agreement with their direct object. It is unclear why this should be.

11.3 Derived from transitive verbs

11.3.1 Applicative verbs

Applicatives can be derived from transitive verbs by adding one of the suffixes *-i*, *-iyi*, *-guan*, and *-ñaihun*. The most productive of these suffixes, *-i*, is realized as *-yi* after a vowel and *-gui* after *ão*. When *-i* is attached to a transitive verb, the result is an applicative that has the same subject as the original verb but a different direct object—either an oblique argument of the original verb or else a new argument that has been added. If the argument was an argument of the original verb, it usually names a goal or recipient. If the argument has been added, it typically names a goal, recipient, or beneficiary; sometimes it also names the possessor of the original verb’s internal argument. Some representative examples of transitive verbs and their *-i* applicatives are given below.

(19) TRANSITIVE VERB		APPLICATIVE	
chuli’	‘take, bring’	chuli’i	‘bring to, bring for’
sãngan	‘say’	sangãni	‘tell, say to’
taitai	‘read’	taitayi	‘read to’
tugi’	‘write’	tugi’i	‘write to’
cho’gui	‘do’	chu’guiyi	‘do for’

⁴ *Tattiyi* ‘follow’ and *kuentusi* ‘speak to’ (see (14)) are probably among the most frequently occurring applicatives derived from intransitive predicates. In the CD database, *tattiyi* occurs 25 times and *kuentusi*, 18 times, but most other applicatives derived from intransitives (e.g. *chatgi* ‘laugh at’, *payuni* ‘accustomed to’, *adingani* ‘talk to’) occur less than 5 times.

fa'tinas	'make'	fa'tinâsi	'make for'
fâhan	'buy'	fahâni	'buy for'
pulan	'watch'	pulâni	'watch for'
tifi'	'pick'	tifi'i	'pick for'

The use of *-i* to derive applicatives from transitive verbs is frequent and productive. Among other things, *-i* applicatives can be formed from some types of morphologically complex transitive verbs, including causatives (e.g. *na'hânâo* 'make go', from *hânâo* 'go') and applicatives derived from intransitive predicates (e.g. *adingani* 'talk to', from *âdingan* 'converse, talk').

(20)	TRANSITIVE VERB	APPLICATIVE	
	na'hânão	'make go'	na'hanãogui
	adingani	'talk to'	adinganiyi
			'make go to, send to'
			'talk on behalf of (to someone)'

Applicatives can also be derived from transitive verbs with *-guan*, *-iyi*, or *-ñaihun*, but these other suffixes are not used as often or as productively. The suffix *-guan* is realized as *-ngguan* after a vowel; it forms applicatives whose additional argument names a maleficiary—one adversely affected by the event described by the original verb. This additional argument also typically names the possessor of the original verb's internal argument. Very occasionally, the suffix *-iyi* is used to form applicatives whose additional argument names a beneficiary.⁵ The suffix *-ñaihun* is realized as *-nñaihun* after a vowel; it can be used to form applicatives whose additional argument names an instrument.⁶ Some examples of these types of applicatives are given below.

(21)	TRANSITIVE VERB	APPLICATIVE	
	chuda'	'spill'	chudâ'guan 'spill on'
	chuli'	'bring, take'	chule'guan 'take or steal from'
	sâkki	'steal'	sakkengguan 'steal from'
	yamak	'break'	yamakguan 'break on'
	sângan	'say'	sanganiyi 'say for, interpret'

⁵ The suffix *-iyi* could conceivably be decomposed into two instances of the applicative suffix *-i*. That approach is not taken here.

⁶ The suffix *-ñaihun* is homophonous with a suffix that attaches to verbs or adjectives and contributes a durative ('for awhile') or moderative ('slightly') meaning (see 28.3.2).

fa'gãsi	'wash'	fa'gasinñaihun	'wash with'
ipi'	'split'	ipi'ñaihun	'split with'
pika	'chop'	pikanñaihun	'chop with'

A transitive verb can form more than one type of applicative. The applicatives in (22) are both derived from *chuli* 'take, bring'.

- (22)a. Hu **chuli**'i i neni difirentis na kamisita.
AGR take.to the baby different L undershirt
 'I got the baby different kinds of undershirt.' (CD, entry for *kamisita*)
- b. Ai, linalalo'-ña i patgun anai **machule'guan** ni
oh NMLZ.angry-AGR the child when AGR.PASS.take.from OBL
na'-ña kandi.
food-AGR candy
 'My, how angry the child was when somebody took his candy!'
 (CD, entry for *linalãlu*)

11.3.2 Applicative clauses

An applicative derived from a transitive verb has three arguments. 11.3.2.1 describes how these arguments are realized. 11.3.2.2 briefly mentions the word order of applicative clauses. 11.3.2.3 discusses how applicatives fare with respect to antipassive and wh-agreement.

11.3.2.1 Grammatical relations

As expected, applicatives derived from transitive verbs have the same subject as the original verb, but a different direct object. This *applicative object* realizes an oblique argument of the original verb, or a new argument that has been added. The original verb's internal argument—the argument that would have been realized as its direct object—is realized as an oblique.⁷

The same considerations discussed in 11.2.2.1 reveal that the applicative object is the direct object of the applicative clause. First of all, it has the form of a direct object. It occurs as a noun phrase in the unmarked case.

⁷ Some speakers of the Guam dialect allow the original verb's internal argument to be realized in the unmarked case, as if it were a second direct object. This 'double object' pattern is probably the result of interference from the English double object construction (as in *I gave the child an apple*). The structure of Chamorro applicative clauses with two apparent direct objects has not yet been investigated.

- (23)a. Litiyi **i neni** ni mamadot-ña.
mix.for the baby OBL milk.bottle-AGR
 ‘Mix the baby’s milk bottle.’ (CD, entry for *liti*)
- b. Ma chule’guan **si tâta** ni tenidut basula gi lanchu.
AGR take.from UNM Father OBL pitchfork LCL farm
 ‘Someone (lit. they) stole Father’s pitchfork at the farm.’ (CD, entry for *ténidut basula*)

And it can be realized as a weak pronoun.

- (24)a. Esti na istoria ha sangångani **hit** para ta tutuhun
this L story AGR say.to.PROG us.INCL FUT AGR begin
 di nuebu.
over.again
 ‘This story tells us (incl.) to begin again.’ (*Ginen i Obispo* April 29, 2013)
- b. Hågu un sanganiyi **yu’** na ti bai fattu.
you AGR say.for me COMP not AGR arrive
 ‘You explain for me that I am not coming.’ (CD, entry for *sanganiyi*)

Further, the applicative object functions like a direct object. It realizes the argument that would be the subject of the corresponding passive (see 10.2.2.1). Compare the transitive clauses in (25) with the passive clauses in (26), which are constructed from the same applicative verbs.

- (25)a. Bâsta ha’ ni hu **na’laguyi** hão ...
enough EMP OBL AGR cook.for you
 ‘Isn’t it enough that I cooked for you...’ (CD, entry for *bâsta*)
- b. Si Juan ha **sakkengguan** i famagu’un ni i
UNM Juan AGR steal.from the PL.child OBL the
bisikletan-ñiha.
bicycle-AGR
 ‘Juan stole the children’s bicycle.’
- (26)a. Mapput **manmana’laguyi** i sientu na tâotão.
AGR.hard AGR.PASS.cook.for the hundred L person
 ‘One hundred people are hard to cook for (lit. hard to be cooked for).’
- b. I famagu’un **mansinakkengguan** as Juan ni i
the PL.child AGR.PASS.steal.from OBL Juan OBL the

bisikletan-ñiha.
bicycle-their
 ‘The children had their bicycle stolen by Juan.’

Like other direct objects, the applicative object cannot be higher than the subject on the person-animacy hierarchy (see 16.2). The applicative clauses in (27) are ungrammatical because they violate this restriction: the applicative object is an animate pronoun, while the subject is a nonpronoun (*si Juan*, *si Susan*).

- (27)a. *Ha tugi'i gui' katta si Juan.
 AGR write.to her letter UNM Juan
 (‘Juan wrote her a letter.’)
 b. *Ha yamakguan gui' si Susan nai bisikletã-ña.
 AGR break.on him UNM Susan OBL bicycle-AGR
 (‘Susan broke his bicycle.’)

Compare the applicative clauses in (28), which conform to the person-animacy restriction, because the subject is a pronoun.

- (28)a. Un tugi'i yu' mami na katta.
 AGR write.to me sweet L letter
 ‘You wrote me a sweet letter.’ (CD, entry for *mami*)
 b. Ha yamakguan si Juan ni bisikletã-ña.
 AGR break.on UNM Juan OBL bicycle-AGR
 ‘She broke Juan’s bicycle’

In contrast, the original verb’s internal argument is not a direct object of the applicative clause, but rather an oblique. When this argument is a noun phrase, it is in the oblique case, not the unmarked case; see (23), (25b), and (28).⁸ It cannot be realized as a weak pronoun. And it remains an oblique even when the applicative occurs in the passive, as can be seen from (26b). Applicatives derived from transitive verbs do not have *two* direct objects, in other words. They have just one direct object—the applicative object—and an oblique, which realizes the original verb’s internal argument (but see note 7 for a qualification).

When the applicative object realizes a beneficiary or—especially—a maleficiary, it may also realize the possessor of the oblique. In such cases,

⁸ Weak noun phrases in the oblique case are not preceded by an overt case marker (see 5.1.1.4).

the oblique shows possessor agreement, as in (29) and many examples cited earlier.

- (29)a. Nã'i yu' pudet ya bai bendiyi hão ni
 give me authority and.then AGRsell.for you OBL
 tano'-mu.
 land-AGR
 'Give me the authority to sell your land for you.' (CD, entry for *pudét*)
- b. Hãyi gai aturidât para u bendengguan yu'
 who? AGR.have authority FUT AGRsell.on me
 ni tano'-hu?
 OBL land-AGR
 'Who has authority to sell my land on me?' (from a conference presentation)
- c. Mamãhan si nanã-hu linila na yãtdas
 AGR.ANTIP.buy UNM mother-AGR purplish L yardage.L
 magãgu para u laksiyi yu' chininã-hu.
 clothes FUT AGRsaw.for me shirt-AGR
 'My mother bought a purplish piece of cloth so she could sew me a shirt.' (CD, entry for *linila*)

When the applicative object realizes a maleficiary, some speakers require the oblique to show possessor agreement, but others do not; compare (22b) and (23b). No such requirement is in force when the applicative object realizes a beneficiary, as can be seen from the following.

- (30)a. Kão siña un cho'guiyi yu' fabot ya un
 Q can AGRdo.for me favor and.then AGR
 yuti' i basula?
 discard the trash
 'Can you please do me a favor and throw out the trash?' (CD, entry for *fabót*)
- b. Hu adinganiyi si Maria as Nãna sa' ma'ã'ñão
 AGRtalk.for UNM Maria OBL Mother because AGR.afraid
 nu i bidã-ña.
 OBL the WH[OBJ].do-AGR
 'I talked to Mother for Maria, because she is afraid of what she did.'
 (CD, entry for *adinganiyi*)

Gibson (1980: 37-39) treats applicative clauses in which the direct object realizes the possessor of the oblique as derived by possessor raising. But even in clauses of this type, the direct object is almost always construed as a beneficiary (in *-i* applicatives) or a maleficiary (in *-guan* applicatives). This suggests that the applicative object *always* realizes a goal, recipient, beneficiary, maleficiary, or instrument, and any further relation of possession between the applicative object and the oblique is merely inferred. This is an area where further research is needed.

11.3.2.2 Word order

Clauses formed from the applicative verbs described in 11.3.1 have the word order of transitive clauses with a subject, a direct object, and an oblique (see 3.4.1.1).

11.3.2.3 Antipassive and wh-agreement

As shown earlier (in 11.2.2.3), applicatives derived from intransitive predicates generally do not occur in the antipassive or show the object form of wh-agreement. Interestingly, applicatives derived from transitive verbs can occur in both of these constructions.

(i) Applicatives derived from transitive verbs can have both passive *and* antipassive forms (see Gibson 1980: 164-166). In this respect, they behave like ordinary transitive verbs. Some passive clauses that are formed from applicatives can be seen in (22b), (26), and below.

- (31)a. **Mansinangãni** as Juan todû i bidâda-ña
AGR.PASS.say.to OBL Juan all the WH[OBJ].do-AGR.PROG
 kada diha.
each day
 ‘Juan told them all the things he had been doing every day.’
 (Cooreman 1983: 85-86)
- b. **Manmachuli’i** ham ni in nisisita na mantension.
AGR.PASS.bring.for we.EXCL OBL AGR.need L supplies
 ‘We (excl.) were brought the provisions we (excl.) needed.’ (NT 269)

Some antipassive clauses formed from applicatives are cited in (32). The antipassive of *sangãni* ‘say to’ (from *sãngan* ‘say’) is volunteered by speakers and attested in conversations and in corpus data. Over and above this, speakers report that other *-i* applicatives, such as *bendi’i* ‘sell for’ (from *bendi* ‘sell’), *chuli’i* ‘bring for’ (from *chuli* ‘bring’), and *fahãni* ‘buy for’ (from *fãhan* ‘buy’), have antipassive forms as well.

- (32)a. Guaha na tãotão mǎolik para **mañangǎni**
 AGR.exist L person AGR.good for AGR.INF.ANTIP.say.to
 rumot.
 rumor
 ‘Some people are good at spreading (lit. telling) rumors.’ (CD, entry
 for *rumót*)
- b. **Mañuli’i** si Juan odda’.
 AGR.bring.for UNM Juan dirt
 ‘John got dirt (for someone).’

Nonetheless, antipassive clauses seem to be more tightly constrained when they are formed from applicatives than when they are formed from ordinary transitive verbs. The applicative verbs that are known to occur in the antipassive are among the most common *-i* applicatives. Whether the pattern extends to less frequent *-i* applicatives, or to applicatives formed with *-guan*, *-iyi*, or *-ñaihun*, is not yet known. Gibson (180: 165) observes that antipassive clauses formed from applicatives require the applicative object (i.e. the goal or beneficiary) to be implicit. This requirement may well be the default, although there are speakers who are comfortable violating it. It is unclear what is responsible for these patterns.

(ii) Applicatives derived from transitive verbs show *wh*-agreement in questions, relative clauses, and the focus construction, but not when the displaced constituent is the applicative object. In this respect, they behave like applicatives derived from intransitive predicates. Consider the question in (33a) and the focus construction in (33b), both of which are in the realis mood. Here, the displaced constituent is the subject, and the applicative shows the subject form of *wh*-agreement.

- (33)a. Hǎyi **sumangǎni** hamyu para en suhǎyi i
 who? WH[SB].say.to you.PL FUT AGR go.away.from the
 linalǎlu’ Yu’us?
 NMLZ.angry.L God
 ‘Who told you (pl.) to flee from God’s wrath?’ (NT 105)
- b. I hobinsitu **fumahǎni** yu’ gimen-hu kafe.
 the teenager WH[SB].buy.for me drink-AGR coffee
 ‘It was the teenage boy who bought me a cup of coffee.’ (CD, entry
 for *hobinsitu*)

But in (34), the displaced constituent is the applicative object, and the applicative cannot show the object form of *wh*-agreement.

- (34)a. *Håyi sinanganem-mu ni istoria?
who? WH[OBJ].say.to-AGR OBL story
 ('Who did you tell the story to?')
- b. *Håyi tinigi'e'-ña ni katta?
who? WH[OBJ].write.to-AGR OBL letter
 ('Who did he write the letter to?')

Compare (35), in which the applicative verb shows normal agreement with the subject.

- (35)a. Esta pã'gu si Dolores ni hãiyi ha' ha
until now UNM Dolores not anyone.EMP EMP AGR
 sangãni ni minagãhit.
say.to OBL truth
 'As for Dolores, until now there's no one she has told the truth to.'
- b. Håyi un tugi'i ni i katta?
who? AGR write.to OBL the letter
 'Who did you write the letter to?'

This is not the end of the story. Recall that when an applicative is derived from a transitive verb, the original verb's internal argument is realized as an oblique. When this oblique is the displaced constituent, the applicative *can* show the object form of wh-agreement, (36) shows.

- (36)a. Håfa sinanganen-ña si Juan as Maria?
what? WH[OBJ].say.to-AGR UNM Juan OBL Maria
 'What did Juan tell Maria?'
- b. Håfa tinaitayin-ñiha ni famagu'un siha?
what? WH[OBJ].read.to-AGR OBL PL.child PL
 'What did they read to the children?'

The same holds true when the oblique is the displaced constituent and the applicative is in the passive (see 22.4.1.2).

- (37) Hahassu ... håfa manmasangãnin-miyu ni
remember.PROG what? WH[OBJ].AGR.PASS.say.to-AGR OBL
 manapostolis.
PL.apostle
 'Remember...what you (pl.) were told by the apostles.' (NT 457)

The questions in (38) reveal that the object form of wh-agreement is realized optionally, just as it is more generally.

- (38)a. Håfa si Juan **ha** sangåni si Maria?
what? UNM Juan AGR say.to UNM Maria
 ‘What did Juan tell Maria?’
- b. Håfa **ma** taitayi i famagu’un siha?
what? AGR read.to the PL.child PL
 ‘What did they read to the children?’
- c. Hassu ha’ håfa manmasangåni.
remember EMP what? AGR.PASS.say.to
 ‘Just remember what they were told.’

In other words, it is possible for applicatives derived from transitive verbs to show the object form of wh-agreement when the displaced constituent is the original verb’s internal argument, but not when it is the applicative object.

The range of applicatives that exhibit this pattern is not yet known. It is clear from speakers’ judgments and from naturally-occurring data that one such applicative is *sangåni* ‘say to’. For some speakers, but not all, the pattern extends to other applicatives, particularly when the additional argument is a goal or recipient. The pattern is even more robust for concealed applicatives (see 11.5).

11.4 False applicatives

A few applicatives formed by attaching *-i* to a transitive verb do not have a different direct object from the original verb from which they are derived. These verbs are *false applicatives*: despite their applicative suffix, they do not have the structure or the additional argument characteristic of applicatives. Consider the false applicative *hassuyi* ‘think, remember’. Its direct object realizes the argument that names what is thought about or remembered. In this respect, *hassuyi* (as in (39a)) does not differ from *hassu* ‘think, remember’ (39b), the verb from which it is derived.

- (39)a. **Hassuyi** håfa hu sāsangan.
think what? AGR say.PROG
 ‘Think of what I am saying.’ (NT 394)
- b. **Hahassu** håfa esta hu sangåni hamyu.
think.PROG what? already AGR say.to you.PL
 ‘Think of I have told you (pl.).’ (NT 58)

The direct object of the false applicative *tåtmi* ‘plant’ realizes the argument that names the thing planted. In this respect, *tåtmi* does not differ from *tånum* ‘plant’, the verb from which it is derived.

- (40)a. Hu **tåtmi** i nira’ gi halum kâhun.
AGRplant the leek LCL inside.L box
 ‘I planted leeks in the box.’ (CD, entry for *nira*)
- b. Hu **tånum** i floris kunanaf gi gima’.
AGRplant the flowers.L crawling LCL house
 ‘I planted the crawling vine plants at the house.’ (CD, *floris kúnanaf*)

Two other false applicatives: *ayudâyi* ‘help’ (from *ayuda* ‘help’) and *po’luyi* ‘put’ (from *po’lu* ‘put’).

Chamorro has relatively few false applicatives. At least some of them are homophonous with applicatives that add an argument. In the pair of examples below, *po’luyi* is used as a false applicative (‘put’) in (41a) and as a benefactive applicative (‘put for’) in (41b).

- (41)a. Anai hu **po’luyi** bula na glue gi lepblu,
when AGRput much L glue LCL book
 gini’ut mǎolik.
AGR.PASS.hold good
 ‘When I put a lot of glue on the book, it grips very good.’ (CD, entry for *gini’ut*)
- b. Sikera un **po’luyi** yu’ dos grânun mellun.
at.least AGRput.for me two piece.L cantaloupe
 ‘At least you should leave me two pieces of cantaloupe.’ (CD, entry for *sikera*)

11.5 Concealed applicatives

Certain Chamorro verbs that describe events of transfer can be viewed as *concealed applicatives*. These verbs lack an applicative suffix, but in other ways are similar to applicatives derived from transitive verbs. There are two types of concealed applicatives, both of which occur quite frequently—more frequently than many of the other types of applicatives documented earlier.

(i) A few verbs of transfer occur only as concealed applicatives (but see below). Some representative examples of these verbs are listed in (42).

(42) SOME CONCEALED APPLICATIVES

fa'nâ'gui	'teach'
fa'nu'i	'show'
faisin	'ask'
nâ'i	'give'
nâ'yi	'add to'
ofresi	'offer'

The verbs in (42) have three arguments: an argument that names the one who does the transfer, another argument that names the recipient of the transfer, and a third argument that names what is transferred (i.e. the object of transfer). The recipient is realized as the direct object and the object of transfer is realized as an oblique, in a pattern broadly similar to the *-i* applicatives described in 11.3.1. Some illustrative examples:

- (43)a. Ha nâ'i yu' ni empe'-ña.
AGR give me OBL part-AGR
 'He gave me his part.' (CD, entry for *empi*)
- b. Si Andrew ha ofresi si Annabel na para
UNM Andrew AGR offer UNM Annabel COMP FUT
 u inasagua ottru sâkkan.
AGR PASS.marry other year
 'Andrew proposed to marry Annabel (lit. Andrew offered Anna that she would be married by him) next year.' (CD, entry for *ofresi*)
- c. Hu nâ'yi i maseta meggai na odda'.
AGR add.to the vase much L dirt
 'I put a lot of soil in the vase.' (CD, entry for *odda*)

The noun phrase that realizes the recipient is clearly the direct object of the concealed applicative. This noun phrase has the form of a direct object: it occurs in the unmarked case (see (43b)) and can be a weak pronoun (43a). It also has the function of a direct object: it realizes the argument that would be the subject of the corresponding passive. Compare the applicative clauses in (43) with the passives below.

- (44)a. I gurupun istudiânti ma solisita gi ma'estran-ñiha
the group.L student AGR plead LCL teacher-AGR
 para u fannina'i siha mâs tiempu.
FUT AGR AGR.PASS.give they more time
 'The group of students pleaded with their teacher that they be given more time.' (CD, entry for *solisita*)

- b. Inofresi si John as Joey ni karetâ-ña.
 AGR.PASS.offer UNM John OBL Joey OBL car-AGR
 ‘Joey offered John his car.’ (CD, entry for *ofresi*)

Like other direct objects, the noun phrase that realizes the recipient conforms to the person-animacy restriction. This means, among other things, that it cannot be an animate pronoun when the subject is a nonpronoun; see (45).

- (45) ***Ha** **nâ’i** **gui’** **si** **Antonia** **ni** **rigalu-ña.**
 AGR give him UNM Antonia OBL present-AGR
 (‘Antonia gave him a present.’)

The constituent that realizes the object of transfer is clearly an oblique. If this constituent is a noun phrase, it occurs in the oblique case, even when the applicative has been passivized; see (43a) and (44b).

Moreover, the concealed applicatives in (42) resemble other applicatives in their interaction with wh-agreement. In questions, relative clauses, and the focus construction, when the displaced constituent is the direct object of a concealed applicative, the verb cannot show the object form of wh-agreement.

- (46)a. ***Hâyi** **nina’i-mu?**
 who? WH[OBJ].give-AGR
 (‘Who did you give it to?’)
 b. ***Hâyi** **fina’na’guem-mu** **nu** **arithmetic?**
 who? WH[OBJ].teach-AGR OBL arithmetic
 (‘Who did you teach arithmetic to?’)

But when the oblique is the displaced constituent, the verb can show the object form of wh-agreement. This can be seen from the questions in (47a-b) and the relative clause in (47c).

- (47)a. **Hâfa** **nina’i-mu?**
 what? WH[OBJ].give-AGR
 ‘What did you give?’
 b. **Hâyi** **fina’na’guem-mu?**
 who? WH[OBJ].teach-AGR
 ‘Who did you teach about (i.e. use as an example in your teaching)?’

- c. Manmabinenuyi ham anai in kannu' atyu i
 AGR.PASS.poison we.EXCL when AGR eat that the
 [nina'in-ñiha] na guihan.
 WH[OBJ].give-AGR L fish
 'We (excl.) were poisoned when we (excl.) ate that fish that they
 gave us (excl.).' (CD, entry for *binenuyi*)

Finally, concealed applicatives resemble other applicatives in permitting antipassive only to a limited extent. Recall that applicatives derived from intransitive predicates generally have no antipassive; applicatives derived from transitive verbs occur in the antipassive, but under restricted conditions (see 11.3.2.3). Concealed applicatives may at first seem to go against this pattern, since they have antipassive forms that occur freely and routinely. But there is a complication: these antipassives reconfigure the arguments of the concealed applicative in an unexpected way. The recipient does not serve as the internal argument of antipassive, but is realized as a noun phrase in the local case (see (48a)), or—less frequently—as the object of a preposition (48b).

- (48)a. Famaisin **gi ma'gas** antis di un hânão.
 AGR.ANTIP.ask LCL boss before PRT AGR go
 'Ask the manager before you leave.' (CD, entry for *mã'gas*)
 b. Ti hu gosa mannã'i grãdu **para** i
 not AGR enjoy AGR.INF.ANTIP.give grade to the
istudiãnti.
 student
 'I'm not satisfied giving grades to the students.' (CD, entry for
gosa)

The argument whose realization identifies it as the internal argument of antipassive is, instead, the object of transfer. This argument is either implicit, as in (48a) and (49a), or else occurs in the oblique case, as in (49b).

- (49)a. Meskina si nanã-hu ni nengkano'-ña, ti u
 AGR.stingy UNM mother-AGR OBL food-AGR not AGR
 fannã'i gi ottru tâotão.
 ANTIP.give LCL other person
 'My mother is so stingy with her food that she will not give (any) to
 other people.' (CD, entry for *meskinu*)
 b. Gof gãki' si Jun; ti ya-ña
 AGR.very stingy UNM Jun not like-AGR

manofresi **ni na'-ña.**
AGR.INF.ANTIP.offer OBL food-AGR
 'Jun is so stingy he doesn't want to share his food.' (CD, entry for *gaki*)

That is, the object of transfer serves as the internal argument of antipassive, despite the fact that it is not the direct object of the concealed applicative.

This unexpected pattern falls into place if the antipassives in (48-49) are not formed directly from concealed applicatives after all. Instead, these antipassives, and concealed applicatives like (42), are derived from transitive verbs that never occur in their basic transitive form, but only in certain derived forms. These hypothesized transitive verbs have the same arguments as the verbs in (42), but take the object of transfer as their direct object. On this view, the antipassives in (48-49) are routine: they have the same internal argument as the hypothesized transitive verbs from which they are derived (namely, the object of transfer). Concealed applicatives are also more or less routine: they are derived from the hypothesized transitive verbs, but without an applicative suffix. Like some other applicatives, they have no antipassive form. What remains a mystery is why the hypothesized transitive verbs have such a highly restricted distribution: they are found in the antipassive, and as (concealed) applicatives, but do not occur otherwise.

This picture receives some support from the patterning of the other type of concealed applicative in Chamorro, which is described next.

(ii) A very few verbs of transfer can serve *either* as ordinary transitive verbs *or* as concealed applicatives. Some of these verbs are listed below.

- (50) TRANSITIVE VERBS THAT CAN ALSO BE CONCEALED APPLICATIVES
- | | |
|--------|----------|
| ayão | 'borrow' |
| bendi | 'sell' |
| dāggão | 'throw' |
| oppi | 'answer' |

The verbs in (50) have three arguments: an argument that names the one who does the transfer, another argument that names the object of transfer, and a third argument that names the source, recipient, or goal of the transfer. When the verb serves as an ordinary transitive verb, the argument that names the object of transfer is realized as the direct object; the source, recipient, or goal is realized as an oblique noun phrase that appears in the local case or serves as the object of a preposition.

- (51)a. Anai hu daggão i kutdet, gotpi maktus.
when AGR.throw the fishing.line suddenly AGR.snap
 ‘When I threw the line, it suddenly snapped.’ (CD, entry for *gotpi*)
- b. Hu ayão i supiyu ginin i gima’.
AGR.borrow the carpenters.plane from the house
 ‘I borrowed the carpenter’s plane from the house’ (CD, entry for *supiyu*)

When the verb serves as a concealed applicative, the source, recipient, or goal is realized as the direct object, and the object of transfer is realized as an oblique. Compare the ordinary transitive verbs in (51) with the concealed applicatives below.

- (52)a. Inatalaki si Juana gi as Acinta sa’ ha
AGR.PASS.scowl.at UNM Juana OBL Acinta because AGR
 dādagão i katu ni atchu’.
throw.PROG the cat OBL rock
 ‘Acinta scowled at Juana because she threw a rock at the cat.’ (CD, entry for *atalaki*)
- b. Ha ayão yu’ si Marian ni mulinu para u gulik
AGR.borrow me UNM Marian OBL grinder FUT AGR.grind
 i denni’.
the hot.pepper
 ‘Marian borrowed a grinder from me to grind the hot pepper.’ (CD, entry for *gulik*)

The diagnostics used earlier reveal that the object of transfer is the direct object in ordinary transitive clauses like (51), but the source, recipient, or goal is the direct object in concealed applicative clauses like (52). The passives corresponding to the two types of clauses are different, for instance. Compare the passive of the ordinary transitive *daggão* ‘throw’ in (53a) with the passive of the concealed applicative *daggão* in (53b).

- (53)a. Māpta’ i niyuk anai madaggão gi trongku.
AGR.crack the coconut when AGR.PASS.throw LCL tree
 ‘The coconut cracked open when it was thrown at the tree.’ (CD, entry for *māpta*)
- b. Puti i dinanchin ātchu’ yanggin madaggão hão.
AGR.hurt the NMLZ.hit.L stone if AGR.PASS.throw you
 ‘It hurts to get hit by a stone if it is thrown at you (lit. if you are thrown at).’ (CD, entry for *ātchu*)

This suggests that the concealed applicatives in (50) are derived from the corresponding ordinary transitive verbs, but without an applicative suffix, as was proposed for the concealed applicatives in (42). The difference is that the ordinary transitive verbs in (50) have no distributional restrictions: they can occur in the full range of clause types available to transitive verbs.

Concealed applicatives of type (50) resemble other applicatives in their interaction with wh-agreement. In questions, relative clauses, and the focus construction, when the displaced constituent is their direct object—the noun phrase that realizes the source, recipient, or goal—the verb cannot show the object form of wh-agreement. See (54).

- (54)a. ***Hăyi binendem-mu** nu i kareta?
 who? WH[OBJ].sell-AGR OBL the car
 ('Who did you sell the car to?')
- b. ***Hăyi inayăo-mu** salăppi'?
 who? WH[OBJ].borrow-AGR money
 ('Who did you borrow money from?')

But the verb can show the object form of wh-agreement when the displaced constituent is the oblique—the noun phrase that realizes the object of transfer—as (55) shows.

- (55) **Hăfa binendem-mu** (as Juan)?
 what? WH[OBJ].sell-AGR OBL Juan
 'What did you sell (Juan)?'

Concealed applicatives of type (50) evidently have no antipassive form. When these verbs are used as ordinary transitive verbs, they have an antipassive whose internal argument is the object of transfer, as shown in (56a-b). But when they are used as concealed applicatives, the antipassive is ungrammatical; compare (56c).

- (56)a. Si Juan ha fa'nă'gui yu' **mandăggăo**
 UNM Juan AGR teach me AGR.INF.ANTIP.throw
 talăya.
 fishing.net
 'Juan taught me how to cast a fishing net.' (CD, entry for *talăya*)
- b. **Manmanayăo** i taotăo iskoba gi bisinu.
 AGR.ANTIP.borrow the person rake LCL neighbor
 'The people borrowed a rake from the neighbor.' (CD, entry for *ayăo*)

- c. ***Manbendi** **yu'** **pâtgun** **siboyas.**
AGR.ANTIP.sell I child onions
(‘I sold a child onions.’)

Stepping back, it is clear that the concealed applicatives in (42) and (50) have essentially the same profile. What differentiates them is the transitive verbs from which they are derived. The concealed applicatives in (42) are derived from hypothesized transitive verbs with a highly restricted distribution: these verbs can occur only in the antipassive or as applicatives. In contrast, the concealed applicatives in (50) are derived from transitive verbs that unquestionably exist and are found in the full range of clause types.

12

CAUSATIVES

Causatives are transitive verbs derived by adding the prefix *na'* to a partly inflected verb or adjective. Causatives can be derived from almost every verb or adjective, including passive verbs and antipassive verbs. This chapter describes how causatives are formed and the structure of the clauses in which they occur.

12.1 Overview

Causatives are transitive verbs derived by adding the prefix *na'* to a partly inflected verb or adjective—a verb or adjective that shows some, but not all, of the marking of an ordinary predicate. Causative verbs name the event of *causing* the event or state described by the original verb or adjective. They take an additional argument that names the causer and is realized as their subject.

For instance, the intransitive verb *suha* ‘go away, get away’ has two arguments: one argument that names what goes away, and another argument that names what is gone away from. In (1), the first of these arguments is realized as the subject; the second is realized as an oblique in the local case.

- (1) Sumuha gi fi'on-ña.
 AGR.go.away LCL near-AGR
 ‘[The lights] moved away from him.’ (Cooreman 1982: 23)

The causative derived from *suha* is *na'suha* ‘cause to go away, remove’. This transitive verb has an additional argument that names the causer of the going away event and is realized as the subject. In the causative clause in (2) (enclosed in brackets), this additional argument is the addressee (‘you’). The argument of *na'suha* that names what goes away (*i chemchum* ‘the nest’) is realized as the direct object.

- (2) Atyu ha' nai siña sumuha i sasata
 that EMP COMP can AGR.go.away the bee
 yanggin [un na'suha i chemchum].
 if AGR make.go.away the nest

‘The only way that the bees will go away is if you remove the nest.’
(CD, entry for *chomchum abeha*)

Causatives are frequent, regular, and productive in Chamorro. They can be derived from just about every verb or adjective in the language, including passive verbs and antipassive verbs. This chapter first describes the form of causative verbs (in 12.2) and then surveys the structure of the clauses in which they occur (in 12.3). Some special uses of the causative prefix are discussed in 12.4.

12.2 Causative verbs

Like the other verb types examined in Chapters 10 and 11, causative verbs are derived by attaching an affix to a verb or adjective. However, the causative prefix *na’-* is not attached directly to a root, but rather to a partly inflected verb or adjective.¹ This original verb or adjective is in the irrealis mood and shows certain types of agreement with its subject. It can take various forms, including passive and antipassive. 12.2.1 deals with causatives derived from intransitive verbs or adjectives; 12.2.2, with causatives derived from transitive verbs; and 12.2.3, with causatives derived from other verb types.

12.2.1 Derived from intransitive verbs or adjectives

Causatives are derived from intransitive verbs or adjectives by attaching *na’-* to the original predicate, which is partly inflected: it is in the irrealis mood and shows agreement with its subject using the number affixes, but not the person-and-number forms, described in Chapter 2 (see 2.2.2.3). The result is a derived verb that means to cause the event or state described by the original predicate.

When the subject of the original predicate is singular or dual, the number affix that signals agreement in the irrealis mood has no realization, so the causative is derived by attaching *na’-* to a form of the predicate identical to the root. Some representative examples are given in (3).

¹ In generative syntax, one would say that causatives are formed from a phrase that includes not only the verb but also a higher functional head, such as Voice.

(3)	IRREALIS SG./DU.			
	PREDICATE		CAUSATIVE	
	châlik	‘laugh’	na’châlik	‘cause to (sg./du.) laugh’
	hânâo	‘go’	na’hânâo	‘cause to (sg./du.) go ‘
	kâti	‘cry’	na’kâti	‘cause to (sg./du.) cry’
	sâga	‘stay’	na’sâga	‘cause to (sg./du.) stay’
	alipâtu	‘upside down’	na’alipâtu	‘cause to (sg./du.) be upside down’
	homlu’	‘healed’	na’homlu’	‘cause to (sg./du.) be healed’
	maipi	‘hot’	na’maipi	‘cause to (sg./du.) be hot’

When the subject of the original predicate is plural, the number affix that signals agreement in the irrealis mood is *fan-*, so the causative is derived by marking the predicate with *fan-* and attaching *na’-* to the result. This is shown in (4).

(4)	IRREALIS PL.			
	PREDICATE		CAUSATIVE	
	fañâlik	‘laugh’	na’fañâlik	‘cause to (pl.) laugh’
	fanhânâo	‘go’	na’fanhânâo	‘cause to (pl.) go’
	fangâti	‘cry’	na’fangâti	‘cause to (pl.) cry’
	fañâga	‘stay’	na’fañâga	‘cause to (pl.) stay’
	fanalipâtu	‘upside down’	na’fanalipâtu	‘cause to (pl.) be upside down’
	fanhomlu’	‘healed’	na’fanhomlu’	‘cause to (pl.) be healed’
	fanmaipi	‘hot’	na’fanmaipi	‘cause to (pl.) be hot’

Matters are more intricate, but in expected ways, when the original predicate shows the *m/f* alternation (see 2.2.3.1). When an *m/f* predicate is in the irrealis mood and its subject is singular or dual, the number affix that signals agreement has no realization, but the predicate itself has an initial /f/. So the causative is derived by attaching *na’-* to the form of the predicate that begins with /f/, as in (5).

(5)	IRREALIS SG./DU.			
	PREDICATE		CAUSATIVE	
	facho'chu	'work'	na'facho'chu	'cause to (sg./du.) work'
	fattu	'arrive'	na'fattu	'cause to (sg./du.) arrive'
	falingu	'disappear'	na'falingu	'cause to (sg./du.) disappear'
	fo'na	'ahead'	na'fo'na	'cause to (sg./du.) be ahead'

When the subject of the *m/f* predicate is plural, the number affix that signals agreement in the irrealis mood is *fan-*, and the predicate itself has an initial /m/. The causative is derived by attaching *na'-* to this form of the predicate; see (6).

(6)	IRREALIS PL.			
	PREDICATE		CAUSATIVE	
	fanmattu	'arrive'	na'fanmattu	'cause to (pl.) arrive'
	fanmalingu	'disappear'	na'fanmalingu	'cause to (pl.) disappear'
	fanmo'na	'ahead'	na'fanmo'na	'cause to (pl.) be ahead'

Throughout, the agreement on the original predicate signals the number of the argument that would be that predicate's subject. This argument serves as the *direct object* of the causative verb (see below). The overall pattern can be glimpsed in the examples in (7), in which the causative verbs are in boldface.

- (7) a. Ti siña hu gratifika si tata-hu yan si
not can AGR repay UNM father-AGR and UNM
 nanâ-hu ni ha **na'dangkulu** yu'.
mother-AGR OBL AGR make.big me
 'I cannot repay my dad and my mom for raising me (lit. for the fact that they caused me to grow up).' (CD, entry for *gratifika*)
- b. Hu poksai sais na famagu'un ya hu
AGR nurture six L PL.child and.then AGR
na'fandangkulu.
make.AGR.big

‘I nurtured six children and made them grow up.’ (CD, entry for *poksai*)

Causatives can be derived from just about every intransitive verb and adjective in Chamorro, including phonologically dependent verbs such as *malak/falak* ‘go to’ (see 2.2.1.1.2), the incorporating verbs *gai* ‘have’ and *tai* ‘not have’ (see 14.3), and the auxiliary verb *siña* ‘can, possible’ (see 4.2.1).

- (8) a. Debi na un **na’tai** hafyi i kattri.
 ought COMP AGRmake.not.have cover the bed
 ‘You’re supposed to make the bed not have a cover.’ (CD, entry for *hafyi*)
- b. Kumu un nã’i ãnimu, siña un **na’siña** chumo’gui
 if AGRgive effort can AGRmake.can INF.do
 maseha hãfa.
 at.all anything
 ‘If you give it all you’ve got, you can (lit. can make it possible to) do anything.’ (CD, entry for *na’siña*)

Causatives can also be derived from intransitive verbs or adjectives that are morphologically complex. The causative in (9a) is formed from an adjective created by attaching the prefix *mí-* ‘full of’ to a noun (see 28.4.6). The causatives in (9b-c) are formed from intransitive verbs or adjectives created from nouns by conversion (see 27.4 and 28.4.9).

- (9) a. Ta **na’fanmititanus** hit agupa’ para i tes.
 AGRmake.AGR.full.of.brains us.INCL tomorrow for the test
 ‘We (incl.) should make ourselves be full-brained for the test tomorrow.’ (CD, entry for *mítitanus*)
- b. Nã’i grãsia sa’ atu’ãsi ha **na’fansena** hit.
 give thanks because at.least AGRmake.AGR.eat.dinner us.INCL
 ‘Thank him because he at least fed us (incl.) dinner.’ (CD, entry for *antu’ãsi*)
- c. Ha poksai bãtbas achai-ña si Tatã-hu ya
 AGRnurture beard chin-AGR UNM father-my and.then
 nina’mãtan ãmku’.
 AGR.PASS.make.face.L old
 ‘My father grew a beard on his chin and it made him look older (lit. be old-faced).’ (CD, entry for *achai*)

Note that *na'* - sometimes appears to be attached to a professional noun. In such cases, the causative is probably formed from a derived verb that is created from the noun by conversion (see 4.3.1). In (10), the causative verb is formed from *må'gas i gurupu* 'serve as group leader', an intransitive verb created by conversion from the noun *må'gas i gurupu* 'group leader'.

- (10) Put i esmeru-ña si Jose, guiya
for the zeal-AGR UNM Jose he
mana'må'gas i gurupu.
AGR.PASS.make.boss.L the group
 'Because of Jose's eagerness, he was made the group leader.' (CD,
 entry for *esmeru*)

12.2.2 Derived from transitive verbs

Causatives are derived from transitive verbs by attaching *na'* - directly to the verb. This is expected: *na'* - is attached to a partly inflected predicate that shows (irrealis) agreement with its subject using the number affixes, but not the person-and-number forms. Since transitive verbs show agreement exclusively through the person-and-number forms, the result is that *na'* - is attached to a form of the verb identical to the root. Some representative examples are cited below.

(11)	TRANSITIVE VERB	CAUSATIVE
	fa'gâsi 'wash'	na'fa'gâsi 'cause to wash'
	guâssan 'cut (grass)'	na'guâssan 'cause to cut (grass)'
	kumprendi 'understand'	na'kumprendi 'cause to understand'
	li'i' 'see'	na'li'i' 'cause to see, show'
	patmâda 'slap'	na'patmâda 'cause to slap'
	taitai 'read'	na'taitai 'cause to read'
	tungu' 'know'	na'tungu' 'cause to know'
	uma 'carry'	na'uma 'cause to carry'

Causatives can be derived from almost all transitive verbs in Chamorro, including verbs that are morphologically complex. For instance, causatives can be formed from applicatives derived from intransitive verbs or adjectives. The causative in (12) is derived from the applicative *chatgi* 'laugh at, ridicule' (from the intransitive verb *châlik* 'laugh'; see 11.2.1).

- (12) Na'pâra, sa' yanggin un **na'chatgi**, guiya siempri
make.stop because if AGR make.laugh.at he indeed

mamâhlão.

AGR.ashamed

‘Stop that, because if you have him ridicule someone, he will be humiliated instead.’

However, causatives cannot be formed from applicatives derived from transitive verbs (see 11.3.1).² This restriction is discussed later (in 12.3.5). In addition, most speakers do not allow causatives to be formed from the few verbs that exceptionally show agreement with the subject as if they were nouns, such as *ga’ña-* ‘prefer’, *ga’o-* ‘prefer’, *sa’-* ‘look good in’, and *ya-* ‘like’ (see 14.4).

12.2.3 Derived from other verb types

Causatives can also be derived from passives, antipassives, reciprocals, and impersonal verbs.

12.2.3.1 Passives

Causatives can be derived by attaching *na’-* to a partly inflected passive verb (see 10.2.1). As expected, the passive verb is in the irrealis mood and shows agreement with its subject using the number affixes, but not the person-and-number forms. Passive verbs are intransitive, and their subject is their internal argument (see 10.2.2). That is why, when a causative is derived from a passive, the partly inflected passive verb signals the number of its internal argument.

The causatives in (13) are derived from *-in*-passives. The internal argument of passive is singular in (13a) (*hảo* ‘you (sg.)’), but plural in (13b) (*famagu’un* ‘the children’), and this difference is registered by the agreement on the partly inflected passive verb.

- (13)a. Bai **na’sinaolak** hảo nu i ma’estra.
AGR make.PASS.spank you OBL the teacher
 ‘I will let the teacher spank you (lit. you be spanked by the teacher).’ (CD, entry for *sinaolak*)
- b. Hu **na’fantinektuk** i famagu’un ni che’lu-hu lâhi.
AGR make.AGR.PASS.hug the PL.child OBL sibling-AGR male
 ‘I made the children be hugged by my brother.’

² Although causatives cannot be derived from applicatives formed from transitive verbs, it is possible for applicatives to be derived from causative verbs (see 12.3.3.3).

The causatives in (14) are derived from *ma*-passives. The internal argument of passive is singular in (14a) (*i ruedan kareta* ‘the car tire’), but plural in (14b) (*i lalâhi* ‘the men’).

- (14)a. Hu **na’malimenda** i ruedan kareta nigap.
AGR make.PASS.patch the tire.L car yesterday
 ‘I had the car tire patched yesterday.’ (CD, entry for *limenda*)
- b. In **na’fanmadulalak** i lalâhi ni famalâo’an.
AGR make.AGR.PASS.chase the PL.man OBL PL.woman
 ‘We (excl.) made the men be chased by the women.’

Causatives can be derived from almost all types of passive verbs in Chamorro, including the passives of (some) causatives. In (15), for instance, the causative is formed from the passive of *na’suha* ‘make go away’, which is itself the causative of *suha* ‘go away, get away’ (compare (1-2)).

- (15) Si Josephine ha **na’mana’suha** i
UNM Josephine AGR make.PASS.make.go.away the
atgoya gi gui’eng-ña.
nose.ring LCL nose-AGR
 ‘Josephine had her nose ring removed (lit. caused her nose ring to be caused to go away.’ (CD, entry for *atgoya*)

However, recall (from 12.2.2) that causatives cannot be formed from applicatives derived from transitive verbs. Most speakers do not allow causatives to be formed from the *passives* of such applicatives, either. It is not obvious what lies behind these restrictions. This is an area that deserves further investigation.

12.2.3.2 Antipassives

Causatives can be derived by attaching *na’-* to a partly inflected antipassive verb (see 10.3.1). Once again, the antipassive verb is in the irrealis mood and shows agreement with its subject using the number affixes, but not the person-and-number forms. Antipassives, like passives, are intransitive, but their subject is their external argument (see 10.3.2). For this reason, when a causative is formed from an antipassive, the partly inflected antipassive verb signals the number of its external argument.

Some examples of causatives derived from antipassives are given below. In (16), the antipassive verb is *chotchu*, the morphologically irregular antipassive of *kânnu* ‘eat’ (see 10.3.1). The external argument of *chotchu* is singular in (16a) (*hâo* ‘you (sg.)’), but plural in (16b) (*ham* ‘we (excl. pl.)’).

- (16)a. Båsta ha' ni hu na'laguyi hão, para bai hu
enough EMP OBL AGR cook.for you FUT AGR
na'chotchu hão ta'lu?
make.ANTIP.eat you again
 'Isn't it enough that I cooked for you, am I going to feed you as well?' (CD, entry for *båsta*)
- b. Ha **na'fañotchu** ham si Benit gi gima'-ñiha
AGR make.AGR.ANTIP.eat us.EXCL UNM Benit LCL house-AGR
 gi Sabalu.
LCL Saturday
 'Bernadita made us (excl.) eat at their house on Saturday.' (CD, entry for *Benit*)

In (17), the antipassive verbs are formed with the prefix *man-/fan-*, which exhibits the *m/f* alternation (see 2.2.3.1). The external argument of the antipassive verb is singular in (17a) (*yu* 'I'), but plural in (17b) (*i taotão* 'the people').

- (17)a. I bakulu-hu ha **na'fangganna** yu'.
the marble-AGR AGR make.ANTIP.win me
 'My shooter marble made me win.' (CD, entry for *bakulu*)
- b. I abisu ha **na'fanmanunungu'** i taotão na
the alarm AGR make.AGR.ANTIP.know.PROG the person that
 esta gof hihut i pakyu.
already AGR.very close the typhoon
 'The alarm is letting people know that the typhoon is very close [to the island].' (CD, entry for *abisu*)

12.2.3.3 Reciprocals

Chamorro has reciprocal verbs—intransitive verbs that describe reciprocal action. These verbs are formed by attaching the stressed prefix *á-* to a transitive verb (see 13.3.1). As might be expected, causatives can be derived by attaching *na'-* to a partly inflected reciprocal verb. Some illustrative examples are cited below. The causative in (18a) is derived from *ásudda* 'meet, find one another', the reciprocal of *sodda* 'find'. The causative in (18b) is derived from *ápatti* 'share with one another', the reciprocal of *patti* 'share (with), divide (with)'.

- (18)a. Hu **na'asudda'** i dos taotão gi chalan.
AGR make.RECP.find the two person LCL road
 'I let the two people meet on the road.' (CD, entry for *ásudda*)

- b. Ha **na'fanapatti** i famagu'on-ña ni i
AGR make.AGR.RECP.share the PL.child-AGR OBL the
 tano'-ña.
land-AGR
 'He divided his property among his children.' (CD, entry for *ápatti*)

12.2.3.4 Impersonals

Finally, causatives can be derived by attaching *na'* to an impersonal verb or adjective such as *guaha* 'exist, there is' or *bula* 'much, many' (see 14.2.2 and 14.2.3). These impersonals are intransitive predicates that describe existence or quantity; their subject is a null, meaningless dummy (see 3.2.1). Because the dummy is treated as third person singular for agreement purposes, the impersonal predicate is never marked with an overt number affix. The result is that in causatives formed from these predicates, *na'* is attached directly to the verb or adjective. Some examples:

- (19)a. Maila' ta **na'guaha** guput dispidida para i bisita
come AGR make.exist party.L farewell for the visitor
 siha.
PL
 'Let's (incl.) have a farewell party for the visitors.' (CD, entry for *dispidida*)
- b. Hu **na'bula** siboyas gi cha'lak i katni.
AGR make.much onions LCL small.cut.L the meat
 'I put lots of onions in the small cut of the meat.' (CD, entry for *chã'lak*)

12.3 Causative clauses

Despite the intricacies of causative verb formation, causative clauses are ordinary transitive clauses in many respects. 12.3.1 describes how their arguments are realized. 12.3.2 briefly mentions their word order. 12.3.3 shows that causative verbs can be used to form passives, antipassives, applicatives, and reciprocals. 12.3.4 documents some respects in which causative clauses differ from other transitive clauses. Finally, 12.3.5 raises the issue of whether causatives might be a type of concealed applicative. The discussion follows Gibson (1980) in concluding that they are not.

12.3.1 Grammatical relations

A causative verb has the same arguments as the partly inflected predicate from which it is derived, plus an additional argument. The added argument,

which names the causer, is realized as the subject of the causative clause. The argument that would be the subject of the partly inflected predicate is realized as the direct object. Any other arguments of the partly inflected predicate are realized as obliques.

Chamorro grammar provides a wealth of evidence that these are indeed the grammatical relations of causative clauses. To begin with, the argument that names the causer is clearly the subject. When this argument is a noun phrase, it is in the unmarked case (see 5.1.2.1), and the causative verb agrees with it in person and number (see 2.2.2). The fact that the agreement is chosen from the paradigms for transitive verbs reveals that causative clauses are transitive. In (20), the causer and the agreement that cross-references it are represented in boldface.

- (20)a. Esta **ha** na'tâya' **si** **Tan Amalia** insâyu
already AGR make.not.exist UNM Tan Amalia rehearsal
 guihi na puengi.
LCL.that L night
 'Tan Amalia caused there to be no rehearsal that night.' (Dibota 10)
- b. Maila' ya **ta** na'fanatya i sinientet-ta.
come and.then AGR make.AGR.match the feeling-AGR
 'Let us (incl.) synchronize our (incl.) spirits (lit. make our feelings match).' (CD, entry for *atya*)

The argument that names the causer also functions like a subject: it is the most prominent constituent of the clause. It is the constituent that must be missing when the causative verb is the predicate of an infinitive clause (see 3.2.1 and 21.2.2).

- (21)a. Ha tungu' i kotneteru [muna'suâbi i sunidu
AGR know the trumpeter INF.make.refined the sound
 ni ha lalaknus].
COMP AGR put.forth.PROG
 'The trumpeter knows how to deliver mellow sound (lit. make refined the sound that he is delivering).' (CD, entry for *kotneteru*)
- b. Ta chagi [muna'funâyan esti ...].
AGR try INF.make.finished this
 'We (incl.) will try to finish this....' (from an e-mail message)

It is also the constituent that is missing when the causative verb is imperative (see 15.2).

- (22)a. Na'takkilu' esti i akunsehu ginin i mañaina-ta.
make.high this the advice from the PL.parent-AGR
 'Put the advice of our (incl.) elders first.' (CD, entry for *akunsehu*)
- b. Put fabot na'tungu' hit.
please make.know us.INCL
 'Please let us (incl.) know.' (from an e-mail message)

The argument that would be the original predicate's subject is the direct object of the causative. Like other direct objects, it occurs in the unmarked case (see (23a)) and can be realized as a weak pronoun (23b).

- (23)a. Hu na'ayão si Isidro ni kareta.
AGR make.borrow UNM Isidro OBL car
 'I let Isidro borrow the car.' (CD, entry for *ayão*)
- b. Ha na'manman yu' i difirentis klâsin kotpurasion
AGR make.amazed me the different sort.L corporation
 ni manggaigi guini gi tano'-ta.
COMP AGR.be.at LCL.this LCL land-AGR
 'The different kinds of corporation we (incl.) have here on island astonishes me (lit. makes me astonished).' (CD, entry for *kotpurasiôn*)

Like other direct objects, it realizes the argument that would be the subject of the corresponding passive (see 3.2.2 and below). Compare the causative clauses in (24) with the passive clauses in (25).

- (24)a. Ha na'bulâchu yu' atyu i kâpsulas ni
AGR make.dizzy me that the pill COMP
 manâ'i yu' nu i mediku.
AGR.PASS.give I OBL the doctors
 'The pill that I was given by the doctors made me dizzy.' (CD, entry for *kâpsulas*)
- b. Ta na'pula' i patgun ni magagu-ña.
AGR make.take.off the child OBL clothes-AGR
 'We (incl.) made the child take off his clothes.'
- (25)a. Mumâma' si Juan ya
AGR.chew.betelnut UNM Juan and.then
 nina'bulâchu.
AGR.PASS.make.dizzy
 'Juan chewed betelnut and it made him dizzy (lit. he was made dizzy by it).' (CD, entry for *mâma'*)

- b. Para bai in mana'pula' ni magagun-måmi.
FUT AGR PASS.make.take.off OBL clothes-AGR
 'We (excl.) are going to be made to take off our (excl.) clothes.'

Finally, like other direct objects, it cannot be higher than the subject on the person-animacy hierarchy (see 16.2). The causative clause in (26) is grammatical only when the subject is the null pronoun ('s/he') and the direct object is the nonpronoun *si Joaquin*. Reversing these grammatical relations would violate the person-animacy restriction.

- (26) Ha na'ke'kati si Joaquin.
AGR make.try.to.cry UNM Joaquin
 'S/he tried to make Joaquin cry.' (Not: Joaquin tried to make him/her cry.)

The causative clause in (27a) is ungrammatical because the direct object (*i patgun* 'the child') is animate but the subject (*i sinisedin-ñiha* 'what they experienced') is inanimate. Compare the corresponding passive clause in (27b), which has no direct object and so does not violate the person-animacy restriction.

- (27)a. *Ha na'ma'å'ñão i sinisedin-ñiha i patgun.
AGR make.afraid the WH[OBJ].experience-AGR the child
 ('What they experienced made the child afraid.')
- b. Nina'ma'å'ñão i patgun ni i
AGR.PASS.make.afraid the child OBL the
sinisedin-ñiha.
WH[OBJ].experience-AGR
 'The child was made afraid by what they experienced.'

All other arguments of the original predicate are realized in the causative clause as obliques. For instance, if the original predicate is a transitive verb, the argument that would be its direct object is realized as an oblique (but see 13.2.2.2 for an exception). This argument is in the oblique case if it is a noun phrase, as (28) shows.

- (28) Na'gu'ut si Maria nu i tali ya hu hålla.
make.hold UNM Maria OBL the rope and.then AGR pull
 'Let Maria hold the rope and I'll pull it.' (CD, entry for *gu'ut*)

If the original predicate has obliques, these become associated with the causative clause, but are otherwise unchanged. In (29a), the oblique originally associated with *hålum* ‘enter’ remains in the local case; in (29b), the oblique originally associated with *maleffa* ‘forget’ remains in the oblique case.

- (29)a. Hu na’hålum i kalulot-tu gi ngulu’ liga.
AGR make.go.in the finger-AGR LCL hole.L wall
 ‘I put (lit. made go in) my finger through the hole in the wall.’ (CD, entry for *ngulu*)
- b. Ha na’maleffa yu’ si nanâ-hu ni lepblok-ku.
AGR make.forget me UNM mother-AGR OBL book-AGR
 ‘My mother made me forget my books.’

12.3.2 Word order

Causative clauses have the same word order options as transitive clauses more generally. Their dominant word order is: *Verb Subject Object Other* (see 3.4.1.1).

- (30) Ha na’dotchun i fuetsan i pakyu i hayun
AGR make.penetrate the force.L the typhoon the wood.L
 loddu’ gi talu’ trongkun niyuk.
heavy LCL center.L tree.L coconut
 ‘The force of the typhoon made a thick piece of wood penetrate into the center of a coconut tree.’ (CD, entry for *na’dotchun*)

But other word orders are possible (see 3.4.1). The subject of the causative often occurs at the far right, after obliques and adjuncts.

- (31) Ha na’puti ha’ kannai-hu anai ha gu’ut si
AGR make.hurt EMP hand-AGR when AGR hold UNM
 Long.
Long
 ‘Long made my hand hurt when he grasped it.’ (CD, entry for *gu’ut*)

The subject often follows the direct object but precedes obliques or adjuncts.

- (32) Ha na’kiba’ i matâ-ña si Joaquin guatu
AGR make.frown the face-AGR UNM Joaquin to.there
 gi as Lourdes.
LCL Lourdes

‘Joaquin made a face (lit. made his face frown) to Lourdes.’ (CD, entry for *kiba*)

The direct object can also follow an oblique or an adjunct, although this may be less common.

- (33) Ha na’besti floris i gaputilu-ña si Maria.
 AGR make.decorated flower the hair-AGR UNM Maria
 ‘Maria decorated her hair with flowers.’ (CD, entry for *na’besti*)

12.3.3 Further patterns

Because causative verbs are transitive, they can occur in the passive and the antipassive, and can be used to derive applicatives and reciprocal verbs.

12.3.3.1 Passives of causatives

The passive of a causative is formed in the usual way, by attaching the infix *-in-* or the prefix *ma-* to the causative verb (see 10.2.2.3 on the choice between *-in-* and *ma-*). Passive clauses differ systematically from transitive clauses in their realization of the verb’s arguments (see 10.2.2.1). The internal argument—the argument that would be the transitive verb’s direct object—is realized as the subject of passive, and the external argument—the argument that would be the transitive verb’s subject—is realized as an oblique. Exactly the same holds true for passive clauses formed from causatives. The internal argument of the causative verb is realized as the subject of passive; this is the argument that would have been the subject of the partly inflected predicate from which the causative is derived. The external argument—the argument that names the causer—is realized as an oblique.

Consider the sentences in (34), involving the causative verb *na’maguf* ‘make happy’ (from the adjective *maguf* ‘happy’). In the transitive clause in (34a), the causer (‘he’) is realized as the subject, and the internal argument, which names the one(s) made happy (*i mañaina-ña* ‘his parents’), is realized as the direct object. In the passive clause in (34b), the internal argument (*i patgun* ‘the child’) is realized as the subject, and the causer (*i chi’uk gi cha’guan* ‘the dew on the grass’) is realized as an oblique.

- (34)a. Ānimu i patgun [para u **na’maguf** i
 AGR.have.effort the child FUT AGR make.happy the
 mañaina-ña].
 PL.parent-AGR
 ‘The child put a lot of effort into pleasing his parents.’ (CD, entry for *ānimu*)

- b. **Nina'maguf** i patgun nu i chi'uk gi
AGR.PASS.make.happy the child OBL the dew LCL
 cha'guan.
grass
 'The child was delighted by the dew on the grass.' (CD, entry for *chi'uk*)

Passives of causatives occur very frequently in Chamorro. They can be formed from the full range of causative verbs, whether the causative itself is derived from an adjective (as in (34b)), an intransitive verb (35a), a transitive verb (35b), or an impersonal predicate (35c).

- (35)a. Gof chaddik **mana'chålik** si Rosario,
AGR.very quick AGR.PASS.make.laugh UNM Rosario
 sa' chatgun.
because AGR.smiley
 'Rosario can quickly be made to laugh, because she laughs easily.'
 (CD, entry for *chatgun*)
- b. Håfa **nina'li'i'** hão gi as Maria?
what? AGR.PASS.make.see you OBL Maria
 'What were you shown (lit. made to see) by Maria?'
- c. Nina'fachi' i hineksa' sa'
AGR.PASS.make.saturated the rice because
mana'meggai hånun.
AGR.PASS.make.much water
 'The rice became watery because too much water was added (lit. there was caused to be much water).' (CD, entry for *na'fachi*)

Passives can also be formed from causatives derived from other verb types, such as passives (as in (36a)), antipassives (36b), and reciprocals (36c). Note that when a passive is formed from the causative of a passive, the passive affix *-in-* or *ma-* appears attached to the left of the causative verb as well as inside the causative verb, to the right of the causative prefix *na'*.

- (36)a. Håfa un na'suha na
what? AGR make.go.away COMP
nina'fanhinengngan siha?
PASS.make.AGR.PASS.astonish they
 'What did you take away such that they were made to be surprised?'

- b. Dispues di Gera II, todū i taotão
since PRT War II all the person
mana'fanggimin ni satbasat.
PASS.make.AGR.ANTIP.drink OBL deworming.medicine
 'After WWII, all the people took (lit. were made to drink) deworming medication.' (CD, entry for *sátbasat*)
- c. Bunitu i bailan bātsu yanggin
AGR.beautiful the dance.L waltz if
mana'fana'adanchi i pasun-ñiha i mambabaila.
PASS.make.AGR.RECP.hit.PROG the step-AGR the PL.dancer
 'Waltz dancing is beautiful when the dancers' steps are timed right.'
 (CD, entry for *na'ádanchi*)

Throughout this spectrum of passives, it is clear that the internal argument of the causative verb is the subject. This argument has the form of a subject: it appears in the unmarked case, and the passive verb shows agreement with it (but see below).

- (37)a. Para **u** mana'bibu **esti na guput?**
FUT AGR PASS.make.lively this L party
 'Is this party going to be (made) lively?' (CD, entry for *bibu*)
- b. Gimín letchi kosa ki **un** nina'dāngkulu mās.
drink milk so.that AGR PASS.make.big more
 'Drink milk so that it will make you (lit. you will be made to) grow bigger.' (CD, entry for *na'dāngkulu*)

The internal argument also functions like a subject; it is the constituent that must be missing in a passive infinitive clause, for instance.

- (38) Pāyun i patgun [mana'ma'udai gi
AGR.accustomed the child AGR.INF.PASS.make.ride LCL
apāga].
shoulder
 'The child is used to being carried (lit. made to ride) on the shoulder.' (CD, entry for *apāga*)

However, one part of the agreement pattern exhibited by passives of causatives is surprising. Since passive verbs are intransitive, they should show agreement with their subject—the internal argument—using the

number affixes.³ Now, the internal argument of a causative corresponds to the subject of the original, partly inflected predicate from which the causative is derived. This means that if the original predicate too is intransitive, the number affixes ought to appear twice: once attached to the passive of the causative, and again attached to the original predicate inside the causative verb.

This double marking does occur, as can be seen from (39).⁴ (The number affixes are represented in boldface in the examples below; note that the number affix on the original predicate also indicates irrealis mood.)

- (39) I pigua' **mannina'****fanbâ'**ba' ni ga'ga' siha.
the betelnut AGR.PASS.make.AGR.stunted OBL animal PL
 'The betelnuts were (made) stunted by the betelnut insects.' (CD, entry for *bâ'ba'*)

But it is also possible for a number affix to be attached to the passive of the causative but not to the original predicate.

- (40) **Manmana'**alipatu todû i siya.
AGR.PASS.make.upside.down all the chair
 'All the chairs were turned upside down.' (CD, entry for *alipatu*)

By far the most common option is for a number affix to be attached to the original predicate but not to the passive of the causative. See the examples in (36) and the following.

- (41)a. Ottru tâotâo siha mientras mâs bula na
other person PL while more AGR.much L
 botlas gi magagun-ñiha, mâs
ornament LCL clothes-AGR more
 nina'**fanmamaguf**.
PASS.make.AGR.happy.PROG

³ In the irrealis mood, passive verbs—like other intransitive verbs—show agreement with the subject through both the number affixes and the person-and-number affixes; see the discussion below in the text.

⁴ In passives of causatives, the number affixes are overt only when the subject is plural. This is because: (i) causatives are formed from a partly inflected *irrealis* predicate, and the sg./du. number affix in the irrealis mood has no realization (see 2.2.2.3); and (ii) passive clauses in the realis mood use the sg./du. number affix that has no realization (see 10.2.2.1).

- ‘Other people feel happier (lit. are more made happy) when there are more ornaments on their clothes.’ (CD, entry for *botlas*)
- b. I *dinangkulon-ña esti na guãfi, esta*
 the NMLZ.big-AGR this L fire already
 mana’fansuha i taotão gi gima’-ñiha.
 PASS.make.AGR.go.away the person LCL house-AGR
 ‘Because of the big conflagration, the people had to be evacuated from their houses.’ (CD, entry for *guãfi*)
- c. *Guaha na balotu mana’fanhãnao para ottru*
 AGR.exist L ballot PASS.make.AGR.go to other
 lugât siha.
 place PL
 ‘Some ballots were sent (lit. made to go) to other places.’ (CD, entry for *balotu*)

The absence of the outer number affix in passives of causatives like (41) does not reflect a general suspension of agreement in passive clauses of this type. In the irrealis mood, agreement is registered on the passive verb by the person-and-number forms, as usual, even when the expected number affix is missing. This can be seen from (42).

- (42) I *istudiãnti para u nina’fanmãfattu atrasão*
 the student FUT AGR PASS.make.AGR.arrive.PROG late
 nai manglu’.
 OBL storm
 ‘The students will be being made to arrive late due to the storm.’

The fact that the number affixes do not occur twice in passives of causatives like (40-42) can be viewed as a kind of haplology at-a-distance. The exact mechanisms involved are not known. Note that the haplology strongly favors the appearance of a number affix on the original predicate, rather than on the passive of the causative.

12.3.3.2 Antipassives of causatives

Antipassives of causatives are formed by shifting the stress of the causative verb to the causative prefix *na’-*. Antipassive clauses are like transitive clauses in realizing their external argument as the subject; they differ in realizing their internal argument as an oblique (see 10.3.2.1). The same holds true for antipassive clauses formed from causatives.

Some representative examples of antipassive clauses formed from causatives are cited below. Note the reduplication for the progressive aspect in

(43a), (43b), and (43d), which reveals that primary stress has shifted to the causative prefix (see 2.2.1.1).

- (43)a. Yanggin **munana'gasgas** hão, pues etsisiu
 if AGR.ANTIP.make.clean.PROG you then exercise
 ennão lokkui'.
 that also
 'When you are cleaning (lit. making (something) clean), that is also
 exercise.' (CD, entry for *etsisiu*)
- b. **Munana'gupu** papaloti si Juanito gi
 AGR.ANTIP.make.fly.PROG kite UNM Juanito LCL
 kantun tâsi.
 edge.L ocean
 'Juanito is flying a kite by the seashore.' (CD, entry for *na'gupu*)
- c. **Manna'hanão** ham âbiu para i mandisgrasião.
 AGR.ANTIP.make.go we.EXCL help to the PL.in.accident
 'We (excl.) sent help (lit. caused help to go) to those involved in
 that accident.' (CD, entry for *âbiu*)
- d. I mapula' i sustânsian i kuentus-ñiha,
 the WH[DJ].PASS.interpret.L the meaning.L the NMLZ.talk-AGR
 guiya esti i **munana'kumprendi**.
 it this the AGR.ANTIP.make.understand.PROG
 'The interpretation of the conversation means it gives a better
 understanding (lit. this is what makes (people) understand).' (CD,
 entry for *pula'*)

Antipassives can be formed from causatives whether the causative verb is derived from an adjective (43a), an intransitive verb (43b-c), or a transitive verb (43d). It is unclear whether antipassives can be formed from causatives derived from other verb types, such as passives or antipassives.

Like other antipassives, antipassives formed from causatives have their external argument—the causer—as the subject. This argument occurs in the unmarked case (see (43b)), and the antipassive verb shows agreement with it. Because antipassive verbs are intransitive, the agreement is chosen from the paradigms for intransitive verbs and adjectives. Note that in the realis mood, sg./du. agreement is indicated by the infix *-um-*. The external argument also functions like a subject; for instance, it is the constituent that must be missing in an infinitive clause.

- (44) Malagu' si Juan [muna'hanão katta
 AGR.want UNM Juan AGR.INF.ANTIP.make.go letter

para i nubiã-ña].
 to the girlfriend-AGR
 ‘Juan wants to send a letter to his girlfriend.’

As in other antipassives, the internal argument is typically implicit or indefinite (see 10.3.2.1 and 10.3.2.3).

12.3.3.3 Applicatives of causatives

Applicatives can be derived from causatives. Two very common applicatives of this type are *na’hanãogui* ‘send, make go to’, which is derived from the causative *na’hãnão* ‘make go’ (from *hãnão* ‘go’), and *na’klaruyi* ‘explain, make clear to’, derived from the causative *na’klãru* ‘make clear’ (from *klãru* ‘clear’). These applicatives are illustrated below.

- (45)a. Hu **na’hanãogui** si nanã-hu ramiyetin floris gi
 AGR make.go.to UNM mother-AGR bouquet.L flower LCL
 kumpliaños-ña.
 birthday-AGR
 ‘I sent my mother a bouquet of roses on her birthday.’ (CD, entry for *ramiyeti*)
- b. Hu **na’klaruyi** i chi’lu-hu ni istoria.
 AGR make.clear.to the sibling-AGR OBL story
 ‘I made the story clear to my sister.’

Compare (46), which illustrates the causatives from which these applicatives are formed.

- (46)a. Hu **na’hãnão** paketi para i dos lahi-hu.
 AGR make.go parcel to the two son-AGR
 ‘I sent a parcel to my two sons.’ (CD, entry for *paketi*)
- b. Para bai hu **na’klãru** giya hamyu, gi me’nan Yu’us,
 FUT AGR make.clear LCL you.PL LCL front.L God
 na gof taddung i dibusiun-miyu nu hami.
 COMP AGR.very deep the devotion-AGR OBL us.EXCL
 ‘I will make clear to you (pl.), before God, that your (pl.) devotion to us (excl.) is deep.’ (NT 332)

Because *na’hanãogui* and *na’klaruyi* contain both a causative prefix and an applicative suffix, it is important to establish exactly how they are derived. If these verbs are indeed applicatives derived from causatives, then the

applicative suffix is added last, as shown schematically in *[na'-hanão]-gui* and *[na'-klaru]-yi*. On the other hand, if they were causatives derived from applicatives, the causative prefix would be added last, as in *na'-[hanão-gui]* and *na'-[klaru-yi]* (see 12.2.2). The realization of the verb's arguments in (45) shows that the first possibility gives the right derivation. The internal argument of the causative—the argument that would be the subject of *hãnão* 'go' or *klãru* 'clear'—is realized not as the direct object, but rather as an oblique. (This argument is *ramiyetin floris* 'a bouquet of flowers' in (45a) and *ni istoria* 'the story' in (45b).) The argument that is realized as the direct object is the additional argument that names the goal—*si nanã-hu* 'my mother' in (45a) and *i chi'lu-hu* 'my sister' in (45b). This is the outcome expected if these verbs are applicatives formed from causatives, and not the reverse.

Although applicatives can be derived from causatives, the range of causative verbs that allow this is not known. The applicatives *na'hanãogui* and *na'klaruyi*, which occur frequently, are derived from causatives formed from intransitive predicates. It is unclear whether applicatives can be derived from causatives formed from transitive predicates. This is an area where further research is needed.

12.3.3.4 Reciprocals of causatives

Reciprocals of causatives are derived like other reciprocals, by attaching the stressed prefix *á-* to the causative verb. The result is an intransitive verb that describes reciprocal action (see 13.3.1). Some representative examples are cited below. (Primary stress is shown to help readers parse the morphemes in the verb. The verb in (47a), for instance, is parsed *um-á-na'-bubu*.)

- (47)a. **Umána'bubu** ham.
AGR.RECP.make.angry we.EXCL
 'We (excl. du.) made each other angry.'
- b. **Umána'empas** ham esta yan i amigu-hu
AGR.RECP.make.even we.EXCL already with the friend-AGR
 put todú i ha faburesi yu'.
about all the AGR contribute.to me
 'I satisfied my friend (lit. we including my friend made each other even) already for all the favors he had done to me.' (CD, entry for *na'empas*)
- c. Kão **umána'patcha** hamyu ni feggun?
Q AGR.RECP.make.touch you.DU OBL stove
 'Did you two let each other touch the stove?'

Reciprocals can be formed from causatives whether the causative verb is derived from an adjective (as in (47a-b)), an intransitive verb, or a transitive verb (47c). It is even possible for a reciprocal to be formed from a causative derived from a reciprocal. The reciprocal verb in (48) is formed from the causative *na'achatgi* 'make laugh at one another', which is itself derived from *áchatgi* 'laugh at one another', the reciprocal of *chatgi* 'laugh at', the applicative formed from the intransitive verb *châlik* 'laugh'.

- (48) **Manána'achatgi** i istudiântis.
AGR.RECP.make.RECP.laugh.at the students
 'The students are making one another laugh at one another.'

12.3.4 Differences from other transitive clauses

Even though causative clauses are transitive, they differ in some ways from other transitive clauses. One difference was discussed at the outset of this chapter: causative verbs are derived from a partly inflected predicate that agrees with the argument that would be its subject—the argument which, in the simplest case, is realized as the causative's *direct object*. This unusual agreement pattern suggests that causative clauses may be more like complex sentences than like clauses. Two more differences between causative clauses and other transitive clauses strengthen this impression.

12.3.4.1 Reflexive objects

Causative clauses can have an unusual realization when the causative verb is derived from a transitive verb with a reflexive direct object.

Chamorro has no separate morphological paradigm for reflexive pronouns (see 8.1 and 13.2.1.1). Instead, personal pronouns have reflexive and nonreflexive uses. In the second clause in (49a), for instance, the direct object is reflexive—understood as bound by the subject—and is realized by a weak pronoun, just like the nonreflexive direct object in (49b).

- (49)a. Mampus si Marikita dudus, sa' [kada
so.much UNM Marikita AGR.showy because each
 birâda ha atan **gui'** gi espehus].
return AGR.look.at her LCL mirror
 'Marikita is a flirt, because all the time she looks at herself in the mirror.' (CD, entry for *espehus*)
- b. I atgumentun-mâmi yan si Linda nigap,
the argument-AGR with UNM Linda yesterday
 esta ti ya-hu umatan **gui'**.
already not like-AGR INF.look.at her

‘After my argument yesterday with Linda, I don’t want to look at her now.’ (CD, entry for *atgumentu*)

The reflexive meaning can be made explicit by attaching the adverb *maisa* ‘self’ to the right of the verb, as in (50), but this is not required.

- (50) Ha dossuk maisa **gui’** ni sipit.
AGR poke.L self him OBL chopsticks
 ‘He poked himself with the chopsticks.’ (CD, entry for *sipit*)

In causatives formed from transitive verbs, the original verb’s internal argument is realized as an oblique (see 12.3.1). This happens even when the internal argument is reflexive, meaning that it is bound by the original verb’s external argument. In (51), the reflexive direct object of the original verb is realized as an oblique associated with the causative.

- (51) In na’fa’gãsi si Joaquin **nu guiya** nu i hapbun.
AGR make.wash UNM Joaquin OBL him OBL the soap
 ‘We (excl.) made Joaquin wash himself with soap.’

However, it is more common for the reflexive internal argument to be realized as a weak pronoun, as in (52).

- (52)a. In na’fa’gãsi **gui’** si Joaquin nu i hapbun.
AGR make.wash him UNM Joaquin OBL the soap
 ‘We (excl.) made Joaquin wash himself with soap.’
 b. In na’pula’ **gui’** i boi.
AGR make.undress him the boy
 ‘We (excl.) made the little boy undress himself.’
 c. In na’painin maisa **gui’** si Maria.
AGR make.comb.L self her UNM Maria
 ‘We (excl.) made Maria comb herself.’

Elsewhere in Chamorro, weak pronouns can serve as subjects or direct objects, but not as obliques (see 8.3). Their unexpected appearance in (52) suggests that in this context at least, a causative sentence may contain two direct objects—one that corresponds to the original verb’s subject, and another that corresponds to the original verb’s reflexive internal argument.

12.3.4.2 Wh-agreement

Wh-agreement offers support for the idea that certain causative clauses may have two direct objects.

In Chamorro, when an argument of the verb is questioned, relativized, or syntactically focused, the verb shows wh-agreement (see 22.4.1). This special agreement, which replaces the normal agreement with the subject, signals the grammatical relation of the constituent that has been questioned, relativized, or focused—henceforth, the *displaced constituent*. For instance, when the displaced constituent is the subject of a transitive verb in the realis mood, the verb shows the subject form of wh-agreement, which is realized as the infix *-um-*. When the displaced constituent is the direct object, the verb optionally shows the object form of wh-agreement, which is realized as the infix *-in-* plus nominalization of the verb.

Like other transitive verbs, causatives in the realis mood show the subject form of wh-agreement when the displaced constituent is their subject (the causer).

- (53)a. Hăyi **muna'săonăo** hăo gi planu?
 who? WH[SBJ].make.participate you LCL plan
 ‘Who included you (lit. let you participate) in the plan?’ (CD, entry for *săonăo*)
- b. I riflektan i liluk **muna'sodda'** yu' ni
 the reflector.L the metal WH[SBJ].make.find me OBL
 chalân-hu.
 road-AGR
 ‘The metal reflector caused me to find my way.’ (CD, entry for *riflekta*)
- c. I chinatkinimprendi **muna'guaguaha** mumu.
 the misunderstanding WH[SBJ].make.exist.PROG fight
 ‘Misunderstanding causes fighting (lit. makes there be fights).’ (CD, entry for *chinatkinimprendi*)

And, like other transitive verbs, they optionally show the object form of wh-agreement when the displaced constituent is their direct object—the argument that would be the original predicate’s subject. Compare (54), in which this wh-agreement is realized overtly, with (55), in which it is not.

- (54)a. Ha na'moderātu si Lillian [i **nina'maipen-ña**
 AGR make.moderate UNM Lillian the WH[OBJ].make.hot-AGR
 hănum].
 water

‘Lillian heated the water at a moderate temperature (lit. made moderate the water that she was making hot).’ (CD, entry for *moderātu*)

- b. Tāya’ tāotāo siña sumipāra [hāfa
AGR.not.exist person can WH[SBJ].separate what
nina’danña’ Yu’us.

WH[OBJ].make.be.together.L God

‘No one can separate what God has joined (lit. made joined) together.’ (NT 36)

- c. Hāyi **nina’li’e’-ña** i palāo’an ni i katta?
who? WH[OBJ].make.see-AGR the woman OBL the letter
‘Who did the woman show the letter to (lit. make see the letter)?’

- (55) Hāfa na ideha siña un na’hālum gi komiti
what? L idea can AGR make.go.in LCL committee
para i kutturan Chamorro?
for the culture.L Chamorro

‘What idea can you suggest (lit. make go in) to the committee for the Chamorro culture?’ (CD, entry for *ideha*)

However, causatives can also show the object form of wh-agreement when the displaced constituent is the oblique that corresponds to the *original predicate*’s direct object. Compare (56a), which has this optional form of wh-agreement, with (56b), which does not.

- (56)a. Hāfa **nina’li’e’-ña** i patgun palāo’an as
what? WH[OBJ].make.see-AGR the child.L female OBL
nanā-ña?
mother-AGR

‘What did the girl show her mother?’

- b. Hāfa ha na’li’i’ i patgun palāo’an si
what? AGR make.see the child.L female UNM
nanā-ña?
mother-AGR

‘What did the girl show her mother?’

The object form of wh-agreement is generally not used for obliques. Thus, the pattern in (56) reveals another way in which causative clauses seem to resemble complex sentences: the original verb’s internal argument is behaving like a direct object for the purposes of wh-agreement, even though it is not the direct object of the causative.

12.3.5 Causatives versus applicatives

The object form of wh-agreement makes another unexpected appearance in applicative clauses in which the applicative verb is derived from a transitive verb (see 11.3.2.3). The applicative verb in these clauses can show the object form of wh-agreement when the displaced constituent is the oblique that corresponds to the original verb's direct object. (This oblique is not the direct object of the applicative.) The fact that the pattern in (56) is similar raises the question of whether Chamorro causatives might be a subtype of applicative; for instance, they might be concealed applicatives similar to *nã'i* 'give' or *fa'nu'i* 'show' (see 11.5). If so, the argument of the causative that corresponds to the original verb's subject would be an applicative object—an argument different from the original verb's direct object.

There are several reasons why such a possibility might seem promising. To begin with, causatives evidently cannot be formed from applicatives derived from transitive verbs (see 12.2.2). Applicatives show the same pattern: a 'double' applicative cannot be formed from an applicative derived from a transitive verb, although one can be formed from an applicative derived from an intransitive predicate (see 11.3.1). Moreover, in many languages of the world, the same morphology is used to derive causatives, on the one hand, and applicatives, on the other. If Chamorro causatives *were* applicatives, the language could be seen as falling under a syntactic version of this typological generalization.

Gibson (1980) was the first to investigate these issues for Chamorro. She observed some systematic differences between Chamorro causatives and applicatives, and used them to argue that Chamorro causatives cannot be reduced to applicatives after all. Here are two of her arguments:

(i) Causatives differ from applicatives in their ability to occur in the antipassive. All types of applicatives in Chamorro resist being placed in the antipassive to one degree or another. Applicatives derived from intransitive predicates generally have no antipassive form (see 11.2.2.3); applicatives derived from transitive verbs can occur in the antipassive, but only in limited circumstances (11.3.2.3). Although concealed applicatives do occur in the antipassive, their antipassive has an unexpected internal argument (11.5). Causatives, on the other hand, occur freely in the antipassive, and their antipassives are completely regular (see 12.3.3.2). Antipassives of causatives have the expected internal argument—namely, the argument that would be the subject of the original, partly inflected predicate. The internal argument is typically implicit or indefinite (as in (57a)), but this is by no means required (57b). The same pattern is exhibited by the antipassives of ordinary transitive verbs (see 10.3.2).

- (57)a. Para ta chagi [manna'halum proposal
FUT AGR try AGR.INF.ANTIP.make.go.in proposal
 para X un biâhi ta'lu].
to X one time again
 'We (incl.) are going to try to submit (lit. make go in) a proposal to X one more time.' (from an e-mail message)
- b. Ha hahassu i ma'estru [muna'hanão nu
AGR think.PROG the teacher AGR.INF.ANTIP.make.go OBL
 atyu na istudiânti para i gima'-ñiha].
that L student to the house-AGR
 'The teacher is thinking of sending (lit. making go) that student home.'

(ii) Causatives ultimately *differ* from applicatives in their wh-agreement pattern. Recall that both causatives and applicatives can show the object form of wh-agreement when the displaced constituent is an oblique corresponding to the original verb's direct object (see above and 22.4.1.2). However, an applicative cannot show the object form of wh-agreement when the displaced constituent is its direct object—the argument that has been added. This ban is in force for all types of applicatives, including concealed applicatives (see 11.2.2.3, 11.3.2.3, and 11.5). Causatives do not have this curious restriction. They can show the object form of wh-agreement when the displaced constituent is their direct object—the argument that would be the subject of the original, partly inflected predicate. See (54) and the following.

- (58)a. Malângu yu' lão bai chagi i nina'siñã-hu.
AGR.sick I but AGR try the WH[OBJ].make.possible-AGR
 'I am sick but I will try my best (lit. what I can make possible).'
 (CD, entry for *lão*)
- b. Hâyî na pilotu nina'bastâm-mu?
who? L pilot WH[OBJ].make.quit-AGR
 'Which pilot did you make quit?'

These differences led Gibson to conclude that causatives should not be analyzed as a type of applicative.

12.4 Special uses of the causative prefix

Although the main function of the causative prefix *na'* is to derive causative verbs, this prefix also has three more specialized uses.

12.4.1 The verb *na'lågu*

Chamorro has a transitive verb, *na'lågu* 'cook', which appears to be a causative derived by combining *na'-* with a root (*lågu*) that does not otherwise occur in the language.⁵ Like other causatives, *na'lågu* has an antipassive form that involves shifting the primary stress from its normal location to *na'-*. Compare the passive form of *na'lågu* in (59a) with its antipassive form in (59b). (The location of primary stress is revealed by reduplication for the progressive aspect; see 2.2.1.1.1).

- (59)a. Manlamas todū i gellai sa' ti
AGR.rotten all the vegetable because not
mana'lålagu.
AGR.PASS.cook.PROG
 'The vegetables are rotten because they are not being cooked.' (CD, entry for *lamas*)
- b. Pinat gi kusinan sanhiyung ni
mostly LCL kitchen.L DIR.outside COMP
mannana'lågu hami.
AGR.ANTIP.cook.PROG we.EXCL
 'We (excl.) mostly cook in the outdoor kitchen.' (CD, entry for *kusina*)

Na'lågu does not behave like a causative in other respects; for instance, its apparent root *lågu* never shows agreement with the internal argument. This suggests that it may have originated historically as a causative, but is now simply an unanalyzable verb with an exceptional antipassive form.

12.4.2 Evaluative adjectives

Chamorro has evaluative adjectives that are derived by attaching *ná'-* (the stressed form of *na'-*) to an intransitive verb or adjective. The most common derived adjectives of this type are listed below.

(60) PREDICATE		DERIVED ADJECTIVE	
chålik	'laugh'	ná'chalik	'funny'
ma'å'ñão	'afraid'	ná'ma'a'ñão	'scary'
ma'åsi'	'have pity'	ná'ma'si'	'pitiful'

⁵ Chamorro does have two words with the form *lågu*. One is a directional whose meaning is 'west (in Saipan), north (in Guam and Rota), towards the ocean'; the other is a noun that names a type of fish ('sweetlips'). Neither is a plausible candidate for the root from which *na'lågu* 'cook' is derived.

maguf	‘happy’	ná’maguf	‘pleasant’
mamâhlão	‘ashamed’	ná’mamahlão	‘shameful’
manman	‘astonished’	ná’mamman	‘astonishing’
o’sun	‘bored’	ná’o’sun	‘boring’
piniti	‘hurt, sad’	ná’piniti	‘hurtful, sad’

These forms probably originated as antipassive forms of causatives (e.g. *ná’chalik* ‘make (someone) laugh’, *ná’maguf* ‘make (someone) happy’), and can still be analyzed as antipassives today. In addition, they have a separate analysis as adjectives, as can be seen from the following:

Like other adjectives but unlike most antipassives, the derived forms in (60) can combine with degree morphemes such as *gof* ‘very’, *sen* ‘extremely, most’, and so on (see 25.2.2).

- (61)a. **Gof** na’ma’anhã esti i haguhih âguas.
AGR.very scary this the horn-eyed.ghost.crab
‘This horn-eyed ghost crab is very scary.’ (CD, entry for *haguhih âguas*)
- b. Gai mudu si Juan gi halum tâotão
AGR.have behavior UNM Juan LCL inside.L person
ya **sen** na’mamahlão.
and.then AGR.extremely shameful
‘Juan has an attitude in front of people that is so embarrassing.’
(CD, entry for *mudu*)

Further, the derived forms in (60) show agreement like adjectives, not like antipassives of causatives. In the realis mood, sg./du. agreement is indicated with no special morphology, not with the infix *-um-* (see (62a)). Note that the original verb or adjective does not show agreement at all. Thus, the plural number affix in (62b) and (62c) must precede *na’-*; it cannot follow *na’-*, even if more than two individuals feel pity (in (62b)) or feel hurt (in (62c)) (see the discussion in 12.3.3.1).

- (62)a. Na’ma’anhã gi halum tânu’ sa’ bula buregu’.
AGR.scary LCL inside.L land because AGR.many ghost
‘It’s scary in the boonies because there are many ghosts.’ (CD, entry for *buregu*)
- b. I militât ha diliba nengkanu’ para i **manna**’ma’si’
the military AGR.deliver food to the AGR.pitiful
na tâotão.
L person

‘The military delivers food to the needy people.’ (CD, entry for *diliba*)

- c. I *dispresiu* na *ineppin* Rita **manna’piniti**.
 the bitter L *NMLZ.answer.L* Rita *AGR.hurtful*
 ‘Rita’s bitter remarks are hurtful.’ (CD, entry for *dispresiu*)

Finally, these forms have the word order of adjectives when they occur within the noun phrase: they typically precede the head noun, as (63) shows (see 7.3.2).

- (63)a. Måttu un **na’maguf** na *nutisia*.
 AGR.arrive a *pleasant* L *news*
 ‘A piece of good news came.’ (CD, entry for *nutisia*)
 b. Yanggin **na’piniti** na *istoria*, ha *na’gagai*
 if *sad* L *story* *AGR.make.have*
 sentimentu *yu’*.
 feeling.PROG *me*
 ‘When it is a sad story, it makes me have feelings.’ (CD, entry for *sentimentu*)

All this suggests that, in addition to forming antipassives of causatives, the stressed prefix *na’-* can be used to derive evaluative adjectives from intransitive verbs or adjectives. This use is most likely not productive.

12.4.3 The conjunction *muna’*

Chamorro has a word *muna’* (with a variant *mina’*) that means roughly ‘the reason that, because, is why’. *Muna’* can be called a conjunction with a highly restricted distribution. It occurs between a constituent that occurs at the left edge of the clause and names a cause or reason, and the rest of the clause, which describes the situation caused. An example is cited below.

- (64) Atyu **muna’** *guaguan* sa’ *duråpbli*.
 that *is.why* *AGR.expensive* *because* *AGR.lasting*
 ‘It is expensive because it is lasting.’ (CD, entry for *duråpbli*)

It is possible to analyze the combination of *muna’* and the adjective following it in (64) as a causative verb (*na’guaguan* ‘make expensive’) that shows the subject form of wh-agreement: *muna’guaguan*. This suggests an etymology for *muna’*: it may have originated historically as the affixal part of realis causative verbs that showed wh-agreement because their subject—the

causer—had been syntactically focused. The affix combination *mu-na*’- was later reanalyzed as a separate word.

This reanalysis is now complete. Today, *muna*’ occurs as an independent word that need not form part of a causative verb. This can be seen from the following:

(i) A verb or adjective that occurs right after *muna*’ can be a fully inflected predicate; it does not have to look like the partly inflected predicate from which a causative is derived. This verb or adjective can be in the realis mood, and can show full (as opposed to partial) agreement with the subject. In (65a), the adjective *lakulakung* ‘having phlegm’ shows realis sg. agreement; in (65b), the passive form of *atan* ‘look at, watch’ shows realis pl. agreement.

- (65)a. I chipa hão todũ muna’ **mulakulakung** lu’lo’-mu.
the smoking you all is.why AGR.phlegmy cough-AGR
 ‘It is the smoking that makes you cough phlegm (lit. is why your cough has phlegm).’ (CD, entry for *lakulakung*)
- b. I mina’gas-ñiha muna’ **manma’a’atan** siha
the high.position-AGR is.why AGR.PASS.look.at.PROG they
hulu’.
up
 ‘Their high position is why they are being looked up to.’ (CD, entry for *mina’gas*)

In (66), the transitive verb *padesi* ‘suffer’ shows agreement with the person-and-number forms.

- (66) Tãya’ fiet na dibusion para si Yu’us
AGR.not.exist faithful L devotion to UNM God
 muna’ **ta** padesi atdit na pridikamentu.
is.why AGR.suffer.PROG severe L crisis
 ‘There is no faithful devotion to God; that is the reason we (incl.) are suffering this serious crisis.’ (CD, entry for *pridikamentu*)

The verb *ya*- ‘like’ in (67) is one of the verbs that exceptionally show agreement with the subject as if they were nouns (see 14.4). It too can occur right after *muna*’.

- (67) I minaggim kurason-mu muna’ **ya-hu** hão.
the NMLZ.soft-hearted.L heart-AGR is.why like-AGR you

‘Your soft-heartedness caused me to like you.’ (CD, entry for *minaggim*)

(ii) Unlike the causative prefix *na’-*, *muna’* does not have to be attached to a verb or adjective. It occurs right before an inner topic in (68a), and right before negation plus an auxiliary in (68b).

- (68)a. Esti muna’ **i** **taotão** **Saipan** ma atyik si San
this is.why the person.L Saipan AGR choose UNM San
 Isidro.
Isidro
 ‘This is why the people of Saipan chose San Isidro.’ (Cooreman 1983: 161)
- b. I mina’lak kandet-mu muna’ **ti** **siña** hu li’i’
the NMLZ.bright.L light-AGR is.why not can AGR see
 hão.
you
 ‘The brightness of your headlights was the reason I could not see you.’ (CD, entry for *mina’lak*)

(iii) Finally, the constituent that precedes *muna’* does not have to be the sort of constituent that could be the subject of a causative. In (66) above, *muna’* is preceded by a clause that looks like a main clause (not an embedded clause). In (69), *muna’* is preceded by a prepositional phrase.

- (69) **Put** **hamyu** muna’ mattu yu’ mągi.
because you.PL is.why AGR arrive I to.here
 ‘I came here because of you (pl.).’ (CD, entry for *muna’*)

12.5 Further reading

Gibson (1980) gives an in-depth investigation of Chamorro causatives in the Relational Grammar framework. Later works that build on her research on Chamorro include Baker (1985), Gibson and Raposo (1986), Baker (1988), and Chung (2017).

REFLEXIVES AND RECIPROCAL

Reflexive clauses involve ordinary verb forms combined with personal pronouns; no special reflexive morphology is required. Nonetheless, pronouns in their reflexive use are treated differently from other types of pronouns. Reciprocal clauses involve a derived intransitive verb that contributes the reciprocal meaning.

13.1 Background

The participants in the event or state described by a predicate are typically different individuals. The clause *Rosa criticized Juan*, for instance, describes a situation in which the criticizer (Rosa) is different from the one criticized (Juan). In reflexive clauses and reciprocal clauses, the link between individuals and their function as participants is more complex. A reflexive clause describes an event or state in which the same individual takes on more than one participant role. For instance, the reflexive clause *Rosa criticized herself* describes a situation in which Rosa is both the criticizer and the one criticized. A reciprocal clause describes a set of events or states involving individuals whose participant status changes from event to event, in such a way that each individual ends up exchanging participant roles with the other(s). For instance, the reciprocal clause *Rosa and Juan criticized each other* describes two criticizing events involving Rosa and Juan: one in which Rosa is the criticizer and Juan is the one criticized, and another in which Juan is the criticizer and Rosa is the one criticized.

Languages often signal that a clause is reflexive or reciprocal by employing special verb morphology or special pronoun forms. Chamorro takes a different approach to reflexive clauses than to reciprocal clauses. Reflexive clauses look much like ordinary clauses: they are formed from ordinary verbs combined with personal pronouns, and do not require special reflexive morphology. Nonetheless, Chamorro grammar treats pronouns in their reflexive use differently from other types of pronouns. Reciprocal clauses are intransitive: they are formed from a derived intransitive verb that contributes the reciprocal meaning.

13.2 Reflexive clauses

13.2.1 Form

13.2.1.1 The reflexive use of personal pronouns

Chamorro has no separate set of reflexive pronouns. Instead, the language's three sets of personal pronouns have a reflexive use. These pronouns can be used just like reflexive pronouns, to refer to individuals that take on more than one participant role in the event or state named by the predicate. In this reflexive use, a pronoun can have the same intended reference as some more prominent noun phrase in the same clause. Such a pronoun is said to be *bound* by the more prominent noun phrase, which is called its *antecedent* (see 26.3).¹

For instance, a pronoun that serves as a direct object or oblique, or its possessor, can be bound by the subject of the same clause. Consider the reflexive clauses below. (In this section, null pronouns that serve as direct objects or possessors are represented by empty sets of brackets; bound pronouns and their antecedents are underlined in the English translation.)

- (1) a. Yanggin ti ta fa'na'an hit Chamorro ...
 if not AGRname us.INCL Chamorro
 'If we (incl.) didn't name ourselves Chamorro...' (from a conference presentation)
- b. Sigi i lahi ha faisin i asaguã-ña [].
 AGR.keep.on the man AGRask the spouse-AGR
 'The man kept asking his wife.' (Cooreman 1983: 77)

In (1a), the direct object, the 1 du./pl. incl. weak pronoun *hit*, is bound by the null pronoun subject. In (1b), the null pronoun possessor of the direct object is bound by the subject *i lahi* 'the man'.

In addition, a personal pronoun that serves as an oblique, or its possessor, can be bound by the direct object of the same clause. In (2a), the 3 sg. independent pronoun *guiya*, which is the object of the preposition *kontra* 'against', is bound by the direct object *si Miguel*. In (2b), the null pronoun possessor of the oblique is bound by the direct object *i famagu'un* 'the children.'

- (2) a. Ti siña in prutehi si Miguel kontra guiya.
 not can AGRprotect UNM Miguel against him

¹ Because the subject is the most prominent noun phrase within the clause, the bound pronoun in a reflexive clause cannot be the subject.

- ‘We (excl.) can’t protect Miguel from himself.’
 b. Chuli’i na’-ñiha [] i famagu’un.
bring.for food-AGR the PL.child
 ‘Bring the kids some food (lit. their food).’ (CD, entry for *na’-*)

The rest of this discussion concentrates on reflexive clauses in which the pronoun is bound by the subject. These are more common, and syntactically more distinctive, than clauses in which the pronoun is bound by the direct object (but see 13.2.2.2).

The three sets of personal pronouns generally have the same form and distribution in their reflexive use as in nonreflexive uses. The weak pronouns (see 8.3) occur as direct objects, as in (1a) and (3).

- (3) a. Mayulang i pesadót anai ha talang gui’ si
AGR.PASS.break the scale when AGRweigh him UNM
 Pedro.
Pedro
 ‘The scale broke when Pedro weighed himself.’ (CD, entry for *pesadót*)
 b. Éga’ga’ ya un na’gãsgas hão.
get.busy and.then AGRmake.clean you
 ‘Get busy and (you) clean yourself up.’ (CD, entry for *éga’ga’*)
 c. Todu ha’ manma’â’ñão pumunu’ siha.
all EMP AGR.afraid INF.kill them
 ‘All are afraid to kill themselves.’

The independent pronouns (see 8.2) occur as obliques that are in the oblique or local case (see (4a-b)), or serve as objects of prepositions (see (2a) and (4c)).

- (4) a. Ilek-ña si Orasima’-san nu guiya ...
say-AGR UNM Orasima’-san OBL him
 ‘Orasima’-san said to himself...’ (from a tape-recorded narrative)
 b. Kada pãtgun ma’â’ñão giya guiya.
each child AGR.afraid LCL him
 ‘Each child is afraid of himself.’
 c. Manápatti ni i salãppi’ intri siha.
AGR.RECP.divide OBL the money among them
 ‘They divided the money amongst themselves.’ (CD, entry for *ápatti*)

The independent pronouns also occur as syntactically focused constituents at the left edge of the clause.

- (5) a. Put guǎhu ha' na mamǎhlǎo yu'.
about me EMP COMP AGR.ashamed I
 'It's myself that I'm ashamed of.'
- b. Guiya ha' i chi'lu-hu ha fachuchu'chu'i.
him EMP the sibling-AGR AGR work.for.PROG
 'It's himself that my brother is working for.'

The null pronouns (see 8.4.1) occur as possessors.

- (6) a. Kǎo umátungu' ha' hamyu put i
Q AGR.RECP.know EMP you.DU about the
 disision-miyu []?
decision-AGR
 'Did the two of you agree about your decision?' (CD, entry for *umátungu'*)
- b. Mama'tinas si Denise baketa-ña [].
AGR.ANTIP.make UNM Denise ramrod-AGR
 'Denise made his own ramrod.' (CD, entry for *baketa*)
- c. Mampus agriesão na palão'an sa' ha atotga
so.much risky L woman because AGR dare
 para u kontra si tatã-ña [].
FUT AGR challenge UNM father-AGR
 'She is too risky a lady because she dares to (lit. dares that she should) run against her own father.' (CD, entry for *asaguãni*)

There is just one surprise in this distribution. In general, personal pronouns can be freely pronounced or unpronounced as long as they are not cross-referenced by agreement in person (see 8.4.2 and 8.4.3). Pronouns in their reflexive use do not have the same freedom. When a pronoun is used as a reflexive but is not cross-referenced by agreement in person, it *must* be realized as a weak pronoun or independent pronoun; it cannot be null. For instance, direct object pronouns are not cross-referenced by agreement. These pronouns ordinarily can be null or overt (as shown in (7a)), but in their reflexive use, they must be overt (7b-c).² The two uses are contrasted in the complex sentence in (7d): the (nonreflexive) direct object of *fá'nu'i*

² Note that (7c) is grammatical as a nonreflexive clause that means 'I already fixed him/her up' or 'I already fixed it up'.

‘show’ is a null pronoun, but the reflexive direct object of *bira* ‘turn’ is a weak pronoun.

- (7) a. Kão un arerekla (gui’) esta?
Q AGR fix.PROG her already
 ‘Have you already fixed her up?’
 b. Hu arerekla yu’ esta.
AGR fix.PROG me already
 ‘I’ve already fixed myself up.’
 c. *Hu arerekla [] esta.
AGR fix.PROG already
 (‘I’ve already fixed myself up.’)
 d. Pues i haggan ... ha bira gui’ ya ha
so the turtle AGR turn him and.then AGR
fa’nunu’i ha’ [] ni tatalo’-ña [].
show.PROG EMP OBL back-AGR
 ‘Then the turtle...returned (lit. turned himself) and was just showing him (i.e. Pedro) his back.’ (Cooreman 1983: 103)

(Pronouns that are cross-referenced by agreement in person must be null, even in their reflexive use; see the reflexive possessors in (6).)

The fact that pronouns in their reflexive use must be overt when they are not cross-referenced by agreement in person has consequences for the pronoun forms used for inanimates. Ordinarily, null pronouns are the only pronoun forms that can refer to inanimates. Weak pronouns and independent pronouns refer only to humans or other animates that have been personified, such as the turtle in (7d) (see Chapter 8). But when a direct object pronoun in its reflexive use refers to an inanimate, it must be overt, so a weak pronoun is employed instead. The sentences in (8) illustrate this for the 3 sg. weak pronoun *gui*’ (glossed here as ‘it’).³

- (8) a. Espesiatmenti sa’ todu tingu’ ha tututuhun
especially because all knowledge AGR begin.PROG
gui’ gi gima’.
it LCL house
 ‘Especially because all knowledge begins (itself) in the home.’
 (from a conference presentation)

³ The 3 sg. weak pronoun can routinely refer to inanimates when it used as a reflexive. The 3 pl. weak pronoun *siha* has a similar use, but that use seems less frequent.

- b. Ha rãspa i bas i karetã-hu anai ha bira gui'
AGR side-swipe the bus the car-AGR when AGR turn it
 hãlum gi iskinan chãlan.
inside LCL corner.L road
 'The bus side-swiped my car when it turned (itself) into the corner
 of the road.' (CD, entry for *rãspa*)
- c. Ha na'ón gui' i tivi.
AGR make.on it the T.V.
 'The T.V. turned itself on.'

What enables *gui'* to refer exceptionally to an inanimate in (8) is the fact that this pronoun is being used as a reflexive. More precisely, it is bound by some more prominent noun phrase in the same clause—here, the subject. Note that *gui'* could not refer to an inanimate if it was bound by some more prominent noun phrase in a *different* clause; then, a null pronoun would be used instead. The contrast can be seen in the complex sentence in (9), which contains two inanimate pronouns that are bound by the subject of the main clause, *i petta* 'the door'. The first pronoun also occurs in the main clause, as the direct object of *baba* 'open'. Since it is reflexive (i.e. bound by the subject of the clause in which it occurs), it is realized as the weak pronoun *gui'*. The second pronoun occurs in the adverbial clause, as the direct object of *huchum* 'close'. Since it is in a different clause from its antecedent, it must be null.

- (9) Ha baba gui' i petta dispues di [hu huchum (**gui*)].
AGR open it the door after PRT AGR close it
 'The door opened itself after I closed it.'

In short, pronouns in their reflexive use have a distribution that is similar to other personal pronouns, but not the same.

13.2.1.2 Optional reflexive morphology

Although Chamorro has no separate set of reflexive pronouns, it has two optional morphemes that can be used to indicate that a pronoun is being used as a reflexive. These morphemes are *maisa* 'alone, by oneself' and *mismu* 'same, very, own'.

13.2.1.2.1 *Maisa*

The adjective *maisa* 'alone, by oneself' serves as a predicate in (10).

- (10) Hu yuti' i às sa' mamaisa ha' gi kattâk-ku.
AGR.discard the ace because AGR.alone.PROG EMPLCL card-AGR
 'I dropped the ace because it was alone in my cards.' (CD, entry for *mâmaisa*)

Maisa has two other uses of note. First, it can serve as an adverb that occurs immediately after the verb or at the right edge of the clause, marked with the pre-head form of the linker (see 7.3.1 and 18.4). Some examples are cited below.

- (11)a. Si Henorah masakâda na palão'an sa'
UNM Henorah brave L woman because
 humânão para i taddung na halumtânu' na **maisa**.
AGR.go to the deep L forest L alone
 'Henorah is a brave woman because she just went to the deep forest by herself.' (CD, entry for *masakâda*)
- b. Si Pedro mampus matâla' kumânta na
UNM Pedro so.much AGR.confident AGR.INF.sing L
maisa gi iskuela pat maseha mânu na lugât.
alone LCL school or at.all anywhere L place
 'Pedro is very self-confident in singing by himself at the school or anywhere.' (CD, entry for *matâla'*)

Second, *maisa* can indicate that an overt pronoun is being used as a reflexive. When an independent pronoun is in its reflexive use, *maisa* occurs immediately after it, marked with the pre-head form of the linker (see 7.3.1). This use, which is not particularly common, is illustrated below. (Compare (12) with (2a), which does not have *maisa*.)

- (12) Ti siñain prutehi si Miguel kontra guiya na **maisa**.
not can AGR.protect UNM Miguel against him L self
 'We (excl.) can't protect Miguel from himself.'

When a weak pronoun is in its reflexive use, *maisa* immediately follows the verb, and the verb is marked with the post-head form of the linker (which is realized as *-n* when the verb ends in a vowel and unpronounced otherwise).

- (13)a. Hu laimin **maisa** yu' anai ti mâttu yu' gi hunta.
AGR.trick.L self me when not AGR.arrive I LCL meeting
 'I tricked myself when I did not show up at the meeting.' (CD, entry for *laimi*)

- b. Ha dossuk **maisa** gui' ni sipit.
AGR poke.L self him OBL chopsticks
 'He poked himself with the chopsticks.' (CD, entry for *sipit*)
- c. Manhuyung i Hetmana siha ya ma ofresin
AGR.go.out the Sister PL and.then AGR offer.L
maisa siha para siha u fanmapunu' ...
self them FUT they AGR AGR.PASS.kill
 'The Sisters came out and they offered themselves for them to be the ones who would be killed...' (Ginen I Obispo March 2, 2003)

In such cases, the verb and *maisa* form a phonological word, as can be seen from reduplication for the progressive (see 2.2.1.1).

- (14)a. Hãyi chumatgin **mamaisa** gui'?'
who? WH[SB].laugh.at.L self.PROG him
 'Who is laughing at himself?'
- b. Mientras manayuyuda ottru tâotão, ma ayudan
while AGR.ANTIP.help.PROG other people AGR help.L
mamaisa siha.
self.PROG them
 'While they were helping other people, they were helping themselves.' (Ginen I Obispo July 7, 2002)

This last use of *maisa* is reasonably frequent. But more typically, weak pronouns in their reflexive use are accompanied by no reflexive morphology at all; see (3) and (8).

Some speakers observe that *maisa* tends to appear in reflexive clauses when the predicate is more typically nonreflexive. For instance, *maisa* is more likely to occur when the predicate of the reflexive clause is *bota* 'vote', as opposed to *fa'gãsi* 'wash', because voting for oneself is a less typical, less frequent, less ordinary occurrence than washing oneself. These comments suggest that *maisa* implicitly contrasts the reflexive argument with other potential alternatives; e.g. when voting, one might have voted not for oneself but for someone else.

Maisa can appear when the pronoun in its reflexive use refers to an inanimate. Although this use of *maisa* is relatively infrequent, it does occur.

- (15)a. Ti hu tungu' hãfa taimanu na ha 'paste' **maisa** gui'
not AGR know how? COMP AGR paste self it
 esti na litrãtu.
this L photo

‘I don’t know how this photo pasted itself [in the message].’ (from an e-mail message)

- b. Ha na’ón **maisa** gui’ i tivi.
AGR make.on self it the T.V.
 ‘The T.V. turned itself on.’

One speaker commented that he prefers to use *maisa* in reflexive clauses like (15) when the event is accidental, or caused by something unknown or not made explicit.⁴

13.2.1.2.2 *Mismu*

The adjective *mismu* ‘same’ occurs within the noun phrase, before the head noun, which is optionally marked with the pre-head form of the linker.

- (16)a. Esta ginin tumohgi gui’ guihi **mismu** na kantun
already IMPERF AGR.stand he that.LCL same L edge.L
tâsi.
ocean
 ‘He had already stood on that same beach.’ (*Ginen i Obispo* April 29, 2013)
- b. Guaha siha salâppi’ lokkui’ gi **mismu** iskuela.
AGR.exist PL money also LCL same school
 ‘There is also money in the same schools.’ (Cooreman 1983: 153)

Mismu can also serve as an emphatic reflexive, meaning ‘(by) oneself, (the) very (one)’. Then it typically follows the noun phrase it modifies.

- (17)a. Mâttu i hagan Herodihas **mismu** gi giput.
AGR.arrive the daughter.L Herodias same LCL party
 ‘The daughter of Herodias herself came in to the party.’ (NT 71)
- b. Hita ha’ **mismu** muna’guaguaha chinatsaga.
we.INCL EMP same WH[SBJ].make.exist.PROG suffering
 ‘We (incl.) ourselves are the ones who create (our own) sufferings.’
 (CD, entry for *chinátsaga*)

⁴ The fact that *maisa* can appear even with reflexive pronouns that refer to inanimates suggests that it is not a marker of perspective or logophoricity (see Charnavel and Sportiche 2016).

Finally, *mismu* can signal that a null possessor pronoun is being used as a reflexive. In such cases, *mismu* usually occurs before the possessed noun, as shown below.

- (18)a. Adahi na un bona unu kontra i pumalu gi **mismu**
careful COMP AGRfavor one against the others LCL own
 familiâm-mu [].
family-AGR
 ‘Be careful lest you favor one against the others in your own family.’ (CD, entry for *bona*)
- b. Fina’ñagui i patgun ni **mismu** anineng-ña [].
AGR.PASS.scare the child OBL own shadow-AGR
 ‘The child is scared by her own shadow.’ (CD, entry for *anining*)
- c. Ha traiduti i **mismu** che’lu-ña [].
AGRbetray the own sibling-AGR
 ‘She betrayed her own sibling.’ (CD, entry for *traiduti*)

This last use of *mismu* is reasonably frequent. But more typically, a reflexive possessor pronoun is accompanied by no reflexive morphology at all; see (6) and (7d).

13.2.2 Reflexive clauses versus other clauses

Despite the fact that reflexive clauses often contain no reflexive morphology, they are treated differently from other clauses when the pronoun being used as a reflexive (henceforth, the *reflexive*) is the direct object or a possessor of the direct object. 13.2.2.1 describes how reflexive clauses interact with the restrictions on information packaging; 13.2.2.2 deals with the structure of causatives derived from reflexive clauses.

13.2.2.1 Information packaging

Reflexive clauses are treated differently from other transitive clauses by the restrictions on information packaging discussed in Chapter 16.

Chamorro has a person-animacy restriction that blocks transitive clauses from having a direct object that is higher than the subject on the person-animacy hierarchy (see 16.2). This restriction prevents clauses from having an animate direct object but an inanimate subject; it also prevents clauses from having an animate pronoun as direct object but a nonpronoun as subject. Direct object pronouns that are reflexive are exempt from this restriction: a transitive clause can have a reflexive direct object even when the subject is a nonpronoun. This exemption is in force whether or not the reflexive morpheme *maisa* also appears, as can be seen from (19) and (20).

- (19)a. Sessu ha riferi gui' gi Bipblia si pãli'.
often AGR refer him LCL Bible UNM priest
 'The priest often refers himself to the Bible.' (CD, entry for *riferi*)
- b. Pues ha bira gui' i haggan ya kumãti.
then AGR turn him the turtle and.then AGR.cry
 'Then the turtle turned (himself) and cried.' (Cooreman 1983: 103)
- c. Ha gosa gui' i patgun ni mângga ya
AGR enjoy him the child OBL mango and.then
 nina'masisinik.
AGR.PASS.make.defecate.PROG
 'The child overindulged himself with the mangos and he's having diarrhea.' (CD, entry for *gosa*)
- (20) Ha disponin **maisa** gui' i patgun sin i
AGR manage.L self him the child without the
 aturidât nanã-ña.
authority.L mother-AGR
 'The child managed himself without his mother's authorization.'
 (CD, entry for *disponi*)

Reflexive clauses otherwise obey the person-animacy restriction: they cannot have an animate direct object but an inanimate subject, for instance. The reflexive clause in (21) is ungrammatical because it violates this requirement, even though the direct object contains a reflexive possessor.

- (21) *Ti ha apãpasi i espitât i infitmerã-ña [] siha.
not AGR pay.PROG the hospital the nurse-AGR PL
 ('The hospital is not paying its nurses.')

The contrast between (19-20) and (21) reveals that reflexive clauses are not generally exempt from the person-animacy restriction. Instead, for whatever reason, a reflexive direct object does not count as a pronoun for the purposes of the person-animacy hierarchy. Recall (from 13.2.1.1) that pronouns in their reflexive use have a slightly different distribution from other personal pronouns. The fact that reflexive pronouns are ignored by the person-animacy restriction is further evidence that they differ syntactically from other pronouns.

Chamorro has a separate restriction that bans transitive clauses in which the subject is third person dual or plural but not a pronoun (see 16.3). This third plural restriction does not affect transitive clauses that contain a reflexive direct object or a reflexive possessor of the direct object. A clause with a

reflexive direct object can have a subject that is third person dual or plural, even when this subject is a nonpronoun, as in (22).

- (22)a. Ma fakiki siha si Dona yan si Dick ni
AGR indulge them UNM Dona and UNM Dick OBL
 chandiha.
watermelon
 ‘Dona and Dick indulged themselves in watermelon.’ (CD, entry for *fakiki*)
- b. Ma pripåpara siha i familianTuho’ para i
AGR prepare.PROG them the family.L Tuho’ for the
 inetnun-ñiha [].
meeting-AGR
 ‘The Tuho’ families are preparing (themselves) for their reunion.’
 (CD, entry for *pripåpara*)

A clause that has a reflexive possessor within the direct object also evades the third plural restriction. See (23).

- (23)a. Ma na’påkpak kannai-ñiha [] i aodensia.
AGR make.clap hand-AGR the audience
 ‘The audience clapped their hands.’ (CD, entry for *aodensia*)
- b. Ma munton i lakulakung magågun-ñiha [] i famagu’un
AGR bundle the dirty.L clothes-AGR the PL.child
 sa’ para u fanmafa’gåsi.
because FUT AGR AGR.PASS.wash
 ‘The children put all their dirty clothes in a pile for the laundry.’
 (CD, entry for *lakulakung*)
- c. Ma lasgui i lalåhi i machettin-ñiha [].
AGR sharpen the PL.boy the machete-AGR
 ‘The boys sharpened their machetes.’

A clause that has a reflexive possessor within the possessor of the direct object, as in (24), evades the restriction as well.

- (24) Ma paini i gapitulun i famagu’un-ñiha [] i
AGR comb the hair.L the PL.child-AGR the
 famalåo’an.
PL.woman
 ‘The women combed their children’s hair.’

The antecedent of the reflexive in all of these clauses is the subject. In fact, the antecedent must be the subject, given that the subject is the only noun phrase in the clause that is more prominent than the direct object. This reveals that the third plural restriction is sensitive to the character of the direct object as well as the subject: it specifically bans transitive clauses in which (i) the subject is third person dual or plural, but not a pronoun and (ii) the reference of the direct object is *independent* from the reference of the subject. It makes no difference whether reflexive morphology is present—in fact, no reflexive morphology at all appears in (22–24). What matters is that the direct object or its possessor is bound by a more prominent noun phrase within the same clause.

13.2.2.2 Causatives

Reflexive direct objects are also distinguished from other direct objects in the formation of causatives.

Causatives are transitive verbs derived by adding the prefix *na'*- to a partly inflected verb or adjective (see Chapter 12). These verbs name the event of causing the event or state described by the original verb or adjective. Causative verbs have an additional argument that names the causer and is realized as their subject.

In a causative clause, the arguments of the original predicate are reconfigured as arguments of the causative verb (see 12.3.1). The argument that would have been the subject of the original predicate is reconfigured as the direct object of the causative; all other arguments are reconfigured as obliques. If the original predicate is a transitive verb, its internal argument—the argument that would have been its direct object—is reconfigured as an oblique, and occurs in the oblique case if it is a noun phrase. Compare the transitive clause in (25a) with the causative clause in (25b).

- (25)a. Hu fa'gâsi i na'yan.
 AGR wash the dishes
 'I washed the dishes.'
- b. Ha na'fa'gâsi yu' nu i na'yan si nanâ-hu.
 AGR make.wash me OBL the dishes UNM mother-AGR
 'My mother made me wash the dishes.'

The situation is different when the original predicate is a transitive verb with a reflexive direct object—more precisely, a transitive verb whose internal argument is reflexive, and whose external argument is the reflexive's antecedent (see 12.3.4.1). The reflexive direct object ought to be reconfigured as an oblique argument of the causative, and realized as an independent

pronoun in the oblique case. Some speakers allow this. But more usually, the reflexive is realized as a weak pronoun; it takes the form that reflects its function as the original verb's direct object. This pattern occurs whether or not reflexive morphology is present, as can be seen from the following.

- (26)a. In na'fa'gâsi gui' si Rita ni hapbun.
AGR make.wash her UNM Rita OBL soap
 'We (excl.) made Rita wash herself with soap.'
- b. Hu na'pula' maisa gui' i neni sin i
AGR make.undress.L self him the baby without the
ayudu-hu.
help-AGR
 'I made the baby undress himself without my help.'
- c. In na'bira siha tâtti i famagu'un Hapon.
AGR make.turn them back the PL.child Japan
 'We (excl.) made the children turn (themselves) back to Japan.'

The antecedent of the reflexive in these examples is the direct object of the causative, which is the original verb's external argument (e.g. *si Rita* in (26a)). When the antecedent is itself a pronoun, only one of the two (identical) pronoun forms is realized, because weak pronouns do not co-occur with other weak pronouns (see 8.3). See (27).

- (27)a. Ha na'tarabira yu' i mediku.
AGR make.turn.over me the doctor
 'The doctor let me turn myself over.'
- b. Ha na'fa'gâsin maisa ham ni hapbun si Rita.
AGR make.wash.L self us.EXCL OBL soap UNM Rita
 'Rita made us (excl.) wash ourselves with soap.'
- c. Kâo hâgu muna'chatgin maisa siha?
Q you WH[SBJ].make.laugh.at.L self them
 'Was it you who made them laugh at themselves?'

Otherwise, if some constituent besides the original verb's internal argument is reflexive, or if the antecedent of the reflexive is not the original verb's external argument, then the arguments are reconfigured in the usual way. For instance, when a causative is formed from a transitive verb whose internal argument contains a reflexive possessor, the internal argument is reconfigured as an oblique argument of the causative, as in (28).

- (28)a. In na'baba i palão'an ni malitã-ña [].
AGR make.open the woman OBL luggage-AGR
 'We (excl.) made the woman open her luggage.'
- b. In na'po'lu nu i kosas-ñiha [] i famagu'un gi
AGR make.put OBL the thing-AGR the PL.child LCL
 halum kahita.
inside.L box
 'We (excl.) made the children put their things in the box.'

When a causative is formed from a transitive verb whose internal argument is a pronoun, but the pronoun's antecedent is the subject of the causative (the causer), the internal argument is reconfigured as an oblique argument of the causative. See (29).

- (29) Ha na'kontra si Maria si Juan nu guiya.
AGR make.against UNM Maria UNM Juan OBL her
 'Maria turned Juan against her.'

It is unclear exactly how to analyze the syntax of the reflexive direct object in (26) and (27). Nonetheless, these patterns reveal another way in which reflexive direct objects are treated differently from other direct object pronouns in Chamorro.

13.3 Reciprocal clauses

13.3.1 Reciprocal verbs

Reciprocals are intransitive verbs derived by adding the stressed prefix *á-* to a transitive verb. In general, when the meaning of a transitive verb is 'X', the meaning of the corresponding reciprocal verb is 'X-each-other'. Some representative transitive verbs and the reciprocals derived from them are listed below.

(30)	TRANSITIVE VERB	RECIPROCAL
	ayuda 'help'	a'ayuda 'help each other'
	chiku 'kiss'	achiku 'kiss each other'
	chonnik 'push'	achonnik 'push each other'
	fa'baba 'cheat'	afa'baba 'cheat each other'
	fana' 'face'	afana' 'face each other'
	guaiya 'love'	aguaiya 'love each other'
	kassi 'tease'	akassi 'tease each other'
	li'i' 'see'	ali'i' 'see each other'

rispeta	‘respect’	arispeta	‘respect each other’
se’si’	‘stab’	ase’si’	‘stab each other’
totpi	‘collide with’	atotpi	‘collide with each other’

Reciprocals can be created from just about every transitive verb in Chamorro. They can be derived from applicative verbs, whether the applicative is derived from an intransitive verb or adjective (as in (31a)) or a transitive verb (31b), or is a concealed applicative (31c).

(31)	APPLICATIVE VERB	RECIPROCAL	
a.	kuentusi ‘speak to’	akuentusi	‘speak to each other’
	payuni ‘accustomed to’	apayuni	‘accustomed to each other’
b.	sangani ‘say to, tell’	asangani	‘tell each other’
	pulã’i ‘take off for’	apula’i	‘take off for each other’
	tugi’i ‘write to’	atugi’i	‘write to each other’
c.	daggão ‘throw to’	adaggão	‘throw to each other’
	fa’nã’gui ‘teach’	afa’nã’gui	‘teach each other’

Reciprocals can also be derived from causative verbs (see 12.3.3.4).

(32)	CAUSATIVE VERB	RECIPROCAL	
	na’mã’ãsi’ ‘make pity’	ana’mã’asi’	‘make each other pity’
	na’chiku ‘make kiss’	ana’chiku	‘make each other kiss’
	na’tungu’ ‘make know’	ana’tungu’	‘make each other know’

A few reciprocals have a more specialized meaning than the verb from which they are derived. For instance, the usual meaning of the reciprocal *ásudda*’ (from *sodda*’ ‘find’) is ‘meet’; one of the meanings of the reciprocal *áchuli*’ (from *chuli*’ ‘bring, take’) is ‘resemble each other’.

Because reciprocal verbs are intransitive, their agreement with the subject is chosen from the paradigms for intransitive verbs and adjectives (see 2.2.2.2). Note that in the realis mood, sg./du. agreement is indicated by the infix *-um-*.

- (33)a. Umafana' put fin i dos para u akumprendi.
AGR.RECP.face at end the two FUT AGR RECP.understand
 'Finally the two faced each other to come to an understanding (lit. so they would understand each other).' (CD, entry for *áfana'*)
- b. Uma'achampa si Jesus yan i bisinu-ña.
AGR.RECP.compete.PROG UNM Jesus and the neighbor-AGR
 'Jesus and his neighbor are competing with each other.' (CD, entry for *châmpa*)
- c. Dispues di manadisipidi ham, in dingui
after PRT AGR.RECP.say.farewell.to we.EXCL AGR leave the
giput.
party
 'After we (excl.) said good-by to each other, we (excl.) left the party.' (CD, entry for *dispidi*)

13.3.2 Grammatical relations

Reciprocal clauses in Chamorro are intransitive. Their subject, which generally picks out a group of individuals, corresponds to *both* the external argument *and* the internal argument of the transitive verb from which the reciprocal is derived. But whereas a transitive verb is typically used to describe a single event involving different participants, the corresponding reciprocal describes a set of events involving individuals whose participant status changes from event to event, in such a way that each individual ends up exchanging participant roles with the other(s).

The subject of a reciprocal clause is usually a noun phrase that is dual or plural. This noun phrase, which occurs in the unmarked case, serves as the most prominent noun phrase of the clause (see 3.2.1). It is the constituent that must be missing in an infinitive clause; see (34).

- (34) Yan-ñiha i famagu'un [manapalakñaihun] an
like-AGR the PL.child AGR.INF.RECP.throw.down if
manhugâgandu.
AGR.play.PROG
 'The kids love to throw each other down when they play.' (CD, entry for *palakñaihun*)

It is also the constituent that must be missing in an imperative.⁵

⁵ The missing subject of an imperative can leave behind a stranded modifier, such as *na dos* 'two' in (35a). That does not change the fact that the head of the noun phrase is, and must be, missing.

- (35)a. Agofli'i' fan na dos.
RECP.like please L two
 '(You two) be nice to each other.' (CD, entry for *ágofli'i'*)
- b. Fanakumprendi ya mungnga na u
AGR.RECP.understand and.then don't COMP AGR
 guaha disgrâsia gi familia.
exist disgrace LCL family
 'Come to terms with each other so that there won't be any disgrace
 in the family.' (CD, entry for *disgrâsia*)

Interestingly, the subject of a reciprocal clause can be singular when the clause also contains a prepositional phrase formed with the comitative preposition *yan* 'with' (see 19.7.1). In such cases, even though the subject and the comitative phrase are separate constituents, they together pick out the group of individuals that exchange participant roles in the set of events described by the reciprocal verb. In (36), for instance, the subject of the reciprocal verb *ali'i'* 'see each other' is the 1 sg. weak pronoun *yu'*, but the clause also contains the comitative phrase *yan i doktu* 'with the doctor', so the meaning is that the speaker and the doctor saw each other.

- (36) Umali'i' yu' lokkui' yan i doktu.
AGR.RECP.see I also with the doctor
 'I also met (lit. saw each other) with the doctor.' (CD, entry for *aprubecha*)

In reciprocal clauses of this type, the subject clearly does not form a larger constituent with the comitative phrase. To begin with, the subject can occur separated from the comitative phrase, as in (36) and the following.

- (37) I che'lu-hu umadispatta yan i asaguã-ña.
the sibling-AGR AGR.RECP.separate with the spouse-AGR
 'My sister separated from her husband (lit. separated from each other with her husband).' (CD, entry for *ádispatta*)

Only the subject is obligatorily missing in infinitive clauses and imperatives; the comitative phrase remains unaffected.

- (38)a. Sigi ha' yu' umatotbus yan
AGR.keep.on EMP I AGR.INF.RECP.collide.with with
 tâotão gi giput sa' mampus bula.
person LCL party because so.much AGR.many

'I kept on colliding (lit. colliding with each other) with people at the party because it was too crowded.' (CD, entry for *totbus*)

- b. Akumprendi yan i che'lu-mu palão'an.
RECP.understand with the sibling-AGR female
 'Reach an agreement (lit. understand each other) with your sister.'
 (CD, entry for *akumprendi*)

On the other hand, the comitative phrase can be questioned, relativized, or syntactically focused on its own, leaving the subject behind, as (39) shows.

- (39)a. Hāyi akuentusesen-ña si Carmen?
who? WH[OBL].RECP.speak.to-AGR.PROG UNM Carmen
 ‘Who is Carmen speaking (to each other) with?’
 b. Debi di ... en kumbida para i fandangu todū
should PRT AGR invite to the wedding all
 i [asudda’-miyu].
the WH[OBL].RECP.find-AGR
 ‘You (pl.) should...invite to the wedding everyone you (pl.) meet
 (lit. find each other) with.’ (NT 42)

These patterns reveal that reciprocal verbs do not require their subject to be dual or plural. Rather, they impose the semantic requirement that the set of events they describe must involve more than one individual—a requirement that can be satisfied even when the noun phrases that name these individuals do not form a larger syntactic constituent.

Other arguments of the reciprocal verb are realized as obliques. For instance, when a reciprocal is created from an applicative or causative that has been derived from a transitive verb, the noun phrase corresponding to the original transitive verb's internal argument is realized as an oblique. This is illustrated below for reciprocals derived from a concealed applicative in (40a), and from a causative in (40b).

- (40)a. Ta ana'i **distãnsia** ya mungnga hit
 AGR.RECP.give distance and.then don't we.INCL
 umatontun.
 AGR.RECP.bump
 'Let's (incl.) keep a distance from each other (lit. give each other
 distance) so we (incl.) don't bump into each other.' (CD, entry for
 distãnsia)

- b. Kão umana'patcha hamyu ni feggun?
Q AGR.RECP.make.touch you.DU OBL stove
 'Did you (du.) let each other touch the stove?'

Reciprocals are derived fairly often from applicative verbs. The reciprocals in (41) are created from applicatives derived by attaching *-i* to the transitive verbs *sãngan* 'say' and *pula* 'take off (clothing)' (see 11.3.1). Notice that the reciprocal relation holds between the external argument and the additional argument of the applicative (i.e. the applicative object). In (41a), the external argument names the ones who tell, and the applicative argument names the ones who are told; in (41b), the external argument names the ones who remove (clothing), and the applicative argument names the ones from whom clothing is removed.

- (41)a. Manasangani istoria i famagu'un.
AGR.RECP.say.to story the PL.child
 'The children told each other a story.'
 b. Ti siña umapula'i kutbâta.
not can AGR.RECP.take.off.for tie
 'They (du.) could not take off each other's ties.' (CD, entry for *ápula'i*)

Reciprocals can also be derived from concealed applicatives (see 11.5).

- (42)a. Mana'afaisin ni muralidât i doktu.
AGR.RECP.ask.PROG OBL morality.L the doctor
 'They were questioning (lit. asking each other about) the morality of the doctor.' (CD, entry for *muralidât*)
 b. Sessu mapuhut i isno para u
often AGR.PASS.press.into.ball the snow FUT AGR
fanadaggão.
AGR.RECP.throw
 'They often pressed the snow into balls so they could throw it at each other.' (CD, entry for *puhut*)

More surprisingly, reciprocals can be derived from transitive verbs in such a way that the reciprocal relation holds between the external argument and a completely new argument. In such cases, the verb from which the reciprocal is formed lacks applicative morphology and is not independently known to be a concealed applicative. This unexpected type of reciprocal is illustrated below. The reciprocal verb in the clauses in (43) appears to be

derived directly from the transitive verb *pula* ‘take off (clothing)’. These clauses have the same structure as (41b), which contains a reciprocal verb derived from the applicative *pulã* ‘take off (clothing) for’. In all three clauses, the reciprocal relation holds between the external argument and an additional argument, which names the one(s) from whom clothing is removed. The internal argument of the original verb, which names what is removed, is realized as an oblique.

- (43)a. Umapula’ balakbak iskuela.
 AGR.RECP.take.off *purse.L* *school*
 ‘They (du.) took off each other’s school bags.’ (CD, entry for *ápula*)
- b. Apula’ kutbãtan-miyu na dos.
 RECP.take.off *tie-AGR* *L* *two*
 ‘(You two) take off each other’s tie.’ (CD, entry for *ápula*)

The reciprocal verbs in (44) appear to be derived directly from the transitive verbs *hãlla* ‘pull’ and *tugan* ‘break off’. Here too, the reciprocal relation holds between the external argument and an additional argument, which names the ones from whom stuff was pulled or broken off. The noun phrase corresponding to the original verb’s internal argument is realized as an oblique.

- (44)a. Umahalla i dos pãtgun ni iskoba ya
 AGR.RECP.pull *the two child* *OBL broom* *and.then*
 mãpga’ i tekpong-ña.
 AGR.split *the handle-AGR*
 ‘The two children pulled the broom between each other and the handle split.’ (CD, entry for *mãpga*)
- b. Umatugan i dos gãyu pilun-ñiha.
 AGR.RECP.pull.out *the two rooster* *feather-AGR*
 ‘The two roosters pulled out each other’s feathers.’ (CD, entry for *átugan*)

Either the reciprocals in (43) and (44) are derived from applicatives that exceptionally lack an applicative suffix, or else they are derived directly from transitive verbs by exceptionally imposing the reciprocal relation between the external argument and a new argument with the same range of meanings as an applicative argument (see 11.3.1). This new argument would name the recipient, beneficiary, or maleficiary of the event; sometimes it would also name the possessor of the original verb’s internal argument.

Either way, it is unclear why reciprocals of this sort are allowed, since the grammar has the resources to create them independently from applicatives that have an applicative suffix. This is an area where further investigation is needed.

13.4 Further reading

See Chung (1989) for further discussion of reflexive clauses in Chamorro.

14

OTHER TYPES OF PREDICATES

Chamorro has impersonal verbs and adjectives, verbs of possession, and verbs that show agreement as if they were nouns.

14.1 Overview

Certain verbs and adjectives in Chamorro occur in special types of clauses or have special marking. These include impersonal verbs and adjectives, verbs of possession, and transitive verbs that show agreement as if they were nouns.

14.2 Impersonal verbs and adjectives

Impersonal predicates are predicates that cannot have a meaningful subject. Instead, their subject is a meaningless null placeholder known as an *expletive* or *dummy*. The impersonal predicates in Chamorro include weather verbs, the existential verbs *guaha* ‘exist’ and *tâya* ‘not exist’, and quantificational adjectives such as *bula* ‘much, many’ and *meggai* ‘many’ (see 6.2.4.3).

14.2.1 Weather verbs

Several Chamorro words that describe weather events can serve as nouns or verbs. These weather words, which include *uchan* ‘rain’, *pâkyu* ‘typhoon, strong storm, tropical cyclone’, and *guaifun* ‘wind, storm’, serve as nouns in the sentences below.

- (1) a. Na’fachi’ i mampus mâtmu na **uchan**.
 AGR.muddying the so.much heavy L rain
 ‘Heavy rain can cause muddy ground.’ (CD, entry for *na’fachi*)
 b. Para u fâttu i **pâkyu** agupa’.
 FUT AGR arrive the typhoon tomorrow
 ‘The typhoon is coming tomorrow.’ (CD, entry for *pâkyu*)

The weather words can serve as intransitive verbs—verbs that describe the event of e.g. raining, storming heavily, or being windy. Like other event

verbs, they are marked for the progressive aspect when the event described is ongoing or in progress with respect to some other event (see 2.2.1.2.1). This other event is the speech event in the sentences in (2).

- (2) a. Chuli' i payu sa' **u'uchan**.
take the umbrella because AGR.rain.PROG
 'Take the umbrella because it is raining.' (CD, entry for *pāyu*)
- b. Kalan **pāpakyu** guini sa' i manglu'
seems.like AGR.typhoon.PROG here because the wind
 yan i ichan.
and the rain
 'It seems like we're having a typhoon here because of the wind and rain.' (CD, entry for *pāpakyu*)

The weather verbs take their agreement with the subject from the paradigms for intransitive verbs and adjectives. Like a very few other intransitive verbs that describe events (e.g. *maigu* 'sleep', *malāgu* 'run'), they have two forms for sg./du. agreement in the realis mood: the infix *-um-*, which signals that the verb is inchoative, and no special marking, which is used otherwise (see 2.2.2.2.1). Compare the verbs in (3), which are inchoative, with the verbs in (2) and (4), which are not.

- (3) a. Manā'pagun i magāgu gi tali anai **umuchan** dididi'.
AGR.damp the clothes LCL line when AGR.rain a.little
 'The clothes on the line became damp when it rained a little.' (CD, entry for *ā'pagun*)
- b. Anai **pumākyu**, oggan si Sirena gi
when AGR.typhoon AGR.run.aground UNM Sirena LCL
 kantun unai.
edge.L sand
 'Sirena ran aground on the beach when the storm hit.' (CD, entry for *oggan*)
- (4) Duru **uchan** gi nigapña.
hard AGR.rain LCL day.before.yesterday
 'It rained hard the day before yesterday.' (CD, entry for *nigapña*)

Finally, though the weather verbs cannot have a meaningful noun phrase as their subject, they *do* have a subject, which they clearly agree with in the irrealis mood. This 3 sg. agreement is illustrated in (5) (see also (38c)).

- (5) a. Para **u uchan** gi talu'āni pǎ'gu na ha'āni.
 FUT AGR.rain LCL afternoon now L day
 'It will rain in the afternoon today.' (CD, entry for *pǎ'gu*)
- b. Yanggin para **u pǎkyu,** debi un na'guaha
 if FUT AGR typhoon should AGR make.exist
 pribension nengkanu' ...
 provision.L food
 'If there is going to be a typhoon, you should have food provisions
 [for at least four to five days].' (CD, entry for *pribension*)

The standard diagnostics for a null dummy subject are (i) morphological evidence for the presence of a subject, which typically is third person singular, and (ii) the impossibility of a meaningful subject. These diagnostics reveal that the weather verbs are impersonal: they have a null dummy as their subject.

14.2.2 Existential verbs

The existential verbs *guaha* 'exist' and *tāya* 'not exist' are intransitive verbs that describe the event of existing at a time or place. In addition, *tāya* also expresses sentence negation (see Chapter 17). Existential verbs have two arguments: one that names the sort of individual, thing, or event that exists, and another that names the location in time or space where it exists. The argument that names what exists—referred to below as *the pivot*—is realized as a noun phrase in the unmarked case. The location argument is either implicit (see 9.3.2) or else realized as a noun phrase in the local case. Some representative examples appear in (6).

- (6) a. **Guaha** lokkui' kollat babui gi uriyan i
 AGR.exist also pen.L pig LCL around.L the
 trongkun mǎngga.
 tree.L mango
 'There was also a pig pen around the mango trees.' (EM 87)
- b. Pues **tāya'** nengkanu' guihi na tiempu.
 so AGR.not.exist food LCL.that L time
 'So there was no food at that time.' (Cooreman 1983: 50)

Like other event verbs, existential verbs are marked for the progressive aspect when the event described is ongoing with respect to some other event, such as the speech event; see (7).

- (7) a. Esta **guaguaha** chungé'-ña si Pedro sa'
already AGR.exist.PROG gray.hair-AGR UNM Pedro because
 gof âmku'.
AGR.very old
 'Pedro is already having gray hair because he is very old.' (CD,
 entry for *chungi*)
- b. Ombris **tâtaya'** salappe'-hu, sigi ha' yu'
even.though AGR.not.exist.PROG money-AGR keep.on EMP me
 un ayão.
AGR.borrow
 'Even though I'm running out of money, you continue to borrow
 from me.' (CD, entry for *ombris*)

They can also be marked for the progressive aspect when they describe a repeated event (see 2.2.1.2.1).

- (8) Yanggin umachatli'i' i taotão, atyu nai
if AGR.RECP.hate the person that COMP
guaguaha disgustu.
AGR.exist.PROG quarrel
 'When people hate each other, that's when disagreements happen.'
 (CD, entry for *áchatli'i'*)

Like other intransitive verbs, existential verbs take their agreement with the subject from the paradigms for intransitive verbs and adjectives. In addition, like the weather verbs and a very few other intransitive verbs that describe events, they have two sg./du. agreement forms in the realis mood: the infix *-um-* when the verb is inchoative, and no special marking otherwise (see 14.2.1 and 2.2.2.2.1). Compare the examples in (9), in which the verb is inchoative, with the examples cited above.

- (9) a. Esta sen hássan i fanihi giya Mariânas
already AGR.extremely rare the fruit.bat LCL Marianas
 disdi ki **gumuaha** paki.
since PRT AGR.exist gun
 'Fruit bats are rare now in the Marianas since the introduction of guns (lit. since there came to be guns).' (CD, entry for *hássan*)
- b. **Tumâya'** prubensión pugas anai ti mâtту i
AGR.not.exist supplies.L rice when not AGR.arrive the
 batku.
ship

‘We ran out of rice supply (lit. There came to be no rice supply)
when the ship did not arrive.’ (CD, entry for *tâya*’)

The fact that existential verbs are intransitive means that the pivot is not their direct object. The pivot is not their subject, either. Instead, existential verbs are impersonal: their subject is a null dummy. That is why their agreement is (third person) singular, even when the pivot is interpreted as plural (as in (10a)) or marked for the plural with the particle *siha* (as in (10c-d)); see 6.1.1.1.¹ Note especially (10d), which shows that a clause in which the existential verb shows plural agreement is ungrammatical.

- (10)a. Para u **guaha** pâstit gi giput?
FUT AGR exist pastry LCL party
 ‘Will there be pastries at the party?’ (CD, entry for *pâstit*)
- b. Nai’an ni u **tâya**’ gera ya u **guaha**
when? COMP AGR not.exist war and.then AGR exist
pâs?
peace
 ‘When will there be no war and will there be peace?’ (CD, entry for *pâs*)
- c. **Guaha** siha matiriât ha cho’gui gi finu’
AGR.exist PL material AGR make LCL speech.L
Chamorro.
Chamorro
 ‘There are materials that he made in the Chamorro language.’ (from a conference presentation)
- d. (***Mang**)**guaha** tâotâo siha gi santatti gi halum kareta.
AGR.exist person PL LCL DIR.back LCL inside.L car
 ‘There are some people in the back (seat) in the car.’

These agreement patterns reveal that existential verbs are impersonal, and the pivot is not the subject or the direct object of the existential clause.

The pivot of an existential clause has other properties of note:

¹ The pattern in (10) was the norm in the 20th century and is still the norm for older speakers today. Very occasionally, one hears younger Chamorro speakers, or Chamorro speakers whose dominant language is English, use plural agreement on an existential verb when the pivot is plural. This pattern is probably the result of contact with English (e.g. *There are people in the back seat*).

(i) As in many other languages, the pivot must be weak (indefinite in some sense; see 6.2.5). Specifically, it must be introduced by an indefinite article (as in (11a)), a numeral (11b), a negative concord determiner (11c), or a quantifier such as *bula* ‘much, many’ or *meggai* ‘many’ (11d).

- (11)a. Guaha un dāngkulun saligão gi kantarun basula.
AGR.exist a big.L centipede LCL can.L trash
 ‘There is a huge centipede in the trash can.’ (CD, entry for *saligão*)
- b. Tāya’ miyon na tãotão giya CNMI.
AGR.not.exist million L person LCL CNMI
 ‘There aren’t a million people in the CNMI.’ (CD, entry for *miyón*)
- c. Tāya’ ni unu na tãotão pirfektu gi hilu’
AGR.not.exist not one L person AGR.perfect LCL top.L
tānu’.
land
 ‘There is no such perfect person in the world.’ (CD, entry for *pirfektu*)
- d. Guaha meggai tinanum lodigão gi halum tãnu’.
AGR.exist many plant.L lodigao LCL inside.L land
 ‘There are a lot of lodigao plants in the jungle.’ (CD, entry for *lódigão*)

This definiteness effect prevents the pivot from being a pronoun, the name of a person or place, or a noun phrase whose determiner is a strong quantifier, such as *kada* ‘each’.² However, in the right discourse context, the pivot can have the definite article or a demonstrative as its determiner, even though these determiners are strong. See (12).

- (12) Guaha atyu i finu yan guaha atyu i
AGR.exist that the fine and AGR.exist that the
bāstus na pāppit aseru.
rough L sandpaper
 ‘There is fine sandpaper and there is rough sandpaper.’ (CD, entry for *pāppit aseru*)

² The noun phrase that serves as the pivot cannot be a pronoun, name, or place name. It can have a strong quantifier as its determiner only when the quantification ranges over types rather than individuals. All the examples of this type in the CD database involve the strong quantifier *todu klasi(n)* ‘all kinds of’. These patterns also occur in other languages (see McNally 1997).

(ii) Like other noun phrases, the pivot can have various types of modifiers, including relative clauses (which are enclosed in brackets below). A relative clause modifier that follows the pivot can be introduced by a relative clause complementizer, such as *ni* in (13) (see 24.3.2).

- (13)a. Guaha un manâda na aga' gi gima' [ni
AGR.exist a lot.of L banana LCL house COMP
 nina'in Maria].
WH[OBJ].give.L Maria
 'There are lots of bananas at the house that Maria gave me.' (CD,
 entry for *manâda*)
- b. Tâya' alâmlî [ni para u mafa'tinas i
AGR.not.exist wire COMP FUT AGR PASS.make the
gigão].
fish.trap
 'There's no wire to make the fish trap.' (CD, entry for *gigão*)

But more often, the relative clause is introduced by one of the complementizers found in constituent questions or the focus construction, such as the null complementizer in (14). See the discussion in 24.4.

- (14)a. Libiânu si Tita sa' guaha muchâcha
AGR.easy UNM Tita because AGR.exist maid
 [para u goggui i famagu'un gi gima'].
FUT AGR care.for the PL.child LCL house
 'Tita is carefree because she has a maid to take care of the children
 at home.' (CD, entry for *goggui*)
- b. Tâya' fîngkâs-ña si David [masodda'
AGR.not.exist belongings-AGR UNM David AGR.PASS.find
ni famagu'on-ña].
OBL PL.child-AGR
 'David's children have not found any of his belongings (lit. there
 are no belongings of David that were found by his children).' (CD,
 entry for *fengkas*)

(iii) Like other noun phrases, the pivot can have a possessor. When that happens, the pivot is typically introduced by the null indefinite article; see below.

- (15)a. Guaha puguâ'-hu lão tâya' pupulu.
AGR.exist betelnut-AGR but AGR.not.exist pupulu

- ‘I have betelnut but there’s no *pupulu*.’ (CD, entry for *pupulu*)
- b. Tãya’ rimediãñ-ña ennão na chetnut.
AGR.not.exist remedy-AGR that L disease
 ‘That sickness does not have a remedy.’ (CD, entry for *rimedia*)

Clauses like (15) are often used to state the relation between the possessor and what is possessed. See 14.3 for another way to express this relation.

14.2.3 Quantificational adjectives

The adjectives *bula* ‘much, many’ and *meggai* ‘many’ are quantificational adjectives that can occur inside the noun phrase or as predicates of clauses (see 6.2.4.3). Inside the noun phrase, they precede the head noun, which is marked with the pre-head form of the linker (see 7.3.1).

- (16)a. Manmanãga’ **bula** na mânia.
AGR.ANTIP.chop many L green.coconut
 ‘They chopped many young coconuts.’ (CD, entry for *tãga*)
- b. Mamoddung **meggai** na manmã’pi’ ispehus gi chalan
AGR.fall many L AGR.broken.L glass LCL road
 anai guaha aksidenti.
when AGR.exist accident
 ‘Lots of pieces of broken glass fell on the road when an accident happened.’ (CD, entry for *mã’pi’ ispehus*)

As predicates, quantificational adjectives have an argument that names the sort of individual, thing, or stuff whose quantity is described. This argument, which is called *the pivot* below, is almost always realized as a noun phrase introduced by the null indefinite article, as in (17).

- (17)a. Gai piligru esti i luhuriosu na tiempu sa’
AGR.have danger this the playboy L time because
bula chetnut.
AGR.much disease
 ‘Being a playboy these days is very dangerous due to the prevalence of STD’s (lit. because there is much disease).’ (CD, entry for *luhuriosu*)
- b. **Bula** to’lang-ña i sãta na guihan.
AGR.many bone-AGR the fish.sp L fish
 ‘*Ctenochaetus striatus* is a fish with a lot of bones (lit. there are many bones of the fish *Ctenochaetus striatus*).’ (CD, entry for *sãta*)

- c. **Meggai** tapun gi chepchup tâsi.
AGR.many clam LCL seashore
 ‘There are many clams by the seashore.’ (CD, entry for *chepchup tâsi*)

Quantificational adjectives behave like other adjectives in most respects. Like other adjectives that serve as predicates of clauses, they combine with the comparative suffix *-ña* to produce their comparative form (see 25.3.1).

- (18)a. **Bulãña** salappe’-ña si Juan kini si
AGR.much.COMPAR money-AGR UNM Juan than UNM
 Ramon.
Ramon
 ‘Juan has more money than Ramon.’ (CD, entry for *kini*)
- b. **Meggaiña** guihan gi ma’pus na sâkkan kini
AGR.many.COMPAR fish LCL AGR.past L year than
 pâ’gu.
now
 ‘There were more fish last year than today.’ (CD, entry for *ma’pus na sâkkan*)

Their default aspect is the neutral aspect, but they can be marked for the progressive aspect when they describe a state that persists (see 2.2.1.2.2) or is repeated.

- (19)a. **Bubula** ha’ tinanum ti hu tungu’ na
AGR.many.PROG EMP plant not AGR.know that
 manmamakannu’.
AGR.edible
 ‘There are still many plants I did not know are edible.’ (CD, entry for *mâmakannu’*)
- b. Kada sâkkan **memeggai** tâotâo gi simintetyu an
each year AGR.many.PROG people LCL cemetery if
 Tulusântu.
all.saints.day
 ‘Every year there are a lot of people at the cemetery on All Saints Day.’ (CD, entry for *Tulusântu*)

And, like other adjectives, they have two forms for sg./du. agreement in the realis mood: the infix *-um-*, which signals that the adjective is inchoative,

and no special marking, which is used otherwise. Compare the predicates in (20), which are inchoative, with those in (17-19), which are not.

- (20)a. **Bumula** mampus ñâmu sa' mampus
AGR.many so.much mosquito because so.much
kâtma.
AGR.calm
 'There have been a lot of mosquitos because the wind is so still.'
 (CD, entry for *kâtma*)
- b. Mâs **mumeggai** grânu matditu yanggin sessu un tufung.
more AGR.many boil if often AGR count
 'If you always count the boils, you will have more (lit. there will come to be many more).' (CD, entry for *grânu matditu*)

Quantificational adjectives differ from other adjectives, and resemble existential verbs, in that they are impersonal. Their subject is not the pivot, but rather a null expletive. This can be seen from the fact that their agreement is always (third person) singular, even when the pivot explicitly shows plural marking (as in (21a-b)) or is interpreted as plural (21c-d).

- (21)a. **Bula** famalâo'an gi tenda.
AGR.many PL.woman LCL store
 'There are a lot of women at the store.' (CD, entry for *famalâo'an*)
- b. **Meggai** siha mamprubichosu na tinanum gi halum
AGR.many PL AGR.beneficial L plant LCL inside.L
tânu' lão ti matungu'.
land but not AGR.PASS.know
 'There are lots of beneficial plant resources in the jungle but no one knows.' (CD, entry for *prubichosu*)
- c. **Meggaiña** punidera ha popoksai si Tun
AGR.many.COMPAR hen AGR.raise.PROG UNM Mr.
Jose put para u bula ga'-ña mảnnuk.
Jose so.that FUT AGR.many pet-AGR chicken
 'Uncle Joe raises more hens so that he can have more chickens.'
 (CD, entry for *punidera*)
- d. Ti **bula** papâya disti ki Typhoon Soudelor. Kâsi
not AGR.many papaya since PRT Typhoon Soudelor maybe
u meggai gi halum dos mesis na tiempu.
AGR.many LCL inside.L two months L time
 'There haven't been a lot of papayas since Typhoon Soudelor.
 Maybe there will be more in two months.' (from an e-mail message)

Finally, the pivot of a quantificational adjective resembles the pivot of an existential clause in some crucial ways (see 14.2.2). It exhibits a definiteness effect: it must have a weak determiner (see 6.2.5). In fact, the pivot of a quantificational adjective is almost always introduced by the null indefinite article. The narrow range of determiners allowed probably reflects the fact that the quantificational adjective itself contributes a determiner-like meaning.³ Moreover, a relative clause modifier of the pivot has the same complementizer choices as it does in existential clauses. A relative clause modifier that follows the pivot can be introduced by one of the usual relative clause complementizers, such as *ni* below (see 24.3.2).

- (22)a. Bula tinanum [ni siña makānnu'] gi
 AGR.many plant COMP can AGR.PASS.eat LCL
 Kannat Tāddung.
 Kannat Taddung
 ‘There are lots of edible plants (lit. plants that can be eaten) at the
 Kannat Taddung.’ (CD, entry for *Kannat Tāddung*)
- b. Meggai manmātai [ni mannina’yi ni atektuk].
 AGR.many PL.dead COMP AGR.PASS.infect OBL leprosy
 ‘There were many dead who had contracted the leprosy disease.’
 (CD, entry for *atektuk*)

But more often, the relative clause is introduced by one of the complementizers found in constituent questions and the focus construction, such as the null complementizer in (23) (see 24.4).

- (23)a. Āntis na tiempu bula buteyan kok
 before L time AGR.many bottle.L coke
 [manmayuti’ gi Sabanetan Tahgung].
 AGR.PASS.discard LCL Sabanetan Tahgung
 ‘Back in the old days there were lots of coke bottles dumped at
 Sabanetan Tahgung.’ (CD, entry for *Sabanetan Tahgung*)
- b. Meggai familian Ayuyu [mañāsaga giya Pāgan
 AGR.many family.L Ayuyu AGR.stay.PROG LCL Pagan

³ The noun phrase that realizes the argument of a quantificational adjective can have a strong quantifier as its determiner, but only when the quantification explicitly ranges over types. The very few examples of this type in the CD database involve the strong quantifier *todu klasi(n)* ‘all kinds of’. See note 2.

na isla].
L island
 ‘There are a lot of Ayuyu families staying in Pagan Island.’ (CD,
 entry for *ayuyu*)

Chamorro has other quantificational adjectives that can serve as impersonal adjectives, although these do not occur as frequently as *bula* or *meggai*. Two such adjectives are *lahyan* ‘many’ and *dídidí* ‘few, not many’.

14.3 Verbs of possession

14.3.1 Basics

Chamorro has two verbs of possession, *gai* ‘have’ and *tai* ‘not have’. (The two differ in that *tai* also expresses sentence negation; see Chapter 17.) These verbs describe the relation between a possessor and what it possesses—a relation which is as broad here as within the noun phrase (see 7.1.2). It includes the part-whole relation, the relation of events to their participants, the relation of entities to their characteristics, as well as family relations, the ownership relation, and so on.

The verbs of possession are state verbs that usually occur in the neutral aspect. They have two arguments: one that names the possessor and another that names what is possessed. The argument that names the possessor is realized as the subject. The argument that names what is possessed is a noun phrase whose head noun is *incorporated*, meaning that it forms a particularly close morphosyntactic unit with the verb.

14.3.2 Incorporation

Incorporation imposes restrictions on the noun phrase whose head noun is incorporated. This noun phrase must be ‘small’: it cannot be introduced by a determiner and cannot have a possessor. It must begin with a head noun that is not marked with any regular inflectional affixes, such as the plural prefix *man-* (6.1.1.1), possessor agreement (7.1.1), or the linker (7.3.1).⁴ The verb of possession combines with this noun to form a complex verb; this morphosyntactic combination is called *incorporation*. As a result of incorporation,

⁴ However, the head noun can have irregular obligatory plural marking of the type seen in e.g. *famagu’un* ‘children’ and *famalão’an* ‘women’ (see 6.1.1.1). Note that the description in the text is accurate for most older-generation speakers. The CD database contains a few examples in which the ‘small’ noun phrase begins, exceptionally, with (i) a noun marked with the linker, or (ii) an adjective or noun modifier followed by the head noun.

the verb and the noun form a phonological word in which the verb bears primary stress. This amounts to saying that *gai* and *tai* are realized as stressed prefixes on the noun, despite the fact that they are represented as independent words in the official orthographies.

Some examples of clauses formed from the verbs of possession are given below. These examples reveal that the ‘small’ noun phrase whose head noun is incorporated can contain various types of complements and modifiers. This noun phrase, which is enclosed in brackets, consists of just the head noun in (24).

- (24)a. *Gai* [do’an] *i* *hagun* *âhgão*.
AGR.have wart the leaf.L plant.sp
 ‘*Premna obtusifolia* leaves have warts.’ (CD, entry for *âhgão*)
- b. *Hâfa* *na* *un* *tungu’* *na* *tai* [tiningu’]
what? COMP AGR.know COMP AGR.not.have knowledge
si Carlos?
UNM Carlos
 ‘How did you know that Carlos does not know anything?’ (CD, entry for *tai tiningu’*)

The ‘small’ noun phrases in (25) consist of the head noun followed by an adjective (25a) or a noun modifier (25b). Because of the requirements imposed by incorporation, the head noun is not marked with the linker.

- (25)a. *Bunitu* *i* *chinina* *nu* *i* *gai* [lonnat âtilung].
AGR.nice the dress COMP AGR.have dot black
 ‘The dress with black dots is nice.’ (CD, entry for *lonnat*)
- b. *I* *torun* *guaka* *gai* [atgoya alâmlî] *gi*
the bull.L cattle AGR.have nose.ring wire LCL
gui’eng-ña.
nose-AGR
 ‘The bull has a wire nose ring on his nose.’ (CD, entry for *atgoya*)

The ‘small’ noun phrases in (26) consist of the head noun plus a finite embedded clause (26a) or an infinitive clause (26b).

- (26)a. *Manggai* [abilidât hit para ta fanmanhassu mâolik].
AGR.have ability we.INCL FUT AGR.AGR.ANTIP.think well
 ‘We (incl.) have the ability to think wisely (lit. that we (incl.) should think wisely).’ (CD, entry for *abilidât*)

- b. Gof gai [ganas chumotchu] si Cecilia.
AGR.very have appetite AGR.INF.ANTIP.eat UNM Cecilia
 ‘Cecilia has lots of appetite to eat.’ (CD, entry for *gái ganas*)

When the head noun has a relative clause modifier, the relative clause can be introduced by one of the relative clause complementizers (as in (27a)) or by one of the complementizers found in constituent questions and the focus construction (27b).

- (27)a. I gitåla gai [oktåba [ni bunitu sunidu-ña]].
the guitar AGR.have octave COMP AGR.nice sound-AGR
 ‘The guitar has octaves that have good sound.’ (CD, entry for *oktåba*)
- b. Hekkua’ håfa gai [pengpung [mamoddung gi
dunno what? AGR.have particle AGR.fall LCL
na’-hu alåguan]].
food-AGR rice.porridge
 ‘I don’t know what particles (lit. what has particles that) landed on my rice porridge.’ (CD, entry for *pongpong*)

In this respect, the noun phrase whose head noun is incorporated resembles the pivot of an existential verb or quantificational adjective (see 14.2.2 and 14.2.3).

14.3.3 Grammatical relations

In clauses formed from a verb of possession, the possessor argument is realized as the subject. The argument that names what is possessed—the argument whose head noun is incorporated—is too ‘small’ to count as an independent constituent. The result is that the complex verb consisting of the verb of possession plus the incorporated noun is intransitive: it has a subject but no direct object.

The complex verb has the morphological profile of an intransitive verb. Its agreement with the subject is chosen from the paradigms for intransitive verbs and adjectives, as can be seen from (28) (see 2.2.2.2). (The complex verb is represented in boldface in the examples below.)

- (28)a. Todu siudadånu **manggai diretchu** para u
all citizen AGR.have right FUT AGR
fanguentus.
AGR.speak
 ‘All citizens have the right to free speech (lit. that they should

- speak).’ (CD, entry for *diretchu*)
- b. I manbâ’ba’ na kakaguâtis **mantai**
the AGR undeveloped L peanut AGR not have
sanhalum.
DIR inside
 ‘The undeveloped peanuts do not have meat inside.’ (CD, entry for *bâ’ba’*)
- c. Ti ha tungu’ si nanâ-hu na ... u **fanggai**
not AGR know UNM mother-AGR COMP AGR AGR have
tanu’ AsTeo.
land AsTeo
 ‘My mother did not know that...they would have land in AsTeo.’
 (EM 102)

Like certain intransitive verbs and all adjectives, the complex verb has two forms for sg./du. agreement in the realis mood: the infix *-um-* when the verb is inchoative, and no special marking otherwise (see 2.2.2.2.1). The sentence in (29) contains two complex verbs that are inchoative.

- (29) **Tumai** **bisiu** si Dennis gi anai
AGR not have habit UNM Dennis LCL COMP
 hohobin, lão gi anai umâmku’ na **gumai**
AGR young.PROG but LCL COMP AGR old COMP AGR have
bisiu chumupa.
habit AGR INF smoke
 ‘Dennis had (lit. came to have) no habits when he was younger but now he has (come to have) a habit of smoking when he’s older.’
 (CD, entry for *tái bisiu*)

Finally, when the subject of the complex verb is a pronoun, it can be realized as a weak pronoun, as in (30) (see 8.3).

- (30)a. Kão gai sinienti **hảo?**
Q AGR have feeling you
 ‘Do you feel anything?’ (CD, entry for *sinienti*)
- b. Tumai ga’chung **yu’** sa’ guâguahu ha’ na
AGR not have companion I because me.PROG EMP L
 maisa.
self
 ‘I had no companions because I was alone.’ (CD, entry for *tái ga’chung*)

14.3.4 The extra noun phrase

In clauses formed from verbs of possession, the ‘small’ noun phrase whose head noun is incorporated can be doubled by a noun phrase that specifies in more detail what is possessed. This *extra noun phrase* is in the unmarked case; when a pronoun, it can be realized as a weak pronoun. The extra noun phrases in (31) are represented in boldface.

- (31)a. Guaha na biâhi i mapagâhis na gai
 AGR.exist L time the cloud COMP AGR.have
 figura **figuran gâ’ga’**.
 shape shape.L animal
 ‘The clouds sometimes have the shape of an animal.’ (CD, entry for *mapagâhis*)
- b. Gai ga’ si Antonio **sietti** **na mampairin**
 AGR.have pet UNM Antonio seven L AGR.best.L
 ga’lâgu.
 dog
 ‘Antonio has seven champion dogs as pets.’ (CD, entry for *sietti*)
- c. Unus kuântus ha’ na famalão’an manggai nâ’an **esti**
 several EMP L PL.woman AGR.have name this
 i Chopia giya Sa’ipan.
 the Chopia LCL Saipan
 ‘Only a few women have Chopia as their name here in Saipan.’
 (CD, entry for *Chopia*)
- d. Hâyi gai patgun **hâo?**
 who? AGR.have child you
 ‘Whose child are you (lit. who has you as child)?’
- e. Tai chotda si Jose **tanduki**.
 AGR.not.have green.banana UNM Jose plantain
 ‘Jose doesn’t have any plantain bananas.’

The extra noun phrase can have all the structure of an ordinary noun phrase, including determiners and a possessor. It has the form of a direct object—it appears in the unmarked case and can be realized as a weak pronoun—but differs from a direct object in that it is syntactically inert. Neither it nor any of its subconstituents can be questioned, relativized, or syntactically focused. A further indication that the extra noun phrase is not a direct object is that the complex verb remains intransitive: its agreement with the subject is chosen from the paradigms for intransitive verbs and adjectives.

The extra noun phrase generally does not double a ‘small’ noun phrase that contains a modifier. But very occasionally, this may be possible; see (32).

- (32) ?Hâyi gai ga’ ga’lâgu **atyu na puppy?**
who? AGR.have pet dog that L puppy
 ‘Who has that puppy as pet (lit. as a pet dog)?’

Finally, the character of the extra noun phrase is affected by the word order of the subject. When the subject occurs to the left of the complex verb because it is an inner topic, or has been syntactically focused (as in (31c)) or questioned (31d), the extra noun phrase can be definite or indefinite, a pronoun or a nonpronoun. But when the subject follows the complex verb, the extra noun phrase must be indefinite, as in (31b) and (31e). This may be how the grammar resolves the ambiguity created by the fact that the extra noun phrase and the subject have the same form: both are noun phrases in the unmarked case that can be realized as weak pronouns.

14.3.5 Word order

Clauses formed from the verbs of possession have the word order of ordinary intransitive clauses, once it is recognized that their verb is the complex verb consisting of the verb of possession plus the incorporated noun.

The subject can occur immediately after the complex verb, as in (33). This means, among other things, that the subject can separate the incorporated noun from the rest of the ‘small’ noun phrase (as in (33b-c)) or from the extra noun phrase (33d).

- (33)a. Gof tai asi’ si Ton gi as Maria.
AGR.very not.have pity UNM Ton LCL Maria
 ‘Ton has no pity for Maria.’ (CD, entry for *tâi asi’*)
- b. Tai ganas i neni gumimin letchi.
AGR.not.have appetite the baby AGR.INF.ANTIP.drink milk
 ‘The baby has no appetite to drink milk.’ (CD, entry for *tâi ganas*)
- c. Esta pâ’gu manggai famagu’un i famagu’on-hu
already now AGR.have PL.child the PL.child-AGR
 ni manggai famagu’un.
COMP AGR.have PL.child
 ‘Now my children have children who have children.’ (Cooreman 1983: 95)
- d. Gai tinanum si Becky bilen gi gima’-ñiha.
AGR.have plant UNM Becky Job’s.tears LCL house-AGR

‘Becky has some Job’s tears plants at her house.’ (CD, entry for *bilén*)

The subject can also occur at the right edge of the clause, after the ‘small’ noun phrase (as in (34a)) or the extra noun phrase (34b).

- (34)a. Gof gai ganas chumotchu si Cecilia.
 AGR.very have appetite AGR.INF.ANTIP.eat UNM Cecilia
 ‘Cecilia has lots of appetite to eat.’ (CD, entry for *gái ganas*)
- b. Gai iyu makinan manlâksi si
 AGR.have possession machine.L AGR.ANTIP.sew UNM
 Rosa.
Rosa
 ‘Rosa has a sewing machine (lit. has a sewing machine as possession).’ (CD, entry for *gái iyu*)

Note that the subject cannot occur immediately after the verb of possession. This is because the verb of possession and the incorporated noun form a single phonological word (see 14.3.2).

14.4 Transitive verbs with the marking of nouns

A few transitive verbs have the marking of nouns: they show agreement with the subject through the suffixes used for possessor agreement. These verbs include *ga’ña-* ‘prefer’, *ga’o-* ‘prefer’, *sa’-* ‘look good in, suited to’, *ya-* ‘like’, and *ilek-* ‘say’. The majority are psychological verbs: they describe feelings or other psychological states. Note that they contrast with the vast majority of psychological verbs in Chamorro, which are ordinary transitive verbs (e.g. *guaiya* ‘love’, *chatli’i* ‘hate’) or adjectives (e.g. *ma’â’ñão* ‘afraid’, *ekgu* ‘jealous’) that show agreement in the normal way.

Some representative examples of transitive verbs with the marking of nouns are given in (35).

- (35)a. **Ya-hu** hảo lão **ga’ñak-ku** i ottru.
 like-AGR you but prefer-AGR the other
 ‘I like you but I prefer the other one.’ (EM 25)
- b. **Ilek-ñiha** na mās mǎnn̄gi’
 say-AGR COMP more AGR.delicious
 makáddu i poya ki i punidera.
 AGR.PASS.make.into.soup the young.hen than the hen
 ‘They said that making soup with young chicken is tastier than with

- hen.’ (CD, entry for *punidera*)
- c. **Sa’-ña** si Chong i mistisã-ña.
suited.to-AGR UNM Chong the formal.blouse-AGR
 ‘Chong looked good in her formal clothes.’ (CD, entry for *mestisa*)

Topping and Dungca (1973: 92) identify *ilek-* ‘say’ as a form of *âluk* ‘say’, a transitive verb that is relatively infrequent but shows agreement with the subject in the normal way. *Ilek-* is often used to introduce direct quotations, as in (36).

- (36) Ha faisin i tres na famagu’un, **ilek-ña**, “Hãfa adai
AGRask the three L PL.child say-AGR what? INTJ
 bidan-mimiyu ... ?”
WH[OBJ].do-AGR.PROG
 ‘He asked the three children, “What are you (pl.) doing...?”’ (from a tape-recorded narrative)

Despite their exceptional marking, these verbs are well-behaved in other ways. They clearly serve as the predicate of the clause. They can be marked for the progressive aspect, for instance.

- (37)a. Maseha un fa’hãhafa hão, **yaya-hu**
although AGR make.into.what.PROG you like-AGR.PROG
 hão ha’.
you EMP
 ‘Even though you’re making yourself into something else, I still like you.’ (CD, entry for *fa’hãfa*)
- b. Ilek-ña atyu i chi’lu-ña, “Ha? Hãfa **ilelek-mu?**”
say-AGR that the sibling-AGR INTJ what? say-AGR.PROG
 ‘That sibling of his said, “Ha? What are you saying?”’ (from a tape-recorded narrative)

They have two arguments: one argument that names the experiencer of the state (e.g. the one who likes) or the performer of the action (e.g. the one who says), and another that names the source of the state (e.g. what is liked) or the result of the action (e.g. what is said). The first argument is realized as the subject, and the second, as the direct object.

The subject and direct object of verbs of this type have essentially the same profiles as the subject and direct object of ordinary transitive verbs. The subject is in the unmarked case, and has the word order flexibility associated with subjects. It can occur immediately after the verb (as in (35c)

and (38a)), at the right edge of the clause (38b), or in other positions (38c-d). (The subjects in the examples below are represented in boldface.)

- (38)a. **Ya-ña** **i** **apehu** fofotgun na tãnu'.
like-AGR the mangrove.fern AGR.wet.PROG L land
 'The mangrove fern grows best in wetland (lit. likes wetland).' (CD, entry for *apehu*)
- b. Sen ya-ña apotalang **i** **che'lu-hu**.
extremely like-AGR box.crab the sibling-AGR
 'My sibling likes box crab a lot.' (CD, entry for *apotalang*)
- c. **Ilek-ña** pã'gu **i** **radio'** na para u guaifun.
say-AGR now the radio COMP FUT AGR.stormy
 'The radio announced today that it will be a stormy day.' (CD, entry for *guaifun*)
- d. **Ti** ya-ña mamãhan magãgu **si** **Pedro**
not like-AGR AGR.INF.ANTIP.buy clothes UNM Pedro
 sa' gof mai'imut na tãotão.
because AGR.very stingy L person
 'Pedro does not like to purchase clothes because he is such a stingy person.' (CD, entry for *mai'imut*)

The direct object is in the unmarked case when it is a noun phrase, and can be realized as a weak pronoun; see (35a), (35c), and the following.

- (39)a. Gef ya-hu si tatã-hu bihu.
very like-AGR UNM father-AGR old
 'I really like my grandfather.' (CD, entry for *bihu*)
- b. Ga'ñak-ku hão kini guãhu.
prefer-AGR you than me
 'I love you more than I do me.' (CD, entry for *kini*)

The direct object can also be an embedded clause, as (40) shows.

- (40)a. **Si** Lucia mampus ti ya-ña [para u atrasão
UNM Lucia so.much not like-AGR FUT AGR.late
 guatu gi iskuela].
to.there LCL school
 'Lucia really hates to be late to school.' (CD, entry for *atrasão*)
- b. **Ilek-ña** si tatã-hu [na gof
say-AGR UNM father-AGR COMP AGR.very

- ñamma' yu'].
sluggish *I*
 'My father said that I'm a slow poke.' (CD, entry for *ñamma'*)

The subject of these verbs is more prominent than the direct object. The subject can be the antecedent of a direct object pronoun in its reflexive use, as can be seen from (41) (see 13.2.1.1).

- (41)a. Ya-ña gui' si Miguel.
 like-AGR *him* *UNM* *Miguel*
 'Miguel likes himself.'
 b. Ga'un-ñiha siha i famagu'un.
 prefer-AGR *them* *the PL.child*
 'The children prefer themselves.'

The subject can also be the antecedent of a (null) pronoun possessor of the direct object in its reflexive use (see 13.2.1.1).

- (42) Ya-ña i bento'-ña si Nānu.
 like-AGR *the box.lunch-AGR* *UNM* *Mariano*
 'Mariano likes his box lunch.' (CD, entry for *bento'*)

When the direct object is an infinitive clause, the subject serves as the antecedent of the missing subject of the infinitive (see 21.4.1). See (38d) and the examples below.

- (43)a. Gof ya-hu [kumānnu' i te'lang mǎnnuk], sa'
 very *like-AGR* *INF.eat* *the bone.L* *chicken* *because*
 bula getmon-ña.
 AGR.much *cartilage-AGR*
 'I like to eat the chicken bones, because they have a lot of cartilage.'
 (CD, entry for *gekmun*)
 b. Sa'-ña [bumaila].
 suited.to-AGR *AGR.INF.dance*
 'She is suited to dancing.' (CD, entry for *sa'-*)

These prominence relations characterize the subject and direct object of transitive clauses more generally.

Perhaps because they show agreement as if they were nouns, the verbs themselves are morphologically deficient. They rarely, if ever, occur in the irrealis mood or as infinitives. Unlike other transitive verbs, they have no

passive or antipassive forms, and cannot be used to create applicatives, reciprocals, or—for most speakers—causatives. They do not show overt forms of wh-agreement. This profile is more characteristic of nouns than of verbs. Nonetheless, *ya-* ‘like’, *ilek-* ‘say’, and so on cannot be analyzed as possessed nouns, because they have a direct object, and nouns in Chamorro do not have direct objects. They also cannot be possessed nouns that exceptionally agree with an argument that is not the subject. The word order patterns in (38) and the prominence relations illustrated in (41-43) reveal that despite the exceptional form of the agreement, these verbs agree with the noun phrase that is their subject.

14.5 Further reading

See Chung (1987) for further discussion of Chamorro existential verbs, and Chung and Ladusaw (2004, Chapter 3) on the structure and meaning of incorporation in Chamorro.

15

IMPERATIVES, EXCLAMATIVES, AND INTERJECTIONS

Chamorro has separate forms for affirmative and negative imperatives. It has an exclamative construction and various interjections.

15.1 Overview

Chamorro has separate forms for affirmative and negative imperatives, as well as an exclamative construction and a familiar range of interjections. All these constructions are discussed in this chapter.

15.2 Imperatives

Imperatives are forms of verbs or adjectives that direct the addressee(s) to do something. Their subject is always missing and understood to refer to the addressee(s). Affirmative imperatives are described in 15.2.1. Negative imperatives, which present some complications, are discussed in 15.2.2.

15.2.1 Affirmative imperatives

Affirmative imperatives are formed from verbs or adjectives in the irrealis mood by omitting the person-and-number forms of agreement (see 2.2.2.3). For practical purposes, this means that the imperative of a transitive verb shows no agreement at all.

- (1)a. Lăo yanggin uchan sanhaya, / **Chuli'** i talâya.
but if AGR.rain DIR.east take the fishing.net
'But if it rains in the east, / Take the fishing net.' (EM 14)
- b. **Su'un** i tessun hălum gi guafi.
push the charcoal inside LCL fire
'Push the charcoal in the fire.' (CD, entry for *su'un*)

The imperative of an intransitive verb or adjective shows agreement with the number affixes alone. In the irrealis mood, these affixes are realized by no

special morphology when the subject is singular or dual (as in (2a-b)), and by the prefix *fan-* when the subject is plural (2c).

- (2) a. **Baila** iya' gi giput.
AGR.dance by.the.way LCL party
 'By the way, dance at the party.' (CD, entry for *iya'*)
- b. **Pākaka'** sa' hu keke'hunguk i rediu.
AGR.silent because AGR try.to.hear.PROG the radio
 'Be quiet because I am trying to listen to the radio.' (CD, entry for *pākaka'*)
- c. **Fanpāra** nu ennao siha na inadingan yanggin
AGR.stop OBL that PL L NMLZ.converse if
 manggaigi i famagu'un.
AGR.be.at the PL.child
 '(There is a need to) stop (with) such talk when children are present.' (CD, entry for *inadingan*)

Because imperatives are in the irrealis mood, the imperative of an *m/f* predicate whose subject is singular or dual begins with /f/ (see 2.2.3.1).

- (3) **Famatkilu** sa' mamaigu' i neni.
AGR.quiet because AGR.sleep.PROG the baby
 'Be quiet because the baby is sleeping.' (CD, entry for *famatkilu*)

Chamorro differs from some other Austronesian languages (e.g. Tagalog and Māori) in not allowing affirmative imperatives to be formed from passive verbs. (The situation with negative imperatives is more complicated; see 15.2.2 below.) However, affirmative imperatives can be formed from all other types of verbs, including antipassives (as in (4a)), applicatives (4b), causatives (4c), and reciprocals (4d).

- (4) a. **Fanutut** hāgun chotda para padda' i
AGR.ANTIP.cut leaf.L green.banana for sheet.L the
 titiyas.
tortillas
 'Cut a banana leaf for the sheet to form tortillas.' (CD, entry for *padda'*)
- b. **Sangāni** si nanā-mu na taya' esta
say.to UNM mother-AGR COMP AGR.not.exist already
 ketchap.
soy.sauce

‘Tell your mother that we are out of soy sauce.’ (CD, entry for *tâya*’)

- c. **Na’banidosu** hão ni linguahi-mu.
make.proud you OBL language-AGR
 ‘Be proud (lit. make yourself proud) of your native language.’ (CD, entry for *lingguahi*)
- d. **Fanásu’un** hălum ya u fanomlat i pumalu.
AGR.RECP.push inside and.then AGR AGR.fit the others
 ‘Squeeze together (lit. push each other in) so the rest can fit.’ (CD, entry for *su’un*)

Affirmative imperatives can also be formed from verbs of possession (5a) or collective verbs derived from a plural pronoun (5b).

- (5) a. **Fanggai** mina’âsi’ nu i taotão siha.
AGR.have NMLZ.merciful OBL the person PL
 ‘Have mercy on the people.’ (CD, entry for *mina’âsi*’)
- b. **Fanhamyu** manma’udai.
AGR.you.PL AGR.INFIN.ride
 ‘(You) ride with them (lit. you (pl.) be together riding).’ (CD, entry for *hamyu*)

The verb *maila*’ ‘come, come on’ occurs only in the imperative. (The related verb *mamaila*’ ‘come (of events)’ has a broader distribution.)

- (6) a. **Maila**’ ya ta boka tinala’ kâtni.
come and.then AGR.eat dried.L meat
 ‘Come and we’ll (incl.) eat dried beef.’ (CD, entry for *boka*)
- b. **Fanmaila**’, mañe’lu-hu, sa’ esta ti atman ha
AGR.come PL.sibling-AGR because already not AGR.long AGR
dingu hit si nanâ-ta.
leave us.INCL UNM mother-AGR
 ‘Come, my brothers and sisters, for our (incl.) mother will leave us (incl.) soon.’ (CD, entry for *maila*’)

Two further characteristics of affirmative imperatives should be noted. First, affirmative imperatives routinely occur in the progressive. Then they direct the addressee to do something that overlaps with some other event.

- (7) a. **Diskâkansa** guennão gi presenti mientras
AGR.rest.PROG there LCL present while

manmáfattu.

AGR.arrive.PROG

‘Be resting for the time being while they are arriving.’ (CD, entry for *priseni*)

- b. **Satteteha** i edda’ ni un guåguadduk.

sort.PROG the dirt COMP AGR dig.PROG

‘Be sorting the dirt as you dig (lit. the dirt that you are digging).’
(CD, entry for *satteha*)

Second, affirmative imperatives are usually conjoined with *yan* ‘and’ (see 19.2). But it is possible to use the asymmetric conjunction *ya* ‘and (then)’ to conjoin an affirmative imperative clause with an irrealis clause whose predicate shows the normal agreement with the subject (see 19.3). In such cases, the clause formed from the imperative always precedes the irrealis clause. The examples below have the force of conjoined imperatives, but only the predicate on the left has the form of an imperative.

- (8) a. [**Fatâ’chung** guennão] ya [un ketu].
sit there and.then AGR keep.still

‘Sit there and keep still.’ (CD, entry for *guennão*)

- b. [**Hânão**], ya [un bendi todú i guinaha-mu].
go and.then AGR sell all the possession-AGR
‘Go and sell all your possessions.’ (NT 36)

15.2.2 Negative imperatives

Chamorro has several strategies for expressing the equivalent of a negative imperative. One strategy involves the negative predicate *munnga* ‘don’t’; another involves the negative verb *cha’* ‘better not, don’t’.

15.2.2.1 *Munnga*

The negative *munnga* ‘don’t’ can also be translated ‘let it not be’. It occurs mainly in negative purpose clauses and in clauses that have the force of negative imperatives.

Munnga is an invariant predicate that is not marked for aspect, mood, or agreement with the subject. Nonetheless, like other predicates, it can be preceded by the future TAM *para*, as can be seen from the negative purpose clause in (9).

- (9) In sesenggi i eddu [para **munnga** na u
AGR burn.PROG the smudge.pot FUT don’t COMP AGR

guaha ñâmu].
 exist mosquito
 ‘[If we are at the ranch at night], we (excl.) burn smudge pots so
 that there won’t be any mosquitos.’ (CD, entry for *oddu*)

Mungnga has just one argument. That argument, which names the event that should not happen, is realized in various ways:

(i) The argument of *mungnga* can be an irrealis embedded clause. Constructions of this sort have several functions. When *mungnga* is the predicate of the main clause and the embedded clause has a second person subject, the sentence has the force of a negative imperative. It directs the addressee(s) not to do something, as in (10).

- (10)a. **Mungnga** na para un falâgu para i lanchu.
 don’t COMP FUT AGR run to the farm
 ‘Don’t run to the farm.’ (CD, entry for *falâgu*)
 b. **Mungnga** na un isagui gui’.
 don’t COMP AGR offend him
 ‘Do not offend him.’ (CD, entry for *isagui*)

Otherwise, when *mungnga* is the predicate of an embedded clause (as in (9)), or is conjoined with an affirmative imperative in asymmetric coordination (as in (11)), the construction has the meaning of a negative purpose clause.

- (11)a. [Huchum i trangka] ya [mungnga na u
 close the gate and.then don’t COMP AGR
 hâlum i ga’lâgu].
 go.in the dog
 ‘Close the gate so the dogs will not come in.’ (CD, entry for
 trangka)
 b. [Se’pi hâo] ya [mungnga na un mampus
 have.snack you and.then don’t COMP AGR so.much
 ñâlang].
 AGR.hungry
 ‘Have a snack so you won’t get so hungry.’ (CD, entry for *se’pi*)

(ii) The argument of *mungnga* can be an infinitive clause or a reduced clause. This construction is reminiscent of raising (see 21.3): the argument that would normally be realized as the subject of the embedded predicate is realized as the subject of *mungnga*.

When this argument is first or third person, the construction serves to communicate a refusal (as in (12a-b)) or a suggestion that the speaker and the addressee not do something (12c).

- (12)a. Mungnga yu' kumonni' hảo sa' gai
don't I INF.take you because AGR.have
 inaguaguat hảo.
NMLZ.naughty you
 'I'm not going to take you because you're naughty.' (CD, entry for *inaguaguat*)
- b. Mungnga gui' pumãra kumãti.
don't she AGR.stop AGR.cry
 'She doesn't want to stop crying.'
- c. Mungnga hit manburuka mientras ki
don't we.INCL AGR.INF.make.noise while PRT
 mamaigu' ha' i neni.
AGR.sleep.PROG EMP the baby
 'Let's (incl.) not make noise while the baby is still sleeping.' (CD, entry for *mientras*)

Far more often, the argument appears to be second person (but see the discussion below). Then it is unpronounced, and the construction has the force of a negative imperative, can be seen from the following.¹

- (13)a. Mungnga tumohgi guennão, sa' bula
don't AGR.stand there because AGR.many
 chichigit ya un inakka'.
insect.sp and.then AGR PASS.bite
 'Do not stand there, because there are many *chichigit* and you might get bitten.' (CD, entry for *chichigit*)
- b. Mungnga mampus umandi', un
don't so.much AGR.showy AGR
 na'fandisganãão i taotão.
make.AGR.disappointed.PROG the person
 'Don't be so showy, you turn people off.' (CD, entry for *andi'*)

¹ Infinitive clauses can be difficult to distinguish morphologically from reduced clauses (see 21.2.1 and 21.6.1). The embedded transitive verb in (12a) clearly shows infinitival agreement. The embedded predicates in (13) and (14) are treated as the predicates of reduced clauses. Note that long passive occurs in (14) (see 21.6.2).

- c. Mungnga mannâ'i ni ti agradesidu.
don't AGR.ANTIP.give OBL not AGR.well.received
 'Don't give something that is not well received.' (CD, entry for *agradesidu*)

The sentences in (13) illustrate the form of these (so-called) negative imperatives when the embedded predicate is intransitive. The structure is different when the embedded predicate is transitive. Then the verb must be passive, and the passive agent—which seems to refer to the addressee(s)—is unpronounced. Negative imperatives of this sort can be constructed from all types of transitive verbs, including applicatives (as in (14c)) and causatives (14d), as can be seen from the following.

- (14)a. Mungnga **mafrâgua** na'an ottru tâotâo.
don't AGR.PASS.forge name.L other person
 'Don't forge another person's name.' (CD, entry for *frâgua*)
- b. Mungnga **makonni'** i hagâhaf ni manggosni.
don't AGR.PASS.catch the sea.crab COMP AGR.molt
 'Don't catch the sea crabs that are molted.' (CD, entry for *gosni*)
- c. Mungnga **masangâni** si Laura sa'
don't AGR.PASS.say.to UNM Laura because
hamaleffa.
AGR.often.forget
 'Don't tell Laura because she's a forgetful person.' (CD, entry for *hâmaleffa*)
- d. Mungnga **mana'sinilu'** hâo.
don't AGR.PASS.make.lose.temper you
 'Don't get out of hand (lit. don't you be made to lose your temper).' (CD, entry for *sinilu'*)

Notice that the embedded passive verb is followed by its internal argument—the argument that would be the direct object of the corresponding transitive verb. Curiously, this argument, which seems to be realized as the subject of *mungnga*, can be overt even when it is a second person pronoun, as (14d) shows.

Sentences like (13) and (14) raise difficult questions about the structure and meaning of negative imperatives formed from *mungnga*. One mystery is why an embedded transitive verb must be passive in this construction. Another mystery is why the subject of *mungnga* in sentences like (14a-c) realizes not the argument that (apparently) refers to the addressee, but instead the internal argument of the passive verb. A third mystery is why,

when the subject of *mungnga* does refer to the addressee, as in (13) and (14d), it is sometimes missing and other times overt.

Tellingly, Chamorro has a type of impersonal construction with many of the same characteristics (see 21.6.4). In this impersonal construction, a higher adjective has one argument, which names an event and is realized as a reduced clause. When the embedded predicate of the reduced clause is intransitive, the argument that would normally be realized as its subject is an implicit argument; it has no syntactic realization at all and is understood as nonspecific (see 9.3.2). When the embedded predicate is transitive, long passive must occur, and the implicit argument is the passive agent.

The fact that sentences of the type (13-14) have essentially this profile suggests that they do not have the structure of imperative clauses after all. Rather, they are impersonal sentences in which a higher adjective (*mungnga*) has one argument, which can be realized as a reduced clause. On this view, *mungnga* literally means ‘let it not be’; the understood subjects in (13) and the understood passive agents in (14) are implicit arguments, and reference to the addressee(s) is implied rather than direct. For instance, (13a) and (14a) would be translated more literally as ‘Let it not be that one stands there...’ and ‘Let it not be that another person’s name is forged.’

15.2.2.2 *Cha’-*

The negative predicate *cha’-* ‘better not, don’t’ is one of the verbs that show agreement with the subject as if they were nouns, with the suffixes used for possessor agreement (see 14.4). *Cha’-* has two arguments. One argument, which is realized as the subject, names the individual who had better not do something; the other argument names what had better not be done. Clauses formed from *cha’-* are not necessarily imperative clauses. The individual who had better not do something does not have to be the addressee, as (15) shows.

- (15)a. **Chacha’-ña** si Miguel mama’bababa.
better.not-AGR.PROG UNM Miguel AGR.INF.ANTIP.deceive.PROG
 ‘Miguel better not be fooling around.’ (CD, entry for *chacha’-*)
- b. **Cha’-ña** yu’ umessitatani na para u
better.not-AGR me INF.joke.with.PROG COMP FUT AGR
 sotta ha’ yu’ guini.
leave EMP me here
 ‘He better not kid me that he is just going to leave me here.’ (CD, entry for *cha’-*)

But when this individual is the addressee, the construction has the force of a negative imperative.

There are various options for realizing the argument that names what had better not be done. This argument is occasionally realized as a finite embedded clause, as in (16).

- (16)a. Sangãni si Tihu-mu yan Tihã-mu, na
 say.to UNM Uncle-AGR and Aunt-AGR COMP
 cha'-ñiha [u fanluluhan].
 better.not-AGR AGR.AGR.afraid.PROG
 'Tell your Uncle and Aunt that they shouldn't be afraid.' (EM 101)
- b. Cha'-mu [na para un falingu esta].
 better.not-AGR COMP FUT AGR disappear already
 'Don't (tell me) that you will disappear already.' (CD, entry for *falingu*)

It can also be realized as an infinitive clause. Then, the infinitive predicate is often marked for the progressive aspect.

- (17)a. Cha'-mu chumochotchu nãya.
 better.not-AGR AGR.INF.ANTIP.eat.PROG for.awhile
 'Don't eat for awhile.' (CD, entry for *nãya*)
- b. Cha'-miyu yu' umattokgui.
 better.not-AGR me INF.hide.from
 'Don't you (pl.) hide from me.' (CD, entry for *cha'-*)
- c. Cha'-mu yu' fuma'chachalik.
 better.not-AGR me INF.make.fun.of.PROG
 'Do not make fun of me.' (CD, entry for *cha'-*)

Most often, the argument is realized as a defective embedded clause that has a missing subject, like an infinitive, but realizes the embedded predicate in a special form that occurs only here (though it is similar to the form of the partly inflected predicate inside causative verbs; see 12.2). This special form is irrealis and marked for the progressive aspect; it shows agreement with the subject through the number affixes alone. Some illustrative examples are cited in (18). Notice that when the initial syllable of the embedded predicate bears primary stress, the morphophonemic alternation known as umlaut can be activated (see 30.2). Umlaut has occurred in *hahanão* 'be going' in (18a) (from *hãnão* 'go'), and *i'isa* 'be using' in (18c) (from *usa* 'use').

- (18)a. Yanggin ti ma kunsienti hão, pues cha'-mu
if not AGR allow you then better.not-AGR
hahanão.
go.PROG
 'If they haven't given you permission, then don't go.' (CD, entry for *kunsienti*)
- b. Cha'-miyu **fanggigimin** gi hãra.
better.not-AGR AGR.ANTIP.drink.PROG LCL pitcher
 'Don't (pl.) drink from the pitcher.' (CD, entry for *hãra*)
- c. Cha'-miyu **i'isa** meggai na palåbra siha gi
better.not-AGR use.PROG many L word PL LCL
tinayuyut-miyu.
prayer-AGR
 'Do not (pl.) use many words in your (pl.) prayers.' (NT 9)

The pattern in (18) probably represents the older version of this construction.

15.3 Exclamatives

Exclamatives are sentences that exclaim over the degree to which something deviates from the norm. In Chamorro, they begin with an interjection, *ai* or *i* (pronounced [i:], with a (very) long vowel), which can be roughly translated 'oh' or 'wow'. The interjection is followed by what looks like an embedded clause introduced by the complementizer *na*. The predicate of this embedded clause describes the property being exclaimed over, and its subject names who or what has the property.

Typically, the predicate is an adjective marked with the infix *-in-*, which is glossed IN in the examples below. (Here and in all its uses, *-in-* activates umlaut; see 30.2.)

- (19)a. Ai na mina'hu yu'.
oh COMP IN.thirsty I
 'My, I am so thirsty.' (CD, entry for *mina'hu*)
- b. Ai na minaggim esta esti na biskuchu.
oh COMP IN.damp already this L biscuit
 'My, this biscuit is so stale already.' (CD, entry for *minaggim*)
- c. I na chinattão si Kai!
oh COMP IN.stingy UNM Kai
 'Frances is very stingy!' (CD, entry for *chattão*)

But the predicate can also be a noun, modified by an adjective that may or may not be marked with the infix *-in-*, as in (20).

- (20)a. Ai na mantinangnga na famagu'un pã'gu na tiempu.
oh COMP AGR.IN.deaf L PL.child now L time
 'Gosh, deaf children these days are common.' (CD, entry for *tinangnga*)
- b. I na anãkku' donni' ti'ão ennão.
oh COMP long.L pepper.sp that
 'Wow! that's a long pepper.' (CD, entry for *donni' ti'ão*)
- c. Ai na minisin mânia esti.
oh COMP IN.full.of.liquid.L green.coconut this
 'My, this young coconut is full of liquid.' (CD, entry for *minisin*)

The predicate can even be a noun on its own (as in (21a)), or a verb of possession conjoined with an adjective (21b).

- (21)a. Ai na pãtgun ennão!
oh COMP child that
 'Oh, that child!' (CD, entry for *ai*)
- b. Ai na mansen tai hinenggi yan
oh COMP AGR.extremely not.have belief and
manlachi hamyu!
AGR.wrong you.PL
 'You (pl.) faithless and corrupt (lit. wrong) generation!' (NT 33)

Exclamatives have some of the structure and distribution of ordinary clauses. They can be conjoined with another clause (as in (22a)), and can serve as adverbial clauses introduced by the subordinating conjunction *sa'* 'because' (22b).

- (22)a. [Ai na minipi si Jose anai hohobin],
oh COMP IN.hairy UNM Jose when AGR.young.PROG
lão [pã'gu, esta todũ dâkngas].
but now already all AGR.bald
 'My, Jose was very hairy when he was younger, but now he is completely bald.' (CD, entry for *mipi*)
- b. Apreta fan ennão na pãtgun sa' [ai na
make.hurry please that L child because oh COMP
tinatnun].
IN.easily.distracted

‘Please hurry that child because she is easily distracted.’ (CD, entry for *tatnun*)

They can also have adverbial clause modifiers, as in (22a) and (23).

- (23) Ai na pinetsu’ si Rosa, [sa’ ha
oh COMP IN.good.at.shooting UNM Rosa because AGR
 danchi i paluma gi hilu’ i trongku anai ha fletcha].
hit the bird LCL top.L the tree when AGR shoot.at
 ‘What a sharp shooter Rosa is, because she hit the bird on top of the
 tree when she shot at it with the slingshot.’ (CD, entry for *potsu*)

The noun phrase that names who or what has the property exclaimed over is clearly the subject. It has the form of a subject: it appears in the unmarked case and can be realized as a weak pronoun (see (19)). It can also serve as the antecedent of the missing subject of an infinitive clause, as in (24).

- (24)a. I na chinacha’ si Brenda chumotchu.
oh COMP IN.choosy UNM Brenda AGR.INF.ANTIP.eat
 ‘Brenda is too choosy in eating.’ (CD, entry for *chacha*)
 b. Ai na mina’ã’ñão si Tan Maria ma’udai gi
oh COMP IN.afraid UNM Tan Maria AGR.INF.ride LCL
 batkun airi.
airplane
 ‘Tan Maria has so much fear riding on airplanes.’ (CD, entry for
mina’ã’ñão)

The puzzling aspects of exclamatives involve their predicate. The predicates in (19) and (22-24) might seem initially to be nominalizations derived by attaching the infix *-in-* to an adjective (see 28.6.1). But an analysis that treats these forms as nominalizations would be at odds with their meaning. (19a), for instance, means ‘My, I’m so thirsty’, not ‘My, I’m so the event of being thirsty’ (with the meaning of an event nominalization) or ‘My, I’m so thirst’ (with the meaning of a result nominalization). Moreover, exclamatives like (21b) reveal that the predicate does not have to be a noun. This suggests that the *-in-* attached to the adjective in (19) might well have some function specific to exclamatives. The conjecture is not unreasonable, given that the *-in-* of exclamatives can appear on an adjective modifier of the predicate noun (see (20a) and (20c)). It is unclear just what this function might be.

15.4 Interjections

Interjections are word-sized or phrase-sized expressions used on their own to make conversational moves. Like other languages, Chamorro has a large number of interjections. This section surveys some of the most common interjections used to affirm, deny, greet, bid farewell to, thank, and hesitate.

The affirmative interjections include the polite *hunggan* ‘yes’ and the more informal affirmatives *(h)â’a*, *(h)u’u*, and *u nai*, all of which mean ‘yes, yeah’.

There is one negative interjection, *âhi* ‘no’. Doubt, uncertainty, or indecision can be expressed with *hekkua* ‘I don’t know, dunno’. *Hekkua* can be followed by an embedded question, as in (25).

- (25)a. Hekkua’ hâfa na ti anâkku’ esti i gigão.
 dunno what? COMP not AGR.long this the fish.trap
 ‘I don’t know why this fish trap is not long.’ (CD, entry for *gigão*)
- b. Hekkua’ kâo para si Hudas o para si
 dunno Q for UNM devil or for UNM
 Yu’us ...
 God
 ‘I don’t know if we’re for the devil or for God...’ (from a tape-recorded narrative)

The common greetings include *hâfa dai* ‘hello, hi’ and, more recently in the CNMI, *buenas* ‘hello, good day’. (*Buenas* is shortened from greetings borrowed from Spanish, e.g. *buenas dihas* ‘good day’, *buenas notchis* ‘good evening’.) The common farewells include the informal *esta* ‘okay, see you’ and the more formal *adios* ‘good-bye, farewell’, which is used for partings that are more serious or of longer duration.

Other common interjections include *buen binidu* ‘welcome’, *put fabót* ‘please’, *si Yu’us ma’âsi* ‘thank you (lit. God is merciful)’, *diahlu* ‘no thank you (used e.g. when declining food)’, *ai adai*, ‘oh dear, my goodness’, and *po’lu ya...* ‘let go of it, let’s put it off’.

The pause or hesitation form, roughly equivalent to English ‘uh’, is *nu*.

- (26) Malagu’ yu’ nu ... umekkunguk hemplu.
 AGR.want I uh INF.listen.to story
 ‘I want to uh...listen to a story.’ (CD, entry for *nu*)

16

INFORMATION PACKAGING

Chamorro has some restrictions that ensure that the subject is salient from the perspective of information packaging. Two restrictions prevent a transitive clause from having a direct object that outranks the subject in person, animacy, and related notions. A third restriction requires subjects that are external arguments to be specific.

16.1 Overview

As observed earlier (in 3.2.1), the subject is the most prominent constituent of the clause. Chamorro has several restrictions that ensure that the subject is also salient from the perspective of information packaging, meaning that its linguistic features make it noteworthy, topical, or deserving of attention in the discourse. At the word level, languages tend to treat animate nouns as more salient than inanimate nouns, singular nouns as more salient than plural nouns, pronouns as more salient than nonpronouns, and pronouns that refer to participants in the speech event (= first and second persons) as more salient than other pronouns (= third person). At the sentence level, languages tend to treat noun phrases that are syntactic topics as more salient than other noun phrases. At the discourse level, languages tend to treat noun phrases that are specific (= refer to particular individuals) as more salient than other noun phrases. These tendencies come into play in the restrictions described below, in ways that are familiar from other languages but also unique to Chamorro grammar.

Two Chamorro restrictions, called the *person-animacy restriction* and the *third plural restriction*, prevent a transitive clause from having a subject that falls below a certain level of word-level salience. A third restriction requires subjects that are external arguments to be specific.

16.2 The person-animacy restriction

Chamorro has a restriction that prevents a transitive clause from having a direct object that outranks the subject in person or animacy (see e.g. Aissen 1997, Chung 1998, Clothier-Goldschmidt 2015, Cooreman 1987, and Woolford 1986). This person-animacy restriction has several subcases. First, a

transitive clause cannot have an animate direct object but an inanimate subject. Clauses like those in (1) are ungrammatical, in other words.

- (1) a. ***Ha na'kåti i manenghing i patgun.**
AGR make.cry the cold the child
 ('The cold made the child cry.')
- b. ***Ha istotba si Carmen [na ha sugun i kareta i lahi-mu].**
AGR disturb UNM Carmen COMP AGR drive the car the son-AGR
 ('That your son drove the car disturbed Carmen.')

Second, a transitive clause cannot have a direct object that is an animate pronoun but a subject that is not a pronoun. So the clauses in (2) are ungrammatical, whether the animate pronoun is overt (as in (2a-b)) or null (2c) (see Woolford 1986).¹

- (2) a. ***Para u lalåtdi gui' si Maria.**
FUT AGR scold him UNM Maria
 ('Maria is going to scold him.')
- b. ***Kåo ha chiku siha i palåo'an?**
Q AGR kiss them the woman
 ('Did the woman kiss them?')
- c. ***Ha tattiyi si Juan guatu gi kareta.**
AGR follow UNM Juan to.there LCL car
 ('Juan followed him to the car.')

Third and finally, a transitive clause cannot have a direct object that is second person but a subject that is third person (see Cooreman 1987: 97). This is illustrated in (3).

¹ Some of these examples also have a different meaning in which they are grammatical but irrelevant, because the direct object is either a reflexive pronoun or not a pronoun at all. (2a) is grammatical if the direct object is reflexive; then the sentence means 'Maria is going to scold herself' (see the discussion later in the text). (2c) is grammatical if the direct object is the noun phrase *si Juan*; then the sentence means 'He followed Juan to the car' (see (4e)).

- (3) ***Kão ha kuentusi hão antis di u hânão?**
Q AGR speak.to you before PRT AGR go
 ('Did he speak to you before he left?')

Transitive clauses with other combinations of subject and direct object are generally well-formed (but see 16.3). Some examples are cited in (4).

- (4) a. Cha'-mu sumangãngani si Vicenta sa' un
better.not-AGR INF.say.to.PROG UNM Vicenta because AGR
na'piniti.
make.sad
 'Don't tell Vicenta because you will hurt her.' (CD, entry for *piniti*)
- b. Ha sangani siha hãfa sinanganen-ña si Tan
AGR say.to them what? WH[OBJ].say.to-AGR UNM Mrs.
Ignacia.
Ignacia
 'She told them what Tan Ignacia had said.' (EM 101)
- c. Ha arãsa i gima'-mãmi i pakyu.
AGR raze the house-AGR the typhoon
 'The typhoon razed our (excl.) home.' (CD, entry for *arãsa*)
- d. Ha fongfung si Pedro si Jose kontra i
AGR pound.head UNM Pedro UNM Jose against the
lamasa.
table
 'Pedro pounded Jose's head (lit. head-pounded Jose) against the table.' (CD, entry for *fongfung*)
- e. Ha tattiyi si Juan guatu gi kareta.
AGR follow UNM Juan to.there LCL car
 'He followed Juan to the car.'

Each of the ungrammatical clauses in (1-3) has a direct object that is more salient than the subject. This suggests that Chamorro has a hierarchy of word-level salience according to which noun phrases can be ranked. This hierarchy, which is called the person-animacy hierarchy, is shown in (5).

- (5) PERSON-ANIMACY HIERARCHY
 2 > 3 animate pronoun > animate > inanimate
 (where > means 'is more salient than')

The person-animacy restriction can be stated in terms of this hierarchy, as follows: no transitive clause can have a direct object that is the left of the subject on the person-animacy hierarchy.

Typically, transitive clauses that violate the person-animacy restriction have their meaning expressed by the corresponding passive (see Cooreman 1987 and Clothier-Goldschmidt 2015). Passive clauses trivially satisfy this restriction because they are intransitive (see 10.1). Compare the ungrammatical transitive clauses in (1-3) with the passive clauses below.

- (6) a. Inistotba si Carmen [na ha sugun i
 AGR.PASS.disturb UNM Carmen COMP AGR drive the
 kareta i lahi-mu].
 car the son-AGR
 ‘Carmen was disturbed (by the fact) that your son drove the car.’
- b. Para u nilalâtdi as Maria.
 FUT AGR PASS.scold OBL Maria
 ‘He is going to be scolded by Maria.’
- c. Kão manchiniku siha ni palão’an?
 Q AGR.PASS.kiss they OBL woman
 ‘Were they kissed by the woman?’
- d. Kão kuinentusi hão ântis di u hânão?
 Q AGR.PASS.speak.to you before PRT AGR go
 ‘Were you spoken to by him before he left?’

The idea that the person-animacy restriction regulates the relative salience of the subject and direct object is supported by some other patterns. To begin with, the restriction is sensitive only to pronouns that are animate. Inanimate direct object pronouns can freely occur with any type of subject. (Inanimate pronouns are always null; see 8.4.)

- (7) a. Guesguis i la’uya ântis di un na’la’lu.
 scrape the pot before PRT AGR return
 ‘Scrape the pot before you return it.’ (CD, entry for *guesguis*)
- b. Humugându si Isabel ni hilu ya ha
 AGR.play UNM Isabel OBL thread and.then AGR
 na’gâtdun.
 make.entangled
 ‘Isabel played with the thread and she made it all entangled.’ (CD, entry for *gâtdun*)
- c. Masinik i mannuk gi barânda lão ha guâhni esta
 AGR.defecate the chicken LCL porch but AGR remove already

si Melchor.
 UNM Melchor
 ‘The chicken pooped in the garage and Melchor removed it.’ (CD,
 entry for *guǎhni*)

The restriction also ignores animate pronouns in their reflexive use, as in (8). This is arguably because reflexive pronouns do not compete in salience with their antecedents, and a direct object that is reflexive always has the subject as its antecedent (see 13.2.1.1).

- (8) a. Ha bǎgai gui’ i neni ni sabanas.
 AGR wrap him the baby OBL blanket
 ‘The baby wrapped himself with the blanket.’ (CD, entry for *bǎgai*)
 b. Ha mǎttit gui’ i nana put i guinaiyan-ña ni
 AGR martyr her the mother for the NMLZ.love-AGR OBL
 lahi-ña.
 son-AGR
 ‘The mother had martyred herself for the love of her son.’ (CD,
 entry for *mǎttit*)

Finally, speakers occasionally allow the restriction to ignore the direct object when the subject serves as an inner topic. Inner topics occur at the left edge of the clause, preceding the predicate; they are resumed within the clause by a null pronoun that typically serves as the subject (see 26.2.1). Their discourse salience may be what allows clauses like (9) to occur, although it is mysterious why such clauses are dispreferred and infrequent.

- (9) I abugǎo-mu para u difendi hǎo.
 the lawyer-AGR FUT AGR defend you
 ‘Your lawyer will defend you.’ (CD, entry for *abugǎo*)

Other aspects of the person-animacy restriction are harder to rationalize. The restriction does not affect the distribution of first person pronouns at all. First person pronouns occur freely as direct objects, whatever the character of the subject.

- (10)a. Estrǎñu sinientek-ku kada ha atan yu’.
 AGR.strange NMLZ.feel-AGR whenever AGR look.at me
 ‘I have a strange feeling every time he looks at me.’ (CD, entry for *estrǎñu*)

- b. Ha hila'gui yu' si Jeanette.
AGR stick.tongue.at me UNM Jeanette
 'Jeanette stuck her tongue out at me.' (CD, entry for *hila'gui*)
- c. Ha istotba ham na binisita i hagan-mãmi
AGR disturb us.EXCL COMP AGR.PASS.visit the daughter-AGR
 as Manuel.
OBL Manuel
 'That Manuel visited our (excl.) daughter disturbs us (excl.).'

First person pronouns also occur freely as subjects, whatever the character of the direct object.

- (11)a. Hu chetchit hảo, lão ti un hunguk.
AGR whisper you but not AGR hear
 'I whispered to you, but you didn't hear me.' (CD, entry for *chetchit*)
- b. Hu adinganiyi i patgun sa' mampus luhan.
AGR converse.for the child because so.much AGR.scared
 'I spoke for the boy, because he was too frightened.' (CD, entry for *adinganiyi*)
- c. Hu na'lokkluk i cha para bai hu gimin.
AGR make.boil the tea FUT AGR drink
 'I boiled the tea to drink it.' (CD, entry for *cha*)

No position on the person-animacy hierarchy could ensure the freedom of distribution illustrated in (10-11). It is a mystery why first person pronouns differ from second person pronouns in escaping this restriction.

Moreover, the person-animacy restriction does not constrain transitive clauses across the board. Its effects are limited to clauses that show the ordinary forms of agreement with the subject—agreement chosen from the paradigms described in 2.2.2. The restriction has no impact on transitive clauses that show more specialized types of agreement. This includes clauses formed from verbs that show agreement as if they were nouns (see 14.4).

- (12) Ti **ya-ña** hảo i nana sa' ti apropósiu hảo
not like-AGR you the mother because not AGR.suitable you
 para i hagã-ña.
for the daughter-AGR
 'The mother does not like you because you are not suitable for her daughter.' (CD, entry for *apropósiu*)

It also includes infinitive clauses formed from transitive verbs, which show the infinitival agreement infix *-um-*. (Infinitive clauses must have a missing subject. The missing subject of the infinitive clause in the control construction in (13) is a pronoun that must be null; see 21.4.)

- (13) Ha chagi si Pai' **umaligão** hảo gi giput.
AGR try UNM Pai' INF.look.for you LCL party
 'Pai' tried to look for you at the party.'

Finally, the restriction has no impact on clauses in which the verb shows an overt form of wh-agreement, since overt wh-agreement supersedes the normal agreement with the subject (see 22.4.1). Consider the constituent questions and the focus construction in (14). The verb in these sentences shows the subject form of wh-agreement, which is realized as the infix *-um-*.

- (14)a. Hãyi **kumestiona** hảo?
who? WH[SBJ].question you
 'Who interrogated you?' (CD, entry for *kumestiona*)
 b. Unu gi disípulus Jesukristu **tumakpångi** gui'.
one LCL disciples Jesus.Christ WH[SBJ].baptize him
 'It was one of Jesus's followers who baptized him.' (CD, entry for *disípulu*)
 c. Hãfa **muna'fanlalaman** i taotão?
what? WH[SBJ].make.AGR.snore.PROG the person
 'What makes people snore?' (CD, entry for *lanan*)

In the constituent question in (15), the verb shows the object form of wh-agreement, which is realized as the infix *-in-* plus nominalization (see 11.5).

- (15) Hãfa **nina'i-ña** si Rita nu hãgu?
what? WH[OBJ].give-AGR UNM Rita OBL you
 'What did Rita give you?'

Even though the combinations of subject and direct object in (14-15) ought to be illegal, their special agreement allows them to escape the person-animacy restriction. In contrast, when wh-agreement is not overtly realized and the verb shows the normal agreement with the subject, the clause must conform to the person-animacy restriction as expected. Compare (14) with (16), where the subject of a transitive verb has been displaced by wh-movement, but wh-agreement is not overt, because the verb is irrealis.

- (16)a. ***Hăyi para u ayuda hăo?**
who? FUT AGR help you
 ('Who is going to help you?')
- b. ***Ti hu tungu' hăyi para u hassu siha.**
not AGR know who? FUT AGR remember them
 ('I don't know who is going to remember them.')
- c. ***Hăfa para u na'kăti i patgun?**
what? FUT AGR make.cry the child
 ('What is going to make the child cry?')

The fact that the person-animacy restriction does not affect all transitive clauses, but only those that show the normal forms of agreement with the subject, is surprising from an information structure perspective. The restriction is probably best viewed as a morphological constraint whose function—to regulate word-level salience within the clause—is obscured by some language-specific arbitrariness (see Chung 2014).

Clothier-Goldschmidt (2015) shows that the person-animacy restriction is almost never violated in Chamorro discourse. Her corpus study of sentences from *Nuebu Testamento* (the Chamorro New Testament, translated from English into Chamorro by a small group of fluent native speakers led by the late Bishop Tomas A. Camacho, and published in 2007) uncovered just two violations out of more than 350 Chamorro sentences that could, in principle, have violated the restriction. A smaller study of sentences from the CD database supports her findings. Nonetheless, in elicitation sessions in fieldwork, some speakers occasionally violate the person-animacy restriction when translating from English into Chamorro, or judge violations produced by the linguist to be well-formed. It is unclear how to interpret this variability. The position taken here, which follows Clothier-Goldschmidt (2015), is that the person-animacy restriction is a hard constraint of Chamorro grammar. The variability in the elicitation data may well reflect individual differences in speakers' reactions to the field situation.

16.3 The third plural restriction

A different Chamorro restriction prevents transitive clauses from having a subject that is third person dual or plural but not a pronoun. Because first and second person subjects are always pronouns, the restriction can be rephrased as follows: no transitive clause can have a dual or plural subject that is not a pronoun.

This third plural restriction, as it will be called here, is responsible for the ungrammaticality of the transitive clauses in (17).

- (17)a. ***Para** **uma** **na'gãsgas** **i** **amigu-hu** **siha**.
FUT AGR make.clean the friend-AGR PL
 ('My friends are going to clean it.')
- b. ***Ma** **tungu'** **i** **famagu'un** [**na** **para** **u** **fãttu**
AGR know the PL.child COMP FUT AGR arrive
si **tatan-ñiha** **agupa'**].
UNM father-AGR tomorrow
 ('The children know that their father is going to arrive tomorrow.')
- c. ***Ma** **bota** **i** **taotão** **i** **maga'lãhi**.
AGR vote the person the high.official
 ('The people voted for the governor.')

Each of the transitive clauses in (17) has a subject that is third person plural but not a pronoun. In contrast, the grammatical transitive clauses in (18) have subjects that are third person plural pronouns (see Cooreman 1987: 73-74).

- (18)a. **Ma** **na'gãsgas** **i** **lamasa** **lão** **guaha** **sopblan** **plātu**
AGR make.clean the table but AGR.exist leftover.L plate
gi **un** **bãnda**.
LCL a side
 'They cleared the table but there were leftover plates on the side.'
 (CD, entry for *sopbla*)
- b. **Ma** **sãsangan** [**na** **i** **apatcha'** **gi** **gima'** **mãolik** **na**
AGR say.PROG COMP the mantis LCL house good L
siñât].
sign
 'They say that a mantis in the house is a good sign.' (CD, entry for *apatcha'*)
- c. **Ma** **na'tângis** **i** **neni** **sa'** **made'un** **fãsu-ña**.
AGR make.cry the baby because AGR.PASS.pinch cheek-AGR
 'They made the baby cry because she was pinched on the cheek.'
 (CD, entry for *tângis*)
- d. **Para** **uma** **kastiga** **hit** **ti** **âtman**.
FUT AGR punish us.INCL not long
 'They are going to punish us (incl.) soon.'

Transitive clauses that violate the third plural restriction, such as those in (17), are judged to be ungrammatical and unparsable. Their meaning can be expressed by the corresponding passives or antipassives, which trivially satisfy the restriction because they are intransitive. Some passive clauses in

(19)a. Mahigif i sakki gi as Juan yan
AGR.PASS.catch.by.surprise the thief OBL Juan and
 Jose.
Jose
 ‘Juan and Jose caught the thieves by surprise.’ (CD, entry for *higif*)

b. Ti maguaiya ni famagu’un i gellai âppan
not AGR.PASS.love OBL PL.child the vegetable.L dry.L
chotda.
green.banana
 ‘The children don’t like the green banana cooked in coconut milk.’
 (CD, entry for *gollai âppan chotda*)

c. Tinampi i atdão ni mapagâhis siha.
AGR.PASS.cover the sun OBL cloud PL
 ‘The sun was covered by the clouds.’ (CD, entry for *âtdão*)

d. Manmahulat ham ni mañaina gi hunta.
AGR.PASS.subdue we.EXCL OBL PL.parent LCL meeting
 ‘We (excl.) were subdued by the parents at the meeting.’ (CD, entry
 for *hulat*)

(20)a. Manmansolisita infotmasion i istudiānti put i
 AGR.ANTIP.solicit information the student about the
 apas kulehu.
 fee.L college
 ‘The students are soliciting information regarding college tuition.’
 (CD, entry for *solisita*)

b. Ma’u’usa lakkui’ i bongbung para u
 AGR.PASS.use.PROG also the bamboo.container FUT AGR
 fanmanlupuk i taotāo hānum gi tipu’.
 AGR.ANTIP.fetch the person water LCL well
 ‘Bamboo containers are also used for people to draw (lit. so that
 people can draw) water from the well.’ (CD, entry for *bongbung*)

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Another option is for the external argument to correspond to an inner topic. Inner topics occur at the left edge of the clause, preceding the predicate; they are resumed within the clause by a null pronoun that is typically the subject (see 26.2.1). Most transitive clauses with an inner topic at their left edge trivially satisfy the third plural restriction, because their subject is a (null) pronoun.

- (21)a. I istudiānti ti ma gofli'i' i ma'estra.
the student not AGR like the teacher
 'The students did not like the teacher.' (CD, entry for *gofli'i'*)
- b. I manāmku' ma guaiya i gellai āppan
the PL.elder AGR love the vegetable.L dry.L
chotda na āggun.
green.banana L starch
 'The elders like to eat green bananas cooked in coconut milk as a staple food.' (CD, entry for *gollai āppan chotda*)

Assuming that singulars are more salient than plurals and pronouns are more salient than nonpronouns, the third plural restriction can be viewed as a strategy to ensure that the subject of a transitive clause has at least some degree of word-level salience: it must be singular, a pronoun, or both. The third plural restriction differs from the person-animacy restriction in that the direct object's salience does not figure in the calculation. Transitive clauses must satisfy the third plural restriction whether the direct object is animate (as in (17c)) or inanimate (17a-b), and even when the direct object is a first person pronoun, as can be seen from the contrast between (22a) and (22b).

- (22)a. *Ma sangāni yu' i ma'estra siha [na makkat
AGR say.to me the teacher PL COMP AGR.hard
i che'chu'-ñiha].
the work-AGR
 ('The teachers told me that their work is difficult.')
- b. Ma ikak yu' gi karera asta i iskuela.
AGR defeat me LCL race until the school
 'They defeated me in the race to the school.' (CD, entry for *ikak*)

The third plural restriction resembles the person-animacy restriction in other respects. First of all, it ignores transitive clauses that are reflexive (see 13.2.2.1). A transitive clause whose direct object is a reflexive pronoun, or contains a reflexive possessor pronoun, can have a subject that is third person dual or plural but not a pronoun, as can be seen from the following.

- (23)a. Ma fakiki siha i dos pātgun ni kandi.
AGR indulge them the two child OBL candy
 ‘The two children took (lit. indulged themselves with) so many candies.’ (CD, entry for *fakiki*)
- b. Ma kumpli i mission-ñiha i sindālu.
AGR complete the mission-AGR the soldier
 ‘The soldiers accomplished their mission.’ (CD, entry for *kumpli*)

In addition, the third plural restriction does not affect transitive clauses across the board, but instead is limited to clauses that show the normal forms of agreement with the subject (see 2.2.2). It has no impact on transitive clauses with more specialized types of agreement, such as clauses in which the verb shows possessor agreement (see 14.4) or an overt form of wh-agreement (see 22.4.1). The transitive clause in (24a), for instance, is formed from the verb *ilek-* ‘say’, which shows agreement as if it were a noun; the clauses in (24b-c) are focus constructions in which the verb shows an overt form of wh-agreement. Despite the fact that these clauses have third person plural subjects that are not pronouns, they are grammatical.

- (24)a. **Ilek-ñiha** i manāmku’ [na yanggin para un
say-AGR the PL.elder COMP if FUT AGR
 me’mi’ pat masinik gi halum tānu’, debi di un
urinate or defecate LCL inside.L land should PRT AGR
 famaisin].
ANTIP.ask
 ‘The elders say that if you’re going to urinate or defecate in the forest, you have to ask permission from the spirits first.’ (CD, entry for *me’mi’*)
- b. I manamko’-ta āntis **tumutuhun** umusa Bo gi
the PL.elder-AGR before WH[SBJ].begin INF.use Bo LCL
 na’an Ramon.
name.L Ramon
 ‘Our (incl.) elders were the ones to begin to use Bo as a nickname for Ramon.’ (CD, entry for *Bo*)
- c. I lanceru siha **bumebendi** i gellai gi
the farmer PL WH[SBJ].sell.PROG the vegetables LCL
 metkão.
market
 ‘The farmers are the ones who are selling the vegetables at the market.’ (CD, entry for *lanceru*)

Finally, when the third person plural subject of a transitive verb is collective (viewed as an undifferentiated group), some speakers allow the verb to show 3 sg. agreement (see 2.2.2.1). Clauses with this agreement pattern escape the third plural restriction; see (25).

- (25)a. Ti **ha** fastidia yu' esti na istudiãnti.
 not AGR annoy me this L student
 'The students don't annoy me.' (CD, entry for *fastidia*)
- b. **Ha** sangãni yu' i famagu'un [na esti na kareta ti
 AGR say.to me the PL.child COMP this L car not
 malãlagu].
 AGR.run.PROG
 'The children told me that this car is not running.'

In short, the third plural restriction, like the person-animacy restriction, ensures that subjects of transitive clauses meet a certain minimum level of word-level salience. But it is also a morphological restriction that incorporates some language-specific arbitrariness.

16.4 The specificity restriction

Noun phrases can be classified according to whether they are *specific*, where a specific noun phrase refers to a particular individual or individuals. In Chamorro, personal pronouns and names are specific; so are noun phrases whose determiner is the definite article *i*, the indefinite article *un*, a demonstrative, a numeral, or *palu* 'some (contrastive)'. General indefinites and negative indefinites are nonspecific; so are noun phrases whose determiner is the null indefinite article or a quantifier such as *kada* 'each', *todu* 'every, all', *bula* 'much, many' or *meggai* 'many'.

The third restriction discussed here, the *specificity restriction*, employs this notion: it requires the subject to be specific when it realizes the verb's external argument (see Chung 2008).³

The specificity restriction has several subcases. Subjects of transitive verbs must be specific, because they are external arguments. Compare the

³ The specificity restriction is limited to subjects that are external arguments of verbs. The situation is different when the predicate is an adjective or a noun (see 27.3.2).

subjects of the transitive clauses in (26), which are specific, with the subjects of the transitive clauses in (27), which are not.⁴

- (26)a. Ha ispânta i famagu'un i katun Dolores.
AGR frighten the PL.child the cat.L Dolores
 'Dolores' cat frightened the children.'
- b. Ti ha tungu' ennâo na pulisiha manggubietna
not AGR know that L policeman AGR.INF.ANTIP.direct
car
 'That police officer doesn't know how to direct traffic.' (CD, entry for *gubietna*)
- c. Hu sâddi si Champs gi petnâk-ku gi giput.
AGR hold.on.lap UNM Champs LCL thigh-AGR LCL party
 'I held Champs on my lap at the party.' (CD, entry for *sâddi*)
- (27)a. *Ha ispânta i famagu'un katun Dolores.
AGR frighten the PL.child cat.L Dolores
 ('A cat of Dolores' frightened the children.)
- b. *Ha tungu' meggai na tâotâo si tatâ-hu.
AGR know many L person UNM father-my
 ('Many people know my father.')
- c. *Ha hoggui kada dikiki' na palâo'an i katu.
AGR hold each little L woman the cat
 ('Each little girl held the cat.')

Subjects of antipassive verbs must be specific, because they too are external arguments—they realize the same argument as the subject of the corresponding transitive verb (see 10.3.2.1). Compare (28) with (29).

- (28) Mangonni' si Pedro gâmsun gi nigap.
AGR.ANTIP.catch UNM Pedro octopus LCL yesterday
 'Pedro caught an octopus yesterday.' (CD, entry for *gâmsun*)

⁴ In the intended, ungrammatical meaning of (27b), the subject is the non-specific noun phrase *meggai na tâotâo* 'many people'; the verb shows 3 sg. agreement, because that enables the clause to escape the third plural restriction (see 16.3). The sentence has another meaning that is grammatical, but irrelevant to the discussion in the text, when the subject is the specific noun phrase *si tatâ-hu* 'my father'.

- (29) ***Manggo'ti** **katu** **kada** **palão'an.**
AGR.ANTIP.hold cat each woman
 ('Each girl held a cat.')

Finally, subjects that name the agent or causer of certain intransitive verbs that describe events (unergative verbs) are external arguments. These subjects must be specific, as the contrast between (30) and (31) shows.

- (30)a. Kão siña kumuentus **yu'** yan i editót?
Q can AGR.speak I with the editor
 'Can I talk to the editor?' (CD, entry for *editót*)
 b. Anai chumålik **i neni**, annuk i haduk gi dos
when AGR.laugh the baby AGR.appear the dimple LCL two
båndan fasu-ña.
side.L face-AGR
 'When the baby laughed, the dimple appeared on both sides of its face.' (CD, entry for *haduk*)
 (31)a. ***Manguekuentus** **todudu ha'** a'gang.
AGR.speak.PROG all.EMP EMP loud
 ('Everyone was speaking loudly.')
- b. ***Mañāchalik** **lalāhi.**
AGR.laugh.PROG PL.man
 ('Boys were laughing.')

The specificity restriction ignores all other arguments and adjuncts associated with the predicate. Subjects of passive verbs, which realize the verb's internal argument, can freely be specific or nonspecific. Subjects that name the undergoer of certain intransitive verbs that describe states or events (unaccusative verbs) have the same freedom. Some representative examples of clauses formed from these types of verbs plus a nonspecific subject are cited in (32).

- (32)a. Manmatufung **todu** **i balotu** åntis di u
AGR.PASS.count all the ballot before PRT AGR
fanmapåtti i distritu.
AGR.PASS.share.with the district
 'All the ballots were counted before they were distributed to the districts.' (CD, entry for *balotu*)
 b. Manmapegåyi krusifiu **kada** **kuåttu.**
AGR.PASS.place.in crucifix each room
 'Each room had a crucifix placed in it.' (CD, entry for *krusifiu*)

- c. Kumahulu' **dangkulu** **na** **haggan**.
AGR.go.up big L turtle
 'A large turtle came out (of the water).' (from a tape-recorded narrative)
- d. Mandokku' **bula** **na** **haigui** *gi* *uriyan*
AGR.sprout many L coconut.seedling LCL around.L
lanchu.
farm
 'A lot of coconut seedlings sprouted around the farm.' (CD, entry for *haigui*)

Direct objects, oblique arguments, and adjuncts can also freely be specific or nonspecific. Consider the nonspecific noun phrases in the clauses in (33).

- (33)a. Talang **kada** **pidâsun** **kâtni** *ya* *u* *manâ'yi*
weigh each piece.L meat and.then AGR PASS.add
presiu.
price
 'Weigh each piece of meat so we can put a price on them.' (CD, entry for *talang*)
- b. Mangonni' *si* *Luis* **bula** **na** **haiting** *gi* *egga'an*.
AGR.ANTIP.catch UNM Luis many L fish.sp LCL morning
 'Luis caught a lot of big eye scad in the morning.' (CD, entry for *haiting*)
- c. Kun *agradesimientu* *put* **todu** **i** **nina'in-miyu**
with gratitude for all the WH[OBJ].give-AGR
siha.
PL
 'With gratitude for all the things you (pl.) have given us.' (CD, entry for *agradesimientu*)

Specific noun phrases are generally thought to be more discourse-salient than nonspecific noun phrases. This suggests that the specificity restriction is a strategy to ensure that certain subjects—those that realize the verb's external argument—are also salient in the discourse.

The specificity restriction regulates only those subjects that occur within the clause, following the verb. Subjects that are inner topics or syntactically focused escape the restriction—conceivably because their position preceding the verb makes them salient at the sentence level. In fact, one common strategy for rescuing the subject when it realizes the verb's external argument, but is nonspecific, is to turn it into an inner topic or displace it to the

left edge of the sentence by wh-movement. The nonspecific subjects in (34) are inner topics.

- (34)a. **Kada** **senadot** ha riprisesenta todū i taotão i
each senator AGRrepresent.PROG all the person.L the
islã-ña.
island-AGR
 ‘Every senator represents his entire island’s population.’ (CD, entry for *senadót*)
- b. **Āntis** na tiempu **todu** **i** **manãchang** mañāsaga
before L time all the lower.class AGR.stay.PROG
gi kantun tãsi.
LCL edge.L ocean
 ‘In the old days all lower class Chamorros lived along the beach area.’ (CD, entry for *manãchang*)

The nonspecific subjects in (35) have been displaced to the left edge of the sentence by wh-movement.

- (35)a. **Hāyi** fuma’tinas i tinaktak kãtni?
who? WH[SBJ].make the minced.L meat
 ‘Who cooked the *tinaktak kãtni*?’ (CD, entry for *tinaktak*)
- b. **Meggai na tãotão** umu’usa i cha’guan mǎnnuk
many L person WH[SBJ].use.PROG the grass.sp
para eskoba.
for broom
 ‘Plenty of people before used the grass *cha’guan mǎnnuk* for brooms.’ (CD, entry for *chã’guan mǎnnuk*)
- c. **Todu** manhãno ya **ni un grãnu** sumāsaga.
all AGR.go and.then not a bit AGR.stay.PROG
 ‘Everybody is going and none of them is staying.’ (CD, entry for *ni un grãnu*)

Because the specificity restriction is concerned with meaning and use, it is sensitive to the fact that noun phrases formed from quantifiers can be understood as specific in certain contexts. Noun phrases formed from *kada* ‘each’ and *todu* ‘every, all’ count as specific when they have a partitive

meaning (e.g. ‘all of the children’). In such cases, the particular individuals referred to are the set of individuals that the quantifier ranges over.⁵

The specificity restriction is observed systematically in discourse and other types of naturally-occurring data. A search of the CD database, for instance, turned up 96 clauses in which the subject realizes the external argument of the verb, but is nonspecific. In 92 of these clauses, the subject is an inner topic or syntactically focused, so the specificity restriction is satisfied. In the remaining 4 clauses, the subject is formed from the quantifier *todu* ‘every, all’, and so could count as specific in context.

Speakers consistently reject transitive clauses that violate the specificity restriction in elicitation sessions in fieldwork. However, some speakers react more variably when presented with intransitive clauses like those in (31). It is not clear whether to attribute this variability to the restriction itself or to the field situation.

16.5 Further reading

See Cooreman (1987) for a general discussion of transitivity and discourse in Chamorro, Chung (2014) and Clothier-Goldschmidt (2015) for discussion of the person-animacy restriction, and Chung (1998) on the other restrictions discussed in this chapter.

⁵ This has consequences for agreement. When a subject noun phrase formed from *todu* ‘every, all’ or *kada* ‘each’ is construed as partitive and specific, the verb shows plural as opposed to singular agreement (Chung 1998: 113-114).

NEGATION

Negative sentences in Chamorro can be formed with the sentential negative *ti*, a negative verb, or a syntactically focused negative indefinite. These sentences allow negative concord and occur in the negative ‘even’ construction.

17.1 Overview

Negative sentences differ from affirmative (nonnegative) sentences in form and meaning. A negative sentence is false when the corresponding affirmative sentence is true, and vice versa. In addition, a negative sentence contains an element which is not in the corresponding affirmative sentence and which expresses the (meaning of) negation. Chamorro has three ways of expressing sentence negation: with the sentential negative *ti*, with a negative verb, or with a negative indefinite that is syntactically focused. Negative sentences formed with these elements have a distinctive syntax: they allow negative concord and occur in the negative ‘even’ construction.

This chapter begins by discussing how negative sentences are formed. It then describes negative concord, negation and scope, the negative ‘even’ construction, and negation in clauses truncated by ellipsis.

17.2 Basics

Chamorro has three ways of creating negative sentences. The default is for negative sentences to be formed with the sentential negative *ti*, which occurs at the beginning of the clause, to the left of the tense-aspect-mood marker and the predicate (see 4.1). Some representative examples of negative sentences formed with *ti* are given in (1).

- (1) a. **Ti** para u hãnao i ma’gas pã’gu.
 not FUT AGR go the boss now
 ‘The boss is not going to leave today.’ (CD, entry for *hãnao*)
 b. **Ti** amiga i infitmera.
 not friend the nurse
 ‘The nurse was not a friend.’ (EM 94)

Note that *ti* follows constituents at the left edge of the clause, including inner topics (see (2a)), complementizers (2b), syntactically focused constituents (2c), and subordinating conjunctions (2d).

- (2) a. I asusena **ti** chã'tan na tinanum.
the tuberosa not choosy L plant
 'The asusena plant is not a delicate plant.' (CD, entry for *asusena*)
- b. I infitmera ilek-ña [na **ti** mǎfattu i tiempu].
the nurse say-AGR COMP not AGR.arrive.PROG the time
 'The nurse said that the time had not yet come [for the incubator to be turned off].' (EM 93)
- c. Ya dos oras **ti** kumalamtin.
and.then two hours not AGR.move
 'And for two hours it didn't move.' (EM 52)
- d. Sa' **ti** ya-hu na un tǎngis.
because not like-AGR COMP AGR cry
 'Because I don't like for you to cry.' (EM 52)

Negative sentences can also be formed from a negative verb—a verb whose meaning includes sentence negation. Chamorro has five negative verbs, which are listed in (3) along with their affirmative counterparts.

(3) NEGATIVE VERB		AFFIRMATIVE VERB	
tai	'not have'	gai	'have'
taigui	'not be (at a location)'	gaigi	'be (at a location)'
tǎya'	'not exist'	guaha	'exist'
cha'-	'better not, don't'	—	
munnga	'don't, let it not be'	—	

The negative verb *taigui* 'not be (at a location)' and its affirmative counterpart *gaigi* 'be (at a location)' are ordinary intransitive verbs. The other verbs in (3) have special properties. The verbs *tǎya* 'not exist' and *guaha* 'exist' are impersonal verbs of existence (see 14.2.2). The verbs *tai* 'not have' and *gai* 'have' are verbs of possession that incorporate the noun that names what is possessed (see 14.3). Finally, the negative verbs *cha*-' 'better not, don't' and *munnga* 'don't' are used in constructions that function as negative imperatives (see 15.2.2). Some examples of sentences formed from negative verbs appear below.

- (4) a. I patgun siempri ha' **tumataigui** gi fi'un i
the child indeed EMP AGR.not.be.at.PROG LCL beside.L the

saina-ña.

parent-AGR

‘The child certainly will not be right beside his parent.’ (EM 136)

- b. **Tai** sanhalum i niyuk ni
AGR.not.have DIR.inside the coconut COMP
 bảobả.

AGR.hollow.sounding

‘The coconut that sounds hollow inside does not have anything inside.’ (CD, entry for *bảobả*)

- c. Kalakas, **cha’-mu** chuchuda’ i kuchinu na hãnum.
yuck better.not-AGR spill.PROG the dirty L water
 ‘Yuck! Don’t spill the dirty water.’ (CD, entry for *kalakas*)

Finally, negative sentences can be formed from a negative indefinite that is syntactically focused—displaced to the left edge of the sentence by wh-movement.

Negative indefinites in Chamorro are formed by combining the word-level negative *ni* with an indefinite noun phrase, or a prepositional phrase whose object is an indefinite noun phrase. The indefinite noun phrase can be a general indefinite (see 9.2.1 and 9.2.2.2) or a noun phrase introduced by the indefinite article *un*, the numeral *unu* ‘one’, or a general indefinite used as a determiner. Some representative negative indefinites: *ni hãyi* ‘no (one)’, *ni hãfa* ‘no(thing)’, *ni unu* ‘no (one)’, and *ni un grãnu* ‘not a bit’. A negative indefinite that is syntactically focused generally expresses sentence negation, as can be seen from the sentences below (but see note 2).

- (5) a. **Ni unu** u maguf ni esti i che’chu’ bãba.
not one AGR.happy OBL this the work.L bad
 ‘No one will be happy with unsatisfactory work.’ (CD, entry for *che’chu’ bãba*)
- b. Un kebrãnta hão muna’lagu lão [**ni hãfa**
AGR.assert you AGR.INF.ANTIP.cook but not anything
tiningo’-mu].
WH[OBJ].know-AGR
 ‘You came forward about cooking, but you know nothing (about it).’ (CD, entry for *kebrãnta*)
- c. **Ni mãnu** nai siña mamãhan yu’ pugua’.
not anywhere COMP can AGR.ANTIP.buy I betelnut
 ‘There is nowhere I can buy betelnut.’ (CD, entry for *ni mãnu*)

- d. **Ni hăiyi ha'** hininguk-mămi na famagu'un.
not anyone.EMP EMP WH[OBJ].hear-AGR L PL.child
 'We (excl.) heard no children at all.'

Negative sentences can contain more than one element that expresses sentence negation. This typically happens when the expressions of negation occur in different clauses of a complex sentence, as in the examples below. In (6a), negation is expressed in the main clause by the negative *ti*, and in the adverbial clause by another negative *ti*. In (6b), negation is expressed in the main clause by the negative verb *cha'* - 'better not, don't', and in the embedded clause by the negative *ti*.

- (6) a. **Ti** fafakmata yu' [yanggin **ti** para bai facho'chu'
not light.sleeper I if not FUT AGR work
tăftaf].
early
 'I am not an early riser if I'm not going to work early.' (CD, entry for *făfakmata*)
- b. **Cha'-mu** yu' [na **ti** para un fa'nu'i si
better.not-AGR me COMP not FUT AGR show UNM
Juan nu i tes-mu].
Juan OBL the test-AGR
 'Don't (tell) me that you will not show Juan your test.' (CD, entry for *fa'nu'i*)

It is also possible for a single clause to contain more than one element that expresses sentence negation. In such cases, two expressions of negation will cancel each other out, producing the same meaning as an affirmative sentence. The simple sentences in (7) contain two expressions of sentence negation: the focused negative indefinite *ni un tăotăo* 'no person' plus a second expression, which is the negative *ti* in (7a) and a negative verb in (7b). Because two expressions of negation cancel each other out, (7a) has the same meaning as 'Everyone cried'; (7b) has the same meaning as 'Everyone has hardship in their lives.'

- (7) a. **Ni un tăotăo ti** kumăti.
not a person not AGR.cry
 'Not one didn't cry.' (Sanchez 2009: 19)
- b. **Ni un tăotăo tai** ginatdun gi lina'la'-ñiha.
not a person AGR.not.have hardship LCL life-AGR

‘Not even one person doesn’t have hardship in their lives.’ (CD, entry for *ginatdun*)

Multiple expressions of negation are allowed as long as they conform to the structure of Chamorro clauses. Specifically, no clause can begin with more than one sentential negative *ti*, and no clause can have more than one syntactically focused constituent at its left edge.

17.3 Negative concord

A negative sentence can contain one or more negative indefinites following the predicate, in the normal locations of arguments or adjuncts. These negative indefinites do not express sentence negation. Instead, they are *negative concord items*: they agree in form with the element that expresses sentence negation, but have the meaning of nonspecific noun phrases.

To illustrate: The negative sentences below have just one element that expresses sentence negation: the negative *ti* in (8a) and (8c), and the negative verb *tâya* ‘not exist’ in (8b). These sentences also contain a negative indefinite that follows the verb and serves as a negative concord item; namely, *ni hâiyi ha* ‘anybody’ in (8a), *ni unu* ‘anybody’ in (8b), and *ni un grânu na guihan* ‘any bit of fish’ in (8c).

- (8) a. *Ti hu bisita ni hâiyi ha’.*
 not AGR.visit not anyone.EMP EMP
 ‘I didn’t visit anyone.’
- b. *Tâya’ ni unu para u kinentra esti.*
 AGR.not.exist not one FUT AGR.PASS.oppose this
 ‘There isn’t anybody who is going to challenge this.’ (*Ginen I Obispo* September 8, 2013)
- c. *Ti ma patti si Kiko’ ni un grânu na guihan.*
 not AGR.share UNM Kiko’ not one bit L fish
 ‘They didn’t give Kiko’ even one bit of fish.’ (CD, entry for *grânu*)

A negative sentence can contain more than one negative concord item, as (9) shows.

- (9) a. *Ti muna’hanâo ni hâfafa ha’ ni para*
 not AGR.ANTIP.make.go not anything.EMP EMP not to
 hâiyi ha’ si Antonio.
 anybody.EMP EMP UNM Antonio
 ‘Antonio didn’t send anything to anybody.’

- b. Tâya' **ni unu** lumi'i' si Dolores **ni**
 AGR.not.exist not one WH[SBJ].see UNM Dolores not
 mânunu **ha'**.
 anywhere.EMP EMP
 'There isn't anyone who saw Dolores anywhere.'

For a negative indefinite to serve as a negative concord item, the sentence must contain an expression of sentence negation for it to agree with. When there is no such expression, a negative indefinite following the predicate is ungrammatical. Compare the negative sentences in (10) with their ungrammatical counterparts in (11).

- (10)a. Ti chumochotchu gui' **ni hâfafa** **ha'**.
 not AGR.ANTIP.eat.PROG he not anything.EMP EMP
 'He's not eating anything.'
- b. I chi'lu-hu palão'an tâya' finahân-ña
 the sibling-AGR female AGR.not.exist WH[OBJ].buy-AGR
 ni hâfafa.
 not anything.EMP
 'There isn't anything that my sister bought.'
- (11)a. *Chumochotchu gui' **ni hâfafa** **ha'**.
 AGR.ANTIP.eat.PROG he not anything.EMP EMP
 ('He's eating nothing.')
- b. *I chi'lu-hu palão'an guaha finahân-ña **ni**
 the sibling-AGR female AGR.exist WH[OBJ].buy-AGR not
 hâfafa.
 anything.EMP
 ('There's nothing / anything that my sister bought.')

Negative concord items in Chamorro have a broad distribution. They can serve as direct objects (as in (8a)), pivots of existential verbs (see (8b) and (10b)), and various sorts of obliques (see (8c), (9a), and (10a)).¹ They can also serve as possessors, as in (12).

- (12)a. Ti ha tokcha' [kalulut **ni hâyi**] i gaddu'.
 not AGRpoke finger.L not anyone the wild.yam
 'The thorny wild yam didn't poke anyone's finger.'

¹ Like other weak noun phrases, negative concord items are not preceded by an overt case marker when in the oblique case (see 5.1.1.4).

- b. Ti manlipåra si Miguel ni [karetan **ni unu**].
 not AGR.ANTIP.notice UNM Miguel OBL car.L not one
 ‘Miguel didn’t notice anyone’s car.’

Negative concord items can serve as adjuncts, as can be seen from (9b) and (13). (In (13a), *ni hâyiyi ha’* ‘no one’ is syntactically focused and expresses sentence negation; *ni mănunu ha’* ‘not anywhere’ is a negative concord item.)

- (13)a. Ni hâyiyi ha’ na istudiântin Antonio manhânão **ni**
 not anyone.EMP EMP L student.L Antonio AGR.go not
mănunu ha’.
 anywhere.EMP EMP
 ‘None of Antonio’s students went anywhere.’
- b. Mungnga makassi si Rosa **ni put**
 don’t AGR.PASS.tease UNM Rosa not about
hâfafa ha’.
 anything.EMP EMP
 ‘Don’t tease Rosa about anything.’
- c. Si guellan-mâmi ma fa’tinas deklarasion na ti
 UNM grandmother-AGR AGR make declaration COMP not
 para u mabendi i tanu’ **ni ngai’an**.
 FUT AGR PASS.sell the land not anytime
 ‘Our (excl.) ancestors declared that land shall never be sold.’ (CD,
 edited entry for *deklarasi6n*)

Negative concord items can bear any grammatical relation at all when they occur in a clause embedded within the clause in which sentence negation is expressed. The complex sentences in (14) consist of a main clause in which the negation is expressed, plus an embedded clause—finite or infinitival—that contains a negative concord item. The negative concord item serves as the direct object of an infinitive in (14a), an embedded passive agent in (14b), an embedded antipassive oblique in (14c), and an embedded subject in (14d) and (14e).²

² When a negative concord item is the subject of an embedded clause, it must be syntactically focused—displaced to the left edge of the embedded clause by *wh*-movement. Such negative concord items provide the only exception to the generalization that a focused negative indefinite expresses sentence negation.

- (14)a. Ti ma'ă'ňão hão [kumuentusi **ni hăyi** **ha'**].
not AGR.afraid you INF.speak.to not anyone.EMP EMP
 'You're not afraid to speak to anyone.'
- b. Ti ya-ña [na u mali'i' **ni hăyi**].
not like-AGR COMP AGR PASS.see not anyone
 'He didn't like that she be seen by anyone.' (Cooreman 1983: 139)
- c. Yanggin gaigi i taotão gi hilu' i atuf, ti
if AGR.be.at the person LCL top.L the roof not
 debi di u tunuk pãpa' [para u fañuli' **ni**
should PRT AGR descend down FUT AGR ANTIP.take not
hăfa ginin i gimã'-ña].
anything from the house-AGR
 'If a person is on the rooftop, he should not go down to take (lit. that he might take) anything from his house.' (NT 47)
- d. Mungnga masedi [**ni unu** u patcha i
don't AGR.PASS.allow not one AGR touch the
 laso'-mu].
testicle-AGR
 'Do not let anyone touch your testicles.' (CD, entry for *lasu'*)
- e. Hami ti manmalagu' [**ni unu** para u
we.EXCL not AGR.want not one FUT AGR
 poddung gi kantit].
fall LCL cliff
 'We (excl.) don't want anyone to fall off the cliff.'

There is one systematic gap in this distribution: a negative concord item cannot be the subject of a negative sentence. Negative sentences like the following are ungrammatical, in other words.

- (15)a. *Ti ha risisibi i katta ginin as Jose **ni**
not AGR receive.PROG the letter from OBL Jose not
ununu ha'.
one.EMP EMP
 ('Nobody has received the letter from Jose.')
- b. *Ti ha âkka' yu' **ni hăfafa ha'**.
not AGR bite me not anything.EMP EMP
 ('Nothing bit me.')
- c. *Ti kumekuentus **ni unu** gi halum i ottru kuâtту.
not AGR.speak.PROG not one LCL inside.L the other room
 ('No one is talking in the other room.')

The negative concord items in (15) are subjects that are external arguments. Those in (16) are subjects but not external arguments; these negative sentences are ungrammatical as well.³

- (16)a. ?***Ti** **mamâhlâo** **nu** **hâgu** **ni** **unu.**
 not AGR.ashamed OBL you not one
 ('No one is ashamed of you.')
- b. ***Ti** **yinilang** **ni** **un** **guma'** **pâtdit** **nu** **i**
 not AGR.PASS.destroy not a house.L concrete OBL the
 taifun.
 typhoon
 ('No concrete house was destroyed by the typhoon.')
- c. ?***Ti** **âguaguat** **ni** **hâiyi** **ha'** **na** **patgon-ña**
 not AGR.naughty not anyone.EMP EMP L child-AGR
 si **Dolores.**
 UNM Dolores
 ('No child of Dolores' was naughty.')

As long as the negative concord item is the subject of a negative sentence (more precisely, the subject of the clause in which the negation is expressed) the result is ungrammatical. This ungrammaticality differentiates negative concord items from nonspecific noun phrases introduced by the null indefinite article, which can serve as subjects of negative sentences under some circumstances (see 6.2.1.2.2.2).

Ungrammatical negative sentences like (15) and (16) can be repaired in various ways. The most straightforward repair is to remove the sentential negative *ti* and syntactically focus the negative indefinite so that it becomes the element that expresses negation. Compare (15a) and (16c) with the following.

³ Sentences like (15) and (16) are not attested in the CD database or in other sources of naturally-occurring data. However, in elicitation sessions in field-work, some speakers react more variably to intransitive clauses like (16a) or passive clauses like (16b), particularly when the predicate describes an event and shows plural agreement with the subject. Some of these clauses might well be impersonal constructions; if so, their subject would be a null dummy rather than the negative concord item. This variability, which requires further study, is ignored in the text.

- (17)a. **Ni unu** rumisisibi i katta ginin as
not one WH[SBJ].receive.PROG the letter from OBL
 Jose.
Jose
 ‘No one has received the letter from Jose.’
- b. **Ni hãiyi ha’ na patgon-ña si Dolores**
not anyone.EMP EMP L child-AGR UNM Dolores
 âguaguat.
AGR.naughty
 ‘No child of Dolores’ was naughty.’

What prevents a negative concord item from serving as the subject of a negative sentence? Recall that the subject is the most prominent constituent of the clause (see 3.2.1). Further, nothing prevents a negative concord item from serving as the subject of an embedded clause when sentence negation is expressed in a higher clause (see (14d) and (14e)). These observations suggest that in order for a negative concord item to agree with sentence negation, it must be syntactically less prominent than the negation. Suppose that sentence negation occupies a prominent position in the clause—more prominent than any of the predicate’s arguments or adjuncts, except the subject. Then negative concord items that are direct objects, obliques, and so on will be able to agree with the negation, because they will be syntactically less prominent than it. Negative concord items in an embedded clause will likewise be able to agree with the negation in a higher clause. But a negative concord item that is the subject of the clause containing the negation will be unable to satisfy this condition, because the subject—as the most prominent constituent of the clause—will be more prominent than the negation it is supposed to agree with.⁴

In generative syntax, prominence is defined in terms of relative height in constituent structure (c-command). One way of accounting for the distribution of negative concord items in Chamorro is to say that a negative concord item must agree with a sentence negation that c-commands it. Notice that it would not work to try to state the condition in terms of word order. This is because sentence negation is realized to the left of subjects and nonsubjects alike, and the word order of the subject with respect to other arguments and adjuncts is flexible (see 3.4 and 4.1).

⁴ Chamorro has other words or morphemes that a negative concord item can agree with. These include the verb *adahi* ‘be careful (lest)’ and comparatives formed with the comparative suffix *-ña* (see 25.3.1).

17.4 Negation and scope

The distribution of negative concord items reflects a more general fact about the Chamorro language: the subject of a negative sentence must have wide scope with respect to negation.

A noun phrase in a negative sentence has *narrow scope* with respect to negation if the negation affects what it refers to. Consider the noun phrases in boldface in (18). Sentence negation affects the reference of these noun phrases, as becomes clear when their meaning is compared with the meaning of the sentence as a whole. Thus, *miyon na tãotã* means ‘a million people’, but the meaning of the sentence in (18a) is that there are fewer than a million people in the CNMI. *Todu kalulut-ñiha* means ‘all their fingers’, but the meaning of the sentence in (18b) is that some of their fingers were not touched by the speaker. *Bulan buelu* means ‘many ruffles’, but the meaning of the sentence in (18c) is that the speaker likes there to be few ruffles on her dress. These noun phrases have narrow scope with respect to negation.

- (18)a. Tãya’ **miyon na tãotã** giya CNMI.
 AGR.not.exist million L person LCL CNMI
 ‘There are not a million people in the CNMI.’ (CD, entry for *miyón*)
- b. Ti hu patcha **todu kalulut-ñiha**.
 not AGR touch all finger-AGR
 ‘I didn’t touch all their fingers (= there were some of their fingers that I didn’t touch).’
- c. Ti ya-hu **bulan buelu** gi chininã-hu.
 not like-AGR many.L ruffle LCL dress-AGR
 ‘I don’t like many ruffles on my dress.’ (CD, entry for *buelu*)

In contrast, a noun phrase in a negative sentence has *wide scope* with respect to negation if the negation does not affect what it refers to. This is the case for the noun phrases in boldface in the negative sentences in (19): their reference is not changed in the meaning of the sentence as a whole. Thus, *tres na chãda’ mǎnnuk* means ‘three chicken eggs’, and the meaning of the sentence in (19a) is that three chicken eggs have the property of not having hatched. *Todu mampus* means ‘everything in excess’, and the meaning of the sentence in (19b) is that everything in excess has the property of not being good. Finally, *bubula ha’ tetenan tano’-hu* means ‘there’s still much of my remaining land’, and the meaning of the sentence in (19c) is that much of the speaker’s remaining land has the property of not being sold.

- (19)a. **Tres na chãda' mǎnnuk** ti manmapulakis.
three L egg.L chicken not AGR.PASS.hatch
 'There are three chicken eggs that did not hatch.' (CD, entry for *mapulakis*)
- b. **Todu mampus** ti mǎolik, i moderasion mǎolik.
all so.much not AGR.good the moderation AGR.good
 'Everything in excess is not good, moderation is good.' (CD, entry for *moderación*)
- c. **Bubula ha' tetehnan tano'-hu** ti hu
AGR.much.PROG EMP remaining.L land-AGR not AGR
 bebendi.
sell.PROG
 'There's still much of my remaining land that I'm not selling.' (EM 101)

Most of the predicate's arguments can have wide or narrow scope with respect to sentence negation. Generally speaking, they have wide scope if they are syntactically focused, as in (19a-b), but narrow scope otherwise, as in (18).⁵ But the subject of a negative sentence always has wide scope with respect to negation, even when it is not syntactically focused. This can be seen from the negative sentences below, in which the noun phrase *tres na famagu'un* 'three children' serves as the subject. Sentence negation does not affect the reference of this noun phrase: the meaning of (20a) is that three children have the property of not having come to the party, and the meaning of (20b) is that three children have the property of having not been punished. These sentences say nothing about how many children actually attended the party or were punished. (If negation had affected the reference of *tres na famagu'un*, (20a) would mean that the number of child attendees at the party was fewer than three. But (20a) does not mean this.)

- (20)a. Ti manmǎttu **tres na famagu'un** gi giput.
not AGR.arrive three L PL.child LCL party
 '(There were) three children (who) didn't come to the party.'

⁵ This statement glosses over various details, including the following: (i) Many speakers will realize the internal argument of a transitive verb as the direct object when it has wide scope with respect to negation, but as an antipassive oblique when it has narrow scope (Chung 1998: 387-388). (ii) Pivots of the negative existential verb *tǎya* 'not exist' must have narrow scope with respect to negation (Chung and Ladusaw 2004: 100-103).

- b. Ti manmakastiga **tres** **na famagu'un.**
 not AGR.PASS.punish *three* *L* *PL.child*
 '(There were) three children (who) weren't punished.'

The fact that the subject of a negative sentence in Chamorro always has wide scope with respect to negation can be shown in another way. In Chamorro, a nonspecific noun phrase cannot be the subject of a negative sentence. This is because such a noun phrase would have to satisfy contradictory requirements: nonspecific noun phrases must have narrow scope with respect to negation, but the subject of a negative sentence must have wide scope with respect to negation. Consider, for instance, nonspecific noun phrases formed with the null indefinite article. These noun phrases can be the subjects of affirmative clauses as long as the specificity restriction is observed (see 16.4), but they cannot be the subjects of negative sentences (though see 6.2.1.2.2.2 for an exception). Compare the affirmative sentences in (21) with their negative counterparts in (22).

- (21)a. Kumahulu' **dangkulu** **na haggan.**
 AGR.go.up *big* *L* *turtle*
 'A large turtle came out (of the water).' (from a tape-recorded narrative)
- b. Kimason **dangkulu** **na guma'.**
 AGR.burn *big* *L* *house*
 'A large house burned down.'
- (22)a. ***Ti kumahulu' dangkulu na haggan.**
 not AGR.go.up *big* *L* *turtle*
 ('A large turtle didn't come out / No large turtle came out (of the water).')
- b. ***Ti kimason dangkulu na guma'.**
 not AGR.burn *big* *L* *house*
 ('A large house didn't burn down / No large house burned down.')

Negative concord items are also nonspecific. Recall (from 17.3) that a negative concord item cannot serve as the subject of a negative sentence because then it would be too syntactically prominent to agree with the negation. The discussion here points to a different reason why a negative concord item cannot be the subject of a negative sentence: its scope requirements are incompatible with the scope requirements of the subject.

17.5 Negative ‘even’

Chamorro has several words that are sometimes translated as ‘even’. One such word is the adverb or preposition *kuntodu* ‘including, also, too’, which combines with a noun phrase in the unmarked case. *Kuntodu* occurs almost exclusively in affirmative sentences, such as (23).

- (23) *Todu esti siha na hâkmang kuntodu i*
all this PL L eel also the
hakmang palus mana’achuli’ ha’ na klâsin gâ’ga’.
conger.eel AGR.RECP.take.PROG EMP L sort.L animal
 ‘All of the salt water eels look similar (lit. are the sort of creatures that resemble one another), even the conger eel.’ (CD, entry for *hâkmang palus*)

Another such word is the word-level negative *ni* when it appears in the negative ‘even’ construction.

In the negative ‘even’ construction, a constituent consisting of *ni* plus a noun phrase in the unmarked case occurs at the left edge of a negative sentence. This constituent (called the ‘even’ phrase below) is understood to be the subject of the negative sentence. The construction as a whole conveys that there are others besides the referent of the subject for which the negative sentence is true. For instance, the ‘even’ phrase in (24) is formed from the noun phrase *i katu* ‘the cat’. Sentence (24) means ‘Even the cat doesn’t want the dog’s leftovers’—or, equivalently, ‘Not even the cat wants the dog’s leftovers’ (see Horn 1969). Implicit in the meaning is the idea that there are others besides the cat that do not want the dog’s leftovers.

- (24) *Ni i katu ti malagu’ ni ansopblan i ga’lâgu.*
not the cat not AGR.want OBL leftover.L the dog
 ‘Even the cat does not want the dog’s leftovers.’ (CD, entry for *ân-*)

Some other examples of the negative ‘even’ construction are given below.

- (25)a. *Lão an kâتما ni i neni ti u senti.*
but when AGR.calm not the baby not AGR.feel
 ‘But when it’s calm, not even the baby will feel it.’ (EM 13)
- b. *Ni si Yu’us ti siña ha tulaika hâfa i esta*
not UNM God not can AGR.change what the already
masusedi.
AGR.PASS.experience

‘Even God cannot change what has already happened.’ (*Ginen I Obispo* April 29, 2013)

- c. Yanggin **ni** hãgu mismu ti malagu’ hão
 if not you same not AGR.want you
 sumãonão guini na kinalamtin ...
 AGR.INF.participate LCL.this L movement
 ‘If even you don’t want to participate in this resurgence...’ (*Saipan Tribune* December 15, 1998)

Some aspects of the negative ‘even’ construction are relatively straightforward. Specifically:

(i) Sentence negation in the ‘even’ construction is expressed in the usual way, with the negative *ti* (as in the examples above), a negative verb (as in (26a)) or a syntactically focused negative indefinite (e.g. *ni ngai’an* ‘never’ in (26b)).

- (26)a. **Ni** si Juan tai salappi’.
 not UNM Juan AGR.not.have money
 ‘Even Juan has no money.’
 b. Hu diseseha na **ni** hita ni ngai’an nai ta
 AGR.wish.PROG COMP not we.INCL not anytime COMP AGR
 fanmaleffa.
 AGR.forget
 ‘I hope that even us (incl.), we (incl.) will never forget it.’ (*Ginen i Obispo* March 20, 2011)

If the sentence contains no expression of negation, then the construction is ungrammatical; compare (27a) and (27b).

- (27)a. **Ni** si Juan ti ha li’i’ i aksidenti.
 not UNM Juan not AGR.see the accident
 ‘Not even Juan saw the accident.’
 b. ***Ni** **si** **Juan** **ha** **li’i’** **i** aksidenti.
 not UNM Juan AGR.see the accident
 (‘Not even Juan saw the accident.’)

The ungrammaticality of (27b) also reveals that sentence negation is not expressed by the ‘even’ phrase or by the word-level negative *ni*.

(ii) The ‘even’ phrase is not a negative indefinite, despite the fact that it begins with the word-level negative *ni*. Negative indefinites can be formed only from certain types of indefinites (see 17.2 and 17.3), but ‘even’ phrases

can be formed from a wider range of noun phrases, including definite noun phrases, names, and pronouns (see (25)). Moreover, negative indefinites that occur at the left edge of the clause are syntactically focused, but ‘even’ phrases are not. The verb does not show *wh*-agreement with them (see (25b) and (27a)), and they can occur in sentences in which a different constituent is syntactically focused (see (26b)).

(iii) The ‘even’ phrase occupies a position at the far left edge of the negative sentence, after the complementizer (if any) but before a syntactically focused constituent (see (26b)). The fact that it can be resumed by a weak pronoun, such as *hảo* ‘you’ in (25c), suggests that it originates in this left-edge position and serves as the antecedent of a subject pronoun within the negative sentence. This pronoun can be overt, but more often it is null.

(iv) Although ‘even’ phrases are usually formed from *ni* plus a noun phrase, they can also be formed from *ni* plus an adverbial clause, as in (28).

- (28)a. **Ni** [para u mabuñelus], esta esti na
not FUT AGR PASS.make.doughnuts already this L
linamas aga’ tai bali.
decayed.L banana AGR.not.have value
‘Even to make doughnuts with, these decayed bananas are already useless.’ (CD, entry for *linamas*)
- b. **Ni** [achuk ha’ kuántus na na’yi ha usa
not although EMP how.many L ingredient AGR use
si Rosa gi sukiyaki’], ti mǎnngi’ ...
UNM Rosa LCL sukiyaki not AGR.delicious
‘No matter how many ingredients Rosa puts in her sukiyaki, it still does not taste good...’ (CD, entry for *pacha-*)

The adverbial clause in (28b) is the antecedent clause of a concealed conditional (see 9.2.2.5).

Two other aspects of the negative ‘even’ construction are more challenging. First, it is not clear what grammatical relations an ‘even’ phrase can be associated with. ‘Even’ phrases are generally associated with the subject of the negative sentence. They can also be associated with the direct object. But speakers react more variably when ‘even’ phrases are associated with other grammatical relations, such as possessor of the pivot of an existential verb (see 14.2.2). Compare (26a) with (29).

- (29) ***Ni si** Juan tâya’ salappe’-ña.
not UNM Juan AGR.not.exist money-AGR
(‘Even Juan has no money.’)

This is an area where further investigation is needed.

Second, it is unclear what the word-level negative *ni* contributes to the meaning of this construction. It was pointed out earlier that the ‘even’ phrase does not express sentence negation. Nonetheless, there are indications that the *ni* in the ‘even’ phrase might negate the noun phrase or adverbial clause it combines with. *Ni* can combine with constituents that must be licensed by negation of some sort, such as the negative polarity items *un grānu* (in *ni un grānu* ‘not a bit’) or *put diós* (in *ni put diós* ‘not at all’).⁶

- (30)a. **Ni** un grānu ti ma pātti gi tanu’.
not a bit not AGR divide LCL land
 ‘Not even one part did they give him on the land.’ (CD, entry for *grānu*)
- b. **Ni** achuka’ ha li’i’ si Jose na lalalacha’
not although AGR see UNM Jose COMP AGR lie.PROG
 yu’ gi fachi’, **ni** put dios ti u ayuda yu’.
I LCL mud not by god not AGR help me
 ‘Even if Jose sees me lying in the mud, he would not help me.’ (CD, entry for *ni put diós*)

Further, *ni* interacts with disjunction inside the noun phrase as if it expresses negation. Consider the negative ‘even’ construction below.

- (31) **Ni** si nanā-mu pat tatā-mu, ti man-“impress”.
not UNM mother-AGR or father-AGR not AGR impress
 ‘Even your mother and your father weren’t impressed.’ (EM 50)

Pat ‘or’ indicates disjunction, but the meaning of (31) involves conjunction (‘and’): it states that even the addressee’s two parents—the mother *and* the father—were not impressed.⁷ This alternation brings to mind De Morgan’s

⁶ The verb in (30a) can be analyzed in several ways. If it is a passive (‘Not even a bit was given to him’), then the ‘even’ phrase is associated with the subject; if it is an ordinary transitive verb (‘Not even a bit they gave to him’), or the transitive or passive form of a concealed applicative (‘Not even a bit they gave him’, ‘Not even a bit he was given’), then the ‘even’ phrase is associated with a direct object or oblique. There are two ‘even’ phrases in (30b), a fact that suggests that these phrases can be iterated. It is not clear how to translate *ni put dios* in this example.

⁷ Thanks to Manuel F. Borja for providing the English translation and additional commentary.

Laws, one of which states that the negation of a disjunction is equivalent to the conjunction of two negations. If *ni* were to negate the disjunction *si nanã-mu pat tata-mu* ‘your mother or your father’, the result—‘not [your mother or your father]’—would be equivalent to ‘[not your mother] and [not your father]’, which would supply the ‘and’ that forms part of the sentence’s meaning.

All this suggests two alternative possibilities. On the one hand, the *ni* in the ‘even’ phrase might express constituent negation. If so, it is unclear just what this negation contributes to the meaning of the construction as a whole. On the other hand, the *ni* in the ‘even’ phrase might have the form but not the meaning of negation, similar to a negative concord item. If so, it would be agreeing with sentence negation in some new way. This is an area where further investigation is needed.

17.6 Negation and ellipsis

When most of a clause is deleted by ellipsis but the sentence negation is left behind, this negation can be expressed by the sentential negative *ti*, the negative interjection *ãhi* ‘no’, or the negative verb *mungnga* ‘don’t, let it not be’.

The sentential negative *ti* is used when ellipsis removes most of the clause but leaves behind the negation followed by some other constituent. This other constituent (enclosed in brackets below) is a noun phrase in (32a), a prepositional phrase in (32b), and an adverbial phrase in (32c).

- (32)a. Gof mǎnngi’ i letchun sa’ mǎsa ha’
 AGR.very delicious the piglet because AGR.cooked EMP
 gi asadot, **ti** [i hetnu].
 LCL spit not the oven
 ‘The roasted pig tasted so delicious because it was roasted in the spit, not the oven.’ (CD, entry for *asadót*)
- b. ... kosa ki un tungu’ ginin hǎgu mismu ya **ti**
 so.that AGR know from you same and.then not
 [ginin i ottru].
 from the other
 ‘...so that you know it from you yourself and not from another person.’ (EM 132)
- c. Taitai i direksion sa’ ilelek-ña guatu guihi,
 read the direction because say-AGR.PROG to.there there
 ãhi’ **ti** [mǎgi guini].
 no not to.here here

‘Read the direction because it’s saying that it’s over there, not over here.’ (CD, entry for *guatu guihi*)

Because the negative *ti* is phonologically dependent—it must lean on material to its right—it cannot be used when ellipsis removes everything in the clause except the negation. In such cases, negation is expressed by the interjection *ahi* ‘no’ or by the predicate *mungnga* ‘don’t, let it not be’. *Mungnga* is used when the truncated clause is irrealis and conveys obligation or necessity (see 15.2.2.1).

- (33)a. Hu adibibina kão para bai hu fãhan pat **mungnga**.
AGRpredict.PROG Q FUT AGR buy or don’t
 ‘I am deciding whether I should buy it or not.’ (CD, entry for *mungnga*)
- b. Ha hahassu kão para u kãnnu’ pat **mungnga**.
AGRthink.PROG Q FUT AGR eat or don’t
 ‘He is thinking if he should eat it or not.’ (CD, entry for *mungnga*)

Åhi appears otherwise (see 15.4); for instance, when the truncated clause is realis (as in (34a)) or when it is irrealis but no obligation or necessity is involved (34b-c).

- (34)a. Guaha na atgidun mampus a’paka’, guaha
AGR.exist L cotton so.much AGR.white AGR.exist
ahi’.
no
 ‘Some cottons are very white, some (are) not.’ (CD, entry for *atgidun*)
- b. Pa un nã’i yu’ ni malago’-hu pat **ahi’**?
FUT AGR give me OBL WH[OBL].want-AGR or no
 ‘Are you giving me what I want or not?’ (CD, entry for *paun*)
- c. Hu chuli’ ha’ i payu-hu achuka’ guaha
AGR bring EMP the umbrella-AGR although AGR.exist
dinidã-hu kão para u uchan pat ahi’.
NMLZ.doubt-AGR Q FUT AGR rain or no
 ‘I brought my umbrella, even though there was doubt on my part whether it would rain or not.’ (CD, entry for *dinida*)

17.7 Further reading

See Vincent (2018) for further discussion of negative concord in Chamorro.

18

ADVERBS

Although Chamorro has no productive way of forming adverbs from other parts of speech, it does have adverbs. These are diverse in form, meaning, and word order.

18.1 Overview

Adverbs are words that provide more information about the event or state described by predicate and its participants. Chamorro has no productive way of forming adverbs from other parts of speech, but it does have a number of adverbs. Three very common adverbs—*puedi* ‘hopefully’, *lokkui* ‘also’, and *på’gu* ‘now’—are illustrated below.

- (1) a. **Puedi** ti kãnsit esti na dohlan.
hopefully not AGR.cancerous this L cyst
‘Hopefully this cyst is not cancerous.’ (CD, entry for *dohlan*)
- b. Ma u’usa i pi’ão **lokkui** para hã’if.
AGR.use.PROG the bamboo also for torch
‘They’re using the bamboo also for torches.’ (CD, entry for *hã’if*)
- c. Ha tulaika si Maria na’ãn-ña ya Chopia
AGR.change UNM Maria name-AGR and.then Chopia
på’gu.
now
‘Maria changed her name and now it’s Chopia.’ (CD, entry for *Chopia*)

This chapter gives a brief survey of adverbs that highlights their diversity in form, meaning, and word order. See 3.3 and 5.2 for some other ways that adverbial meanings can be expressed.

18.2 Form

Adverbs can be classified according to whether they also belong to some other part of speech. Most adverbs are simply adverbs; they have no other syntactic function. Some representative examples of this type of adverb are given below.

(2)	ADVERBS WITH NO OTHER SYNTACTIC FUNCTION	
	adumídidi'	'little by little'
	atu'âsi	'(but) at least'
	esta	'already'
	guatu	'to there (away from speaker and addressee)'
	fan	'please'
	ha'	emphatic
	kulang	'looks like, seems like' (with variants <i>kulan</i> , <i>kalan</i> , <i>kalang</i>)
	lokkui'	'also'
	mâgi	'to here (toward the speaker)'
	pâ'gu	'now'
	puedi	'hopefully'
	tengnga	'usually, often'
	trabiha	'still, yet'

A smaller number of adverbs also belong to another part of speech that probably represents their primary syntactic function. In particular:

(i) Certain very frequent adjectives also function as adverbs. Some of them are listed in (3).

(3)	ADVERBS THAT ARE ALSO ADJECTIVES	
	bâba	'bad'
	chaddik	'fast'
	dispâsiu	'slow'
	hagas	'gone, past, in the past, for a long while (and still pertinent)'
	mâolik	'good'
	sessu	'often'
	ta'lu	'again'

When these words serve as adjectives, they can be predicates of clauses (as in (4a)) and modifiers of nouns (4b); they can also be used to form applicative verbs (4d) and causative verbs (4c). Many of these adjectives have an argument that can be realized as an infinitive clause or reduced clause (see 3.3.7 and Chapter 21).

- (4) a. **Manmâolik** bos-ñiha atyu siha i mangkakanta.
AGR.good voice-AGR that PL the PL.singer
 'Those singers' voices are good.' (CD, entry for *bos*)

- b. Gi **hagas** na tiempu, i famagu'un ti managuaguat.
LCL past L time the PL.child not AGR.naughty
 'In the past, children were not naughty.' (CD, entry for *hagas*)
- c. **Na'fanchaddik** i pasun-miyu.
make.AGR.fast the pace-AGR
 'Make your (pl.) pace faster.' (CD, entry for *pâsu*)
- d. Si Juan ha **ta'luyi** chumuda' i gimin.
UNM Juan AGR again.to INF.spill the drink
 'Juan spilled more of the drink.' (CD, entry for *ta'luyi*)

When they serve as adverbs, they modify the predicate or the clause, and do not show agreement with the subject; see (5).

- (5) a. Atan **mâolik** i yure'-ta ya mungnga na
watch good the zori-AGR and.then don't COMP
 ta alachi.
AGR mix.up
 'Let's watch our (incl.) zoris carefully so that we (incl.) don't mix them up.' (CD, entry for *âlachi*)
- b. **Hagas** ti hu li'i' hâo guini giya Tinian.
past not AGR see you here LCL Tinian
 'I didn't see you for ages here in Tinian.' (CD, entry for *hagas*)
- c. Hu balâha i balâha **chaddik**.
AGR shuffle the card fast
 'I shuffled the cards quickly.' (CD, entry for *balâha*)
- d. Na'iyi yu' fan **ta'lu** fina'denni'.
add.for me please again hot.sauce
 'Please add more hot sauce for me.' (CD, entry for *na'iyi*)

(ii) The local forms of the demonstratives, namely, *guini* 'here (near speaker)', *guennâo* 'there (near addressee)', and *guihi* 'there (near third person)', can function as adverbs of location (see 6.2.2). The use of these forms as adverbs is illustrated in (6).

- (6) a. Guaha nonis **guini** na sapâtus sa'
AGR.exist AGR.odd here L shoe because
 taigui i ga'chong-ña.
AGR.not.be.at the partner-AGR
 'There is an odd shoe here, because its mate is missing.' (CD, entry for *nonis*)

- b. Ekkis ha' **guihi** para un bota.
mark.with.x EMP there FUT AGR vote
 'Just mark your vote with an X (lit. mark an X there so you can vote).' (CD, entry for *ekkis*)

Similarly, the manner adjectives *taiguini* 'like this (near speaker)', *taiguennão* 'like that (near addressee)', and *taiguihi* 'like that (near third person)' are clearly derived from the local forms of demonstratives. These manner adjectives can serve as predicates of clauses, as (7) shows.

- (7) a. Disdi ngai'an ni **tumaiguihi** gui'?'
since when? COMP AGR.like.that he
 'Since when did he become like that?' (CD, entry for *disdi ngai'an*)
 b. Hãfa na **taiguennão** trahi-mu?
what? COMP AGR.like.that appearance-AGR
 'Why is your appearance like that?' (CD, entry for *trãhi*)

They can also serve as manner adverbs.

- (8) a. Tãya' ni hu li'i' si Long
AGR.not.exist COMP AGR see UNM Long
 gumonggung **taiguihi** gi as Nelly.
AGR.mutter like.that LCL Nelly
 'I never saw Long mutter under his breath like that at Nelly.' (CD, entry for *gonggung*)
 b. Mungnga madililing i neni **taiguennão**.
don't AGR.PASS.carry the baby like.that
 'Don't carry the baby like that.' (CD, entry for *dililing*)

(iii) Local nouns such as *hãlum* 'inside, in(to)', *huyung* 'outside, out', *mo'na* 'front, before', and directional nouns such as *lãgu* 'north (in Guam and Rota), west (in Saipan), toward the ocean', are also used as directional adverbs (see 5.3 and 5.4).

(iv) The prepositions *ântis di* 'before' and *dispues di* 'after' have counterparts without *di* that serve as time adverbs. These prepositions are discussed in 5.2; their use as adverbs is illustrated below.

- (9) a. Guaguan **ântis** i liluk na materiât.
AGR.expensive before the iron L material
 'Iron was an expensive material a long time ago (lit. before).' (CD, entry for *luluk*)

- b. Esta, ta ali'i' **dispues.**
okay AGR RECP.see later
 'Okay, we'll (incl.) see each other later.' (CD, entry for *esta*)

(v) Time expressions such as *na biâhi* 'this time', *na sâkkan* 'this year', *na mes* 'this month', *na simâna* 'this week', and so on can be analyzed as adverbs or as heads of relative clauses (see 24.6.3). They consist of a noun that describes (some amount of) time, marked with the pre-head form of the linker.

(vi) Chamorro has a small number of adverbs ending in *-menti* which are borrowed from Spanish (e.g. *espesiatmenti* 'especially', *solamenti* 'only, except, unless', *buluntâriamenti* 'voluntarily'). In Spanish, these adverbs are derived from adjectives. It is less clear whether in Chamorro they should be treated as derived from adjectives. If Chamorro does have a word formation process that derives adverbs ending in *-menti* from adjectives, this process is limited to Spanish loanwords, and is not productive.

Finally, certain types of adjuncts that are noun phrases could be viewed as adverbial, but are not treated as adverbs here (see 5.1.1.3 and 5.1.2.3). These adjuncts typically are not marked for case; they include noun phrases that express duration (e.g. *dos oras* 'for two hours') and frequency (e.g. *kada sâkkan* 'every year', *kada râtu* 'every time', *kada diha* 'every day', *todu i tiempu* 'all the time'), as well as certain noun phrases that express location in time (e.g. *nigap* 'yesterday', *agupa* 'tomorrow').

18.3 Meaning

Adverbs have a wide range of meanings, roughly summarized here.

Modal adverbs indicate the extent to which the event or state described by the predicate is real, possible, desirable, permitted, or required. Chamorro has a large number of modal adverbs. Some representative examples are listed below.

(10)	MODAL ADVERBS	
	buenti	'maybe, perhaps, possibly'
	diputsí	'supposed to'
	fa'na'an	'maybe, perhaps, presumably'
	kâsi	'probably, approximately'
	kulang	'looks like, seems like' (with variants <i>kulan</i> , <i>kalan</i> , <i>kalang</i>)
	mohon	expresses wish, desire, or something contrary to fact

puedi	‘hopefully’
siempri	‘certainly, surely (used to indicate certain future)’
téneki	‘surely, definitely (indicates less certainty than <i>siempri</i>)’

Chamorro also has adverbs that indicate location in time, including *ántis* ‘before’, *dispues* ‘later’, *hagas* ‘in the past, long ago’, *lámu’na* ‘tonight’, and *pá’gu* ‘now, today’.

A few adverbs indicate what can be called order in the discourse. These include *finé’nena* ‘first’, *pues* ‘then’, and perhaps *lokkui* ‘also’.

There are adverbs that indicate degree or extent, such as *atu’ási* ‘(but) at least’, *dimasião* ‘too much’, *kana* ‘almost’, *kási* ‘approximately’, *putlumenus* ‘at least’. Degree morphemes such as *góf* ‘very’ and *sén* ‘extremely, most’ are discussed in Chapter 25.

Adverbs can indicate frequency, e.g. *apenas* ‘rarely, seldom’, *di’áriu* ‘daily, every day’, *sessu* ‘often’, *tengnga* ‘usually, often’.

Adverbs can indicate other aspectual notions; that is, other notions that provide a perspective on the event or state described by the predicate. The aspectual adverbs include e.g. *esta* ‘already’, *dinuebu* ‘again’, *nāya* ‘for awhile, yet’, *ta’lu* ‘again’, *trabiha* ‘still, yet’, and perhaps also *adumididi* ‘little by little’, *diripenti* ‘suddenly, unexpectedly’, *gotpi* ‘suddenly’.

Chamorro has manner adverbs that also serve as adjectives (see 18.2). It is not clear whether the language has manner adverbs that do not belong to any other part of speech.

A number of adverbs indicate direction or location in space. Some of these adverbs also serve as local nouns (e.g. *tátti* ‘back, behind’; see 5.3), directional nouns (e.g. *hāya* ‘south (in Guam and Rota), east (in Saipan), away from the ocean’; see 5.4), or the local forms of demonstratives (e.g. *guini* ‘here (near speaker)’; see 6.2.2). Two directional adverbs that are not also nouns are *māgi* ‘to here (toward the speaker)’ and *guatu* ‘to (over) there (away from speaker or addressee)’.

The reflexive adverb *maisa* ‘alone, by oneself’ can also be used as a predicate. As an adverb, it serves as an emphatic reflexive or signals that an overt pronoun is reflexive (see 13.2.1.2.1).

Finally, two very frequent forms that are classified as adverbs here are the emphatic particle *ha*, which indicates focus and is sometimes translated into English as ‘just, only, really’ (see 23.2), and *fan* ‘please’, which is used in imperatives to indicate politeness (see 15.2 and 18.4.1).

18.4 Word order

Overall, adverbs have the same word order possibilities as other adjuncts in Chamorro. They can occur at the left edge of the clause, at the right edge of the clause, or after the predicate (in clauses formed from verbs or adjectives) or after the predicate phrase (in clauses formed from nouns or prepositions). These locations are marked with an *x* in the word order templates below (see 3.4.2, 3.4.3, and 4.1).

- (11) WORD ORDER OF CHAMORRO CLAUSES
- a. Dominant word order of clauses formed from verbs or adjectives
x Negative TAM Predicate x Subject Object Obliques x
 - b. Word order of clauses formed from nouns or prepositions
x Negative TAM Predicate-Phrase x Subject x

This range of possibilities can be narrowed down somewhat further. 18.4.1 describes two types of phonologically dependent adverbs, and 18.4.2 deals with the remaining types of adverbs.

18.4.1 Phonologically dependent adverbs

Chamorro has two types of phonologically dependent adverbs—adverbs that must combine with some other element to form a phonological word. First, a few adverbs are enclitics—dependent elements that must lean on material to their left to form a phonological word. These adverbs include the modal adverb *mohon*, the emphatic particle *ha'*, and the politeness particle *fan* ‘please’.

The modal adverb *mohon* signals that the situation described by the clause is wished for, desired, or contrary to fact. It can appear after the first phonological word of the clause, whether this word happens to be a subordinating conjunction (as in (12a)), an interrogative word (12b), an adverb (12c), or an interjection (12d). This amounts to saying that *mohon* can occur in ‘second position’ in the sentence (compare 8.3 on weak pronouns).

- (12)a. Kumu **mohon** un cho'gui esti, ti un fañoñotsut.
if UNREAL AGR do this not AGR ANTIP.regret.PROG
 ‘If you had done this, you wouldn’t be regretting it.’ (CD, entry for *kumu mohon*)
- b. Håfa **mohon** para u masusedi yanggin
what? UNREAL FUT AGR PASS.experience if
tåya' elektrisidå gi tano'-ta?
AGR.not.exist electricity LCL land-AGR

‘What do you think would happen if there were no electric power on the island?’ (CD, entry for *elektrisiḁ*)

- c. Kulang **mohon** guaha matai-mu na
seems.like *UNREAL* *AGR.exist* *dead-AGR* *COMP*
linilitu hão.
AGR.wear.black.PROG *you*
‘It seems as if you have somebody who died that you are all in black.’ (CD, entry for *lutu*)
- d. I **mohon** ya ti bai matan âmku’ kumu hu
oh *UNREAL* *and.then* *not* *AGR.face.L* *old* *if* *AGR*
gacha’ otchenta ănus.
catch.up.with *eighty* *years*
‘Oh, how I wish I won’t look old when I get to be eighty!’

Mohon can also occur after the predicate (as in (13a)) or at the right edge of the clause (13b).

- (13)a. Kumu hu tungu’ **mohon** esti, bai hu fañuñuli’
if *AGR.know* *UNREAL* *this* *AGR* *ANTIP.bring.PROG*
atchu’.
rock
‘If I had known this, I would have brought a rock.’
- b. Ti u mahluk i patâs-mu **mohon** yanggin un osgi yu’.
not *AGR.break* *the* *leg-AGR* *UNREAL* *if* *AGR.obey* *me*
‘Your leg wouldn’t have broken if you had obeyed me.’

The emphatic particle *ha’* signals that the immediately preceding word or phrase is focused. It occurs immediately after (the last phonological word of) the focused constituent (see 23.2). Note that the last phonological word of the focused constituent can contain other enclitics. In (14c), for instance, the focused constituent is the adverb *dispâsiu* ‘slowly’, but the phonological word containing it also includes the enclitic *fan* ‘please’.

- (14)a. Si Julie para u guput **ha’** gi Sabalu
UNM *Julie* *FUT* *AGR.party* *EMP* *LCL* *Saturday*
maseha malâlangu.
even.though *AGR.sick.PROG*
‘Julie will still have her party on Saturday even though she’s sick.’
(CD, entry for *maseha*)
- b. Kana’ esti **ha’** na kandi guaha ântis na tiempu.
almost *this* *EMP* *L* *candy* *AGR.exist* *before* *L* *time*

‘This was about the only candy in the old days.’ (CD, entry for *bukâyü*)

- c. Guesguis dispâsiu fan **ha’** ennâo i addeng-hu?
rub slowly please EMP that the foot-AGR
 ‘Can you slowly rub my feet?’ (CD, entry for *guesguis*)

The politeness particle *fan* ‘please’ occurs immediately after the phonological word containing the predicate, or at the right edge of the clause. Note that the phonological word that contains the predicate can contain other enclitics, such as *ha’* or a weak pronoun, as in (15c) and (15d).

- (15)a. Hânâo **fan** guatu ya un inbilikeraanñaihun.
go please to.there and.then AGRsnoop.awhile
 ‘Could you go there and snoop around.’ (CD, entry for *imbilikeru*)
- b. Na’bula hânûm maipi i titmosa **fan**.
make.full water.L hot the thermos please
 ‘Please fill up the thermos with hot water.’ (CD, entry for *titmosa*)
- c. Po’lunñaihun ha’ **fan** ennâo na problema sa’
put.awhile EMP please that L problem because
ha na’malilininik ilu-hu.
AGRmake.ache.PROG head-AGR
 ‘Please set that problem aside, because it is giving me a headache.’
 (CD, entry for *po’lunñaihun*)
- d. Chuli’i yu’ **fan** singku lobun siboyas.
bring.to me please five bulb.L onion
 ‘Please bring me five bulbs of onions.’ (CD, entry for *lobu*)

Second, some adverbs can or must combine phonologically with the verb. These adverbs immediately follow the verb, which is marked with the post-head form of the linker (see 7.3.1). The post-head form of the linker is realized as the suffix *-n* when the verb ends in a vowel (including, for some speakers, stressed *âo*), and is unpronounced otherwise. It turns the verb into a dependent element that forms a phonological word with the adverb (see 2.2.1.1.2). Among the adverbs that can combine with the verb in this way are the manner adverbs *chaddik* ‘fast’, *dispâsiu* ‘slow’, *mâolik* ‘good’, and *bâba* ‘bad’.

- (16)a. Ha chatgin **bâba** yu’ anai hu gânnâ.
AGR laugh.at.L bad me when AGR win
 ‘She laughed at me mockingly when I beat her.’ (CD, entry for *chatgi*)

- b. Mapput munhåyan **chaddik** i che'chu' sa'
AGR.hard AGR.finished.L fast the work because
bula motmurasion.
AGR.much confusion
'The work is difficult to complete because there is so much
confusion.' (CD, entry for *motmurasión*)

The reflexive adverb *maisa* must combine with the verb when it signals that a direct object pronoun is reflexive (see 13.2.1.2.1).

- (17) Tohgi hulu' ya un difendin **maisa** hão.
stand up and.then AGR.defend.L self you
'Stand up and defend yourself.' (CD, entry for *tohgi*)

18.4.2 Other adverbs

The remaining adverbs have some or all of the word order options described earlier: at the left edge of the clause, at the right edge of the clause, or immediately after the predicate. The word order of individual Chamorro adverbs has not yet been investigated in detail. Nonetheless, an examination of the CD database suggests that there are adverbs occur only at the left edge of the clause, as well as adverbs that occur only immediately after the predicate. There are also adverbs occur at one edge of the clause or immediately after the predicate, and adverbs that occur in all three locations. A very preliminary attempt is made here to classify some common adverbs in these terms. Because the classification is based on a limited amount of naturally-occurring data, it is quite likely that some adverbs have a wider distribution than is suggested below.

A large number of adverbs occur (only) at the left edge of the clause. These include many modal adverbs, many degree adverbs, some adverbs that indicate order in the discourse, and a few adverbs that indicate frequency or location in time.

- (18) ADVERBS THAT OCCUR AT THE LEFT EDGE OF THE CLAUSE
- | | |
|----------|---|
| apenas | 'rarely' |
| atu'åsi | '(but) at least' |
| diputsí | 'supposed to' |
| fa'na'an | 'maybe, perhaps, I assumed' |
| hagas | 'gone, past, in the past, for a long while (and still pertinent)' |
| kana' | 'almost' |
| kåsi | 'probably, approximately' |

kulang	‘looks like, seems like’ (with variants <i>kulan</i> , <i>kalan</i> , <i>kalang</i>)
piót	‘especially’
puedi	‘hopefully’
pues	‘then’
téneki	‘surely, definitely (indicates less certainty than <i>siempri</i>)’

Some illustrative examples are given in (19).

- (19)a. **Fa’na’an** hãgu yuhi i hu li’i’ gi paingi.
maybe you that the AGRsee LCL last.night
 ‘Maybe you were the one that I saw last night.’ (CD, entry for *fa’na’an*)
- b. Ha sakapiku i edda’, **pues** ha tãnum i simiya.
AGRpick the dirt then AGRplant the seed
 ‘He used a pick on the soil, then he planted the seedlings.’ (CD, entry for *sakapiku*)
- c. **Kãsi** manparehu idat-ñiha ennão na gurupun
probably AGR.same age-AGR that L group.L
famagu’un.
PL.child
 ‘Perhaps all the children in the group are the same age.’ (CD, entry for *idât*)
- d. Mãnngi’ pão-ña esti i floris hasmin
AGR.delicious scent-AGR this the flower.L jasmine
piot an puengi.
especially when night
 ‘The scent of the jasmine flower is delightful, especially in the evening.’ (CD, entry for *hasmín*)

Some manner adverbs seem to occur immediately after the predicate (and nowhere else), even when they do not combine with it to form a phonological word. Included in this class are *mãolik* ‘good’ and perhaps *bãba* ‘bad’. In (20), *mãolik* occurs right after the verb *fa’gãsi* ‘wash’, even though *fa’gãsi* is not marked with the linker and the two do not form a phonological word. (This can be seen from the fact that reduplication for the progressive affects the stressed CV of the verb, not the CV that would bear primary stress if the verb and adverb formed a single phonological word; see 2.2.1.1.2.)

- (20) I á'amtí ha fa'gãgasi **mãolik** i kannai-ña antis di
the healer AGR wash.PROG good the hand-AGR before PRT
u patcha i chetnut.
ART touch the wound
'The nurse washes her hands well before touching the wound.' (CD,
entry for á'amtí)

A large number of adverbs can occur immediately after the predicate or at the right edge of the clause. These include many—perhaps all—adverbs of direction or location in space, some adverbs that indicate frequency or other aspectual notions, a few manner adverbs, a few time adverbs, and *maisa* 'by oneself, alone'. (When *maisa* has this meaning, it is marked with the pre-head form of the linker.)

- (21) ADVERBS THAT OCCUR (SOMEWHERE) AFTER THE PREDICATE
- | | |
|-----------|--|
| chaddik | 'fast' |
| dinuebu | '(over) again' |
| guatu | 'to there (away from speaker and addressee)' |
| guennão | 'there (near addressee)' |
| guihi | 'over there (away from speaker and addressee)' |
| guini | 'here (near speaker)' |
| huyung | 'outside', and other adverbs formed from local nouns |
| kãttan | 'east (in Guam and Rota), north (in Saipan), toward one's right as one faces the ocean', and other adverbs formed from directional nouns |
| kuntiempu | 'ahead of time, beforehand' |
| mãgi | 'to here (toward speaker)' |
| maisa | 'by oneself, alone' |
| nãya | 'for awhile, yet' |
| taiguini | 'like this', and other adverbs formed from manner adjectives |
| ta'lu | 'again' |

Some representative examples are given in (22).

- (22)a. Sahguan **hãlum** i ramienta gi kahun estãñu.
put inside the tools LCL box.L tin
'Put the tools in the tin box.' (CD, entry for estãñu)

- b. Ha barohu si Manuel i liluk **hålum** gi hayu.
AGR.drill UNM Manuel the nail inside LCL wood
 ‘Manuel drilled the nail into the wood.’ (CD, entry for *barohu*)
- c. Ti o’ora **nåya** i amotsan talu’åni.
not hour.PROG yet the meal.L lunch
 ‘It is not yet time for lunch.’ (CD, entry for *nåya*)
- d. Dumiskånsa i haggan gi nihung **nåya**.
AGR.rest the turtle LCL shade awhile
 ‘The turtle rested in the shaded area for awhile.’ (CD, entry for *nuhung*)

A few adverbs can evidently occur at the left edge of the clause or immediately after the predicate; these include *diripenti* ‘suddenly’, *siempri* ‘surely, certainly (used to indicate certain future)’, and *tengnga* ‘usually, often’.

- (23)a. Yanggin tåya’ bittut-ña i taotão, pues
if AGR.not.exist virtue-AGR the person then
siempri chaddik tumai pasensia.
surely AGR.fast AGR.INF.not.have patience
 ‘If a person does not have virtue, then he quickly becomes impatient.’ (CD, entry for *bittut*)
- b. Måttu **siempri** si Kunggresun Kilili’ gi
AGR.arrive surely UNM congressman.L Kilili’ LCL
 mamamaila’ na simåna.
coming L week
 ‘Congressman Kilili’ will arrive this coming week.’ (CD, entry for *måmamaila’ na simåna*)

Finally, some adverbs can occur in all three locations: at the left edge of the clause, immediately after the predicate, and at the right edge of the clause. Some of these adverbs are listed below.

- (24) ADVERBS THAT OCCUR WHEREVER ADJUNCTS CAN OCCUR
- | | |
|------------|----------------------------|
| adumídidi’ | ‘little by little’ |
| åntis | ‘before’ |
| buenti | ‘maybe, perhaps, possibly’ |
| dispues | ‘later’ |
| esta | ‘already’ |
| fine’nena | ‘first’ |
| låmu’na | ‘tonight’ |

lokkui'	'also'
på'gu	'now'
sessu	'often'
trabiha	'yet'

This freedom of occurrence is illustrated in (25) for *buenti* 'maybe, perhaps, possibly'.

- (25)a. **Buenti** ti siña mafa'besti esti i
maybe not can AGR.PASS.make.into.decoration this the
butonsiyu.
plant.sp.
 'Maybe this *butonsiyu* plant cannot be used for decoration.' (CD, entry for *butonsiyu*)
- b. Siña ha' **buenti** mafa'amut i
can EMP maybe AGR.PASS.make.into.medicine the
cha'guan kakaguetis.
plant.sp.
 'Maybe the *chã'guan kakaguetis* could be used for medicine.' (CD, entry for *chã'guan kakaguetis*)
- c. Para u uchan **buenti**.
FUT AGR.rain maybe
 'Maybe it's going to rain.' (CD, entry for *buenti*)
- d. Nahung ha' esta nengkanu' **buenti**.
AGR.enough EMP already food maybe
 'Maybe there's enough food already.' (CD, entry for *buenti*)

18.5 Adverb meaning and word order

To what extent can the word order possibilities of an adverb be predicted from its meaning? Unfortunately, almost nothing is known about how adverbs are ordered relative to one another in Chamorro. But if we focus on the location of adverbs with respect to the predicate or edges of the clause, some interesting trends emerge.

Adverbs of direction or location in space occur immediately after the predicate or at the right edge of the clause.

Manner adverbs generally occur immediately after the predicate, even when they do not combine with it to form a phonological word. One exception is the adverb *chaddik* 'fast', which has a wider distribution: it can occur immediately after the predicate or at the right edge of the clause; see (16b) and (5c).

Adverbs of degree or extent usually occur at the left edge of the clause. However, *mampus* ‘so (much), extremely, too (much)’ can also occur immediately after the predicate or at the right edge of the clause (see 25.2.1). See (26).

- (26)a. **Mampus** maipi i ha’āni.
so.much AGR.hot the day
 ‘The day is very hot.’ (CD, entry for *ha’āni*)
- b. Mahettuk **mampus** i fina’tinās-ña si Alice
AGR.hard so.much the WH[OBJ].make-AGR UNM Alice
 na guyuriha.
L sugar.biscuit
 ‘The sugar-coated biscuit that Alice made is very hard.’ (CD, entry for *guyuriha*)
- c. Ha gogof guāfi yu’ si Jose **mampus**.
AGR.very make.angry.PROG me UNM Jose so.much
 ‘Jose is agitating me so much.’ (CD, entry for *guāfi*)

Modal adverbs generally occur at the left edge of the clause, except that *siempri* ‘certainly, surely’ can also occur immediately after the predicate (as in (23)), and *buenti* ‘maybe, perhaps, possibly’ can occur wherever adjuncts are allowed (25).

It is harder to generalize about the word order of other types of adverbs. Many time adverbs (e.g. *āntis* ‘before’, *dispues* ‘later’, *pā’gu* ‘now’) can occur in all three locations available to adjuncts. But the time adverb *hagas* ‘gone, past, in the past, for a long while’ apparently must occur at the left edge of the clause (see (5b)), and *kuntientpu* ‘ahead of time, beforehand’ apparently must occur somewhere to the right of the predicate.

Aspectual adverbs, too, are diverse in their word order possibilities. The adverb *nāya* ‘for awhile, yet’ apparently must occur somewhere to the right of the predicate (see (22c-d)), but *trabiha* ‘still, yet’ can occur in all three locations available to adjuncts.¹

- (27)a. **Trabiha** ti mama’titinas si nāna sena.
yet not AGR.ANTIP.make.PROG UNM mother dinner
 ‘Mother has not cooked dinner yet.’ (CD, entry for *trabiha*)

¹ Both adverbs can occur under the scope of negation. Both can also occur in affirmative sentences. The word order possibilities described for them in the text appear to hold in affirmative as well as negative sentences.

- b. Ti ha payuyuni **trabiha** i ga'lâgu i sagâ-ña.
not AGRused.to.PROG yet the dog the place-AGR
 'The dog is not accustomed to his place yet.' (CD, entry for *payuni*)
- c. Mama'ya ha' **trabiha** i hinassok-ku hâyî
AGR.indecisive EMP still the NMLZ.think-AGR who?
 para bai hu bota.
FUT AGR vote
 'My mind is still indecisive on who to vote for.' (CD, entry for *mâma'ya*)
- d. Ti hu o'oppi i kattan Russel **trabiha**.
not AGRanswer.PROG the letter.L Russel yet
 'I have not responded to Russel's letter yet.' (CD, entry for *oppi*)

Sessu 'often' can occur in all three locations available to adjuncts. However, *tengnga* 'usually, often' seems to occur only at the left edge of the clause or immediately after the predicate. Compare (28a) with (28b-c).

- (28)a. Geftão si Cornelio ni taotão siha yan
AGR.generous UNM Cornelius OBL person PL and
 mananayuyut as Yu'us **sessu**.
AGR.ANTIP.pray.PROG OBL God often
 'Cornelius was generous to the people and prayed to God often.'
 (NT 230)
- b. **Tengnga** un butleha i taotão, pues uttimon-ña
often AGRmock the person then end-AGR
 asaguâ-mu.
spouse-AGR
 'Oftentimes you mock the person, then you end up being their spouse (lit. in the end s/he is your spouse).' (CD, entry for *tengnga*)
- c. Mâmamfuk yu' **tengnga** kottut para
AGR.ANTIP.weave.PROG I often basket for
 sagan mâma'.
container.L betelnut
 'I usually weave baskets for betelnut mix containers.' (CD, entry for *mâmamfuk*)

Although the word order possibilities illustrated above are real, the status of the tentative generalizations they suggest remains to be determined. This is an area where further investigation is clearly needed.

19

COORDINATION

In coordination, two constituents of the same type are combined with a conjunction, such as *yan* ‘and’ or *pat* ‘or’, to form a larger constituent. Coordination can be used to form sentences, words, and various types of phrases. The plural pronoun construction is used to form noun phrases with meanings similar to coordinate noun phrases.

19.1 Overview

In coordination, two constituents of the same type are combined with a conjunction, such as *yan* ‘and’ or *pat* ‘or’, to form a larger constituent. The two constituents that are combined, called *conjuncts*, can be two sentences, two words from the same part of speech, or two phrases of the same type—two noun phrases, for instance. The two conjuncts and the conjunction, which occurs between them, form a larger constituent called a *coordinate structure*. A coordinate structure is always a constituent of the same type as the conjuncts from which it is formed: it is a sentence if its conjuncts are sentences, a predicate phrase if its conjuncts are predicate phrases, a verb if its conjuncts are verbs, and so on. Some coordinate structures are illustrated below. (1a) contains a coordinate sentence; (1b), a coordinate verb; and (1c), a coordinate noun phrase. (The conjuncts in the examples are enclosed in brackets.)

- (1) a. [Para u guaha gera] ya [dispues para u
FUT AGR exist war and.then then FUT AGR
 mâtai i finene’na na asaguã-ña].
die the first L spouse-AGR
 ‘There would be a war and then her first husband would die.’ (EM 102)
- b. Ti para u [masângan] pat [matungu’] ni ottru.
not FUT AGR PASS.say or PASS.know OBL other
 ‘It will not be said or known by another person.’ (EM 124)
- c. Esta manmamaigu’ [i mañe’lun Rosa] yan [i
already AGR.sleep.PROG the PL.sibling.L Rosa and the

mañaina-ña].

PL.parent-AGR

‘Rosa’s siblings and her parents were already asleep.’ (Cooreman 1983: 28)

Coordinate structures can be formed from more than two conjuncts. Then a conjunction occurs between the last two conjuncts; other conjuncts may have a conjunction between them, or may be separated from one another merely by intonation or pauses (indicated by commas in the orthography). See (2).

- (2) Mafa’titinas i agi gi māsān [aga’],
AGR.PASS.make.PROG the fruit.liquor LCL ripe.L banana
[piña], yan [ottru na frutas siha].
pineapple and other L fruits PL
‘Fruit liquor is made from ripe bananas, pineapple, and other ripe fruits.’ (CD, entry for *agi*)

Coordinate structures with multiple conjuncts are usually assumed to be formed by the repeated combination of pairs of constituents to form larger coordinate structures. In (2), for instance, the noun phrase *aga’* ‘bananas’ might first be combined with the noun phrase *piña* ‘pineapple’ to form a coordinate noun phrase that is then combined with the noun phrase *ottru na frutas siha* ‘other fruits’ to form an even larger coordinate noun phrase. (Another possibility is that the noun phrase *piña* might first be combined with *ottru na frutas siha* to form a coordinate noun phrase that is then combined with *aga’*.)

This chapter begins by describing the Chamorro conjunctions (in 19.2) and then goes on to discuss the coordination of sentences (19.3), words (19.4), and phrases (19.5). After that, the word order of sentences with coordinate verb phrases is discussed (in 19.6). Finally, 19.7 is devoted to comitative constructions, including the plural pronoun construction, which creates noun phrases with meanings similar to coordinate noun phrases.

19.2 Conjunctions

Chamorro has five conjunctions that are used in coordination. These coordinating conjunctions are listed in (3).

(3) COORDINATING CONJUNCTIONS

<i>lão</i>	‘but’
<i>o sino</i>	‘or (else)’ (sometimes written as a single word, <i>osino</i>)
<i>pat</i>	‘or’
<i>ya</i>	‘and (then)’
<i>yan</i>	‘and’

These conjunctions differ in distribution and meaning. Specifically:

The conjunctions *yan* ‘and’, *pat* ‘or’, and *o sino* ‘or (else)’ are used to combine sentences, words from the same part of speech, or phrases of the same type. *Ya* ‘and (then)’ can be used to combine sentences or predicate phrases. *Lão* ‘but’ is generally used only to combine sentences.

The meaning of *lão* ‘but’ involves contrast, but the meaning of *yan* ‘and’ does not. In (4a), *lão* draws an explicit contrast between the degree to which I am derisive and the degree to which you are derisive, but in (4b), *yan* does not explicitly contrast land rocks with ocean rocks—the sentence merely states that both types of rocks exist.

- (4) a. [Siña ha’ butlon yu’], **lão** [butlonña
can EMP AGR.derisive I but AGR.derisive.COMPAR
hảo].
you
‘I can be derisive, but you are more derisive.’ (CD, entry for *butlón*)
- b. [Guaha âtchu’ tânu’] **yan** [guaha âtchu’ tâsi].
AGR.exist rock.L land and AGR.exist rock.L ocean
‘There are land rocks and there are ocean rocks.’ (CD, entry for
âtchu)

Both *ya* and *yan* are conjunctive—their meaning is ‘and’—and both can be used to combine sentences or verb phrases. But when the events described by the conjuncts are ordered in time, with one preceding the other, the conjunction used is *ya*. In such cases, the conjunct on the left—preceding *ya*—describes the event that occurs first. In (5), for instance, the old woman’s arrival at the healer’s house precedes her request for treatment.

- (5) [Måttu un biha] **ya** [ha fafaisin si
AGR.arrive a old.woman and.then AGR.ask.PROG UNM
nanâ-hu kảo siña inamti gui’ ta’lu].
mother-AGR Q can AGR.PASS.heal she again

‘An elder lady came and she was asking my mother if she could treat her again.’ (LSS 355-356)

The uses of *ya* and *yan* are discussed further in 19.3.

Both *pat* and *o sino* are disjunctive—their meaning is ‘or’—but *o sino* indicates exclusive disjunction, whereas *pat* indicates inclusive disjunction. In exclusive disjunction, the conjuncts describe alternatives that are mutually exclusive—they cannot both be true at the same time. This type of disjunction corresponds roughly to ‘either one or the other, not both’. Inclusive disjunction allows for the possibility that both alternatives might be true. The difference can be seen in the examples below. In (6a), *o sino* is used because the alternatives described by the two sentences are mutually exclusive: either you pay the debt, in which case you aren’t fined, or else you are fined, because you didn’t pay the debt. But in (6b), *pat* is used, because the disjunction is inclusive—a person can change himself, change his actions, or both. Similarly, *pat* is used to form the coordinate verb in (6c) because the activities described by the conjuncts—marking or tearing the catechism book—are *not* mutually exclusive. Notice that the coordinate verb in (6c) is contained within one conjunct of a coordinate sentence. This coordinate sentence is formed with *o sino*, because its conjuncts describe mutually exclusive alternatives—either you didn’t deface the catechism book, or else you were fined, but not both.

- (6) a. [Apâsi i dibi-mu] **o sino** [un mana’mutta].
pay the debt-AGR or AGR PASS.make.fined
 ‘Pay your debt or you will be fined.’ (CD, entry for *o sinó*)
- b. Dinira tiempu asta ki [ha tulaika gui] **pat** [ha
AGR.PASS.take time until PRT AGR change him or AGR
tulaika i hâfa ha chocho’gui.
change the any AGR do.PROG
 ‘It takes time until he changes himself or he changes whatever he is doing.’ (EM 124)
- c. Åntis lokkui’ [ti siña [un mâtka] **pat** [un titik] i
before also not can AGR mark or AGR tear the
katisismu] osino [mana’fanapâsi hâo].
catechism.book or AGR.PASS.make.ANTIP.pay you
 ‘In the past, you couldn’t mark or tear the catechism book, or else you’d pay a fine’ (CD, entry for *katisismu*)

O sino is sometimes translated as ‘or else’ or ‘otherwise’.

19.3 Coordination of sentences

All the coordinate conjunctions listed in (3) can be used to form coordinate sentences. Some examples are cited below.

- (7) a. [Sen puti manguaiya] / **Lão**
 AGR.extremely hurt AGR.ANTIP.love but
 [putiña ti maguaiya].
 AGR.hurt.COMPAR not AGR.PASS.love
 ‘Loving really hurts, / But not being loved hurts more.’ (EM 30)
- b. [Mãolik na humânão yu’ para i espitât] **o sino**
 AGR.good COMP AGR.go I to the hospital or
 [mâtai yu’ gi talú’âni].
 AGR.die I LCL afternoon
 ‘It was good that I went to the hospital or else I’d be dead in the afternoon.’ (CD, entry for *mãolik*)
- c. ... kão makonni’ i haggan ni ottru peskadot] **pat**
 Q AGR.PASS.take the turtle OBL other fisherman or
 [maleffa ni hâfa i sinangân-ña].
 AGR.forget OBL what? the WH[OBJ].say-AGR
 ‘[He thought about] whether the turtle was caught by another fisherman or it had forgotten about what it had said.’ (from a tape-recorded narrative)

Note that coordinate sentences can be formed with *yan* ‘and’ or *ya* ‘and (then)’, but there is a difference. When *yan* is used, the coordination is symmetric: the conjuncts are equal in status. These conjuncts can generally be reversed with no change in the meaning of the larger structure: a coordinate structure [X and Y] will be synonymous with the reversed version [Y and X]. This holds true for the coordinate sentences in (4b) and (8), which are formed with *yan*. For instance, if the conjuncts in (8a) are reversed, so that *hâfa magagugu-ña* ‘what dress she was wearing’ precedes the conjunction, and *hâfa pañuñu-ña* ‘what scarf she was wearing’ follows the conjunction, the result will have the same meaning as (8a).¹

¹ If one conjunct contains a noun phrase that is the antecedent of a pronoun in the other conjunct, as in (8c), reversing the two conjuncts may break the antecedent-pronoun relation (see 26.3.1). Consequently, antecedent-pronoun relations should be ignored when using reversibility of conjuncts as a test for symmetric coordination.

- (8) a. Ha sângan ha' ta'lu [hâfa pañuñu-ña] **yan**
AGR.say EMP again what? scarf-AGR.PROG and
 [hâfa magagugu-ña].
what? clothes-AGR.PROG
 'She said again what scarf she was wearing and what dress she was wearing.' (Cooreman 1983: 180)
- b. Hunggan, [listu gui'] **yan** [kunfotmi gui']
yes AGR.ready he and AGR.agree he
 na para u asagua].
COMP FUT AGR.marry
 'Yes, he was ready and he agreed that they would be married.'
 (Cooreman 1982: 7)
- c. [Dikiki' na tinanum i anilis] **yan** [siña
small L plant the anil and can
 masodda' gi kantun châlan].
AGR.PASS.find LCL edge.L road
 'The anil is a small plant and it can be found on roadsides.' (CD,
 entry for *anilis*)

But when *ya* is used, the coordination is asymmetric—the conjuncts are *unequal* in status. The conjuncts in asymmetric coordination cannot be reversed without changing the meaning of the larger structure.

In Chamorro and other languages, the most common type of asymmetric coordination involves ordering in time: the event described by one conjunct precedes the event described by the other conjunct. In such cases, the conjunct on the left—which precedes *ya*—describes the event that occurs first. (If the two events overlap in time, the conjunct on the left describes the event that begins first.) See (5) and the following.

- (9) a. [Palaspas i laña] **ya** [tininu si
AGR.splash the oil and.then AGR.PASS.burn UNM
 Magdalena] anai ha afliflitu i guihan.
Magdalena when AGR.fry.PROG the fish
 'The oil splashed and it burned Magdalena when she was frying the fish.' (CD, entry for *palaspas*)
- b. [Hu si'uk i babui] **ya** [mâtai].
AGR.stab the pig and.then AGR.die
 'I stabbed the pig and it died.' (CD, entry for *si'uk*)

Asymmetric coordination can involve other types of relations. The event described by one conjunct might be the cause of the event described by the

other conjunct. In such cases, the conjunct on the left describes the event that is the cause.

- (10)a. Todu i notchi [humãohão i ga'lãgu] **ya** [ti
all the night AGR.bark the dog and.then not
siña yu' dumiskãnsa].
can I AGR.rest
'All night long a dog barked and I couldn't rest.' (CD, entry for
notchi)
- b. Gof ñaũu' i machetti **ya** [ti siña ha
AGR.very dull the machete and.then not can AGR
utut i hayu].
cut the wood
'The machete is very dull and it cannot chop the wood.' (CD, entry
for *ñaũu'*)

The event described by one conjunct might be the result of the event described by the other conjunct. In such cases the conjunct on the right—which follows *ya*—describes the event that is the result.

- (11) [Hu tufung i salãppi'] **ya** [guaha sitenta
AGR.count the money and.then AGR.exist seventy
pesus sopplu].
dollars AGR.remain
'I counted the money and there's seventy dollars left over.' (CD,
entry for *sitenta sopplu*)

The event described by one conjunct might be the purpose of the event described by the other conjunct. In such cases, the conjunct on the right describes the event that is the purpose.

- (12)a. [Hu na'setbi i pala] **ya** [hu guadduk i hoyu
AGR.use the spade and.then AGR.dig the hole
para i tinanom-hu].
for the plant-AGR
'I used the spade to dig the hole for my plants.' (CD, entry for *pãla*)
- b. [To'hi tres gota na ketchap] **ya** [u
put three drop L soy.sauce and.then AGR
nina'i kulot].
PASS.give color
'Add three drops of soy sauce to give it color.' (CD, entry for *to'hi*)

A conjunct that contains an imperative verb or adjective (see 15.2.1) might state a condition that must be fulfilled for the event described by the other conjunct to occur. In such cases, the conjunct on the left states the condition.

- (13) [Fåttu mągi agupa'] **ya** [bai hu nă'i hão ni
arrive to.here tomorrow and.then AGR give you OBL
malago'-mu.
WH[OBL].want-AGR
 'Come back tomorrow and I will give what you want.' (CD, entry
 for *mągi*)

These types of asymmetric coordination are similar in meaning to complex sentences containing an adverbial clause (see 20.4).

In Chamorro, asymmetric coordination can express other meanings as well. Conditional sentences in which the adverb *piot* 'especially' modifies the antecedent clause (the adverbial clause introduced by e.g. *yanggin* 'if') can apparently be paraphrased with asymmetric coordination. In such cases, the conjunct on the right is preceded by *piot*, and states the condition. Compare the conditional sentence in (14a) with the asymmetric coordination in (14b).

- (14)a. Makkat esti i kahun ramenta, *piot* yanggin
AGR.heavy this the box.L tool especially if
bula sinahguan-ña.
AGR.full contents-AGR
 'This toolbox is very heavy, especially if it is full.' (CD, entry for
kahun ramenta)
- b. [Månggi' mangangas i tipu], *piot*
AGR.delicious AGR.PASS.chew the sugar.cane especially
ya [mamis].
and.then AGR.sweet
 'It is good to chew on the sugar cane, especially if the juice is
 sweet.' (CD, entry for *tupu*)

Exclamatives and related constructions (see 15.3) in which an interjection is followed by an embedded clause can be paraphrased with asymmetric coordination. Compare the exclamative in (15a) and the asymmetric coordination in (15b).

- (15)a. Ohala na yanggin gumuaha salappe'-hu, bai hu siña
hopefully COMP if AGR.exist money-AGR AGR can

humãnao para Amerika.

AGR.go to America

‘I wish that, if I have money, I could go to the U.S. mainland.’ (CD, entry for *óhala*)

- b. [Ohala] **ya** [manggãna yu’ gi lottery].
hopefully and.then AGR.ANTIP.win I LCL lottery
 ‘I wish that I could win the lottery.’ (CD, entry for *óhala*)

Finally, asymmetric coordination can be used to paraphrase some types of complex sentences in which a verb has an argument that is realized as an embedded clause. Compare the complex sentence in (16a), in which the embedded clause is an argument of the verb *sangãni* ‘say to, tell’, with the asymmetric coordination in (16b).

- (16)a. Sangãni si Tihu-mu yan Tihã-mu, na
say.to UNM uncle-AGR and aunt-AGR COMP
 cha’-ñiha u fanluluhan.
better.not-AGR AGR AGR.afraid.PROG
 ‘Tell your Uncle and Aunt that they shouldn’t be afraid.’ (EM 101)
- b. [Sangãni si Ann] **ya** [mungnga
say.to UNM Ann and.then don’t
 pumaspas gi satgi].
AGR.splash LCL floor
 ‘Tell Ann not to splash on the floor.’ (CD, entry for *paspas*)

Individual speakers vary in whether they prefer to use embedded clauses or asymmetric coordination in sentences such as (14-16). Further investigation of these constructions is needed.

19.4 Coordination of words

The conjunctions *yan* ‘and’, *pat* ‘or’, and *o sino* ‘or (else)’ can be used to combine words from the same part of speech. Coordinate structures of this type are typically formed from nouns, verbs, or adjectives. The sentences in (17) illustrate a coordinate noun (in (17a)), a coordinate verb with multiple conjuncts (17b), and a coordinate adjective (17c).

- (17)a. Gi kada [siudã] **o sino** [songsung] ni manmãttu
LCL each city or village COMP AGR.arrive
 hamyu ispiha i taotão ...
you.PL look.for the person

‘In each city or village that you (pl.) enter, look for the person...’
(NT 10)

- b. Mânngi’ an [matunu], [ma’aflitu], **pat**
AGR.delicious if AGR.PASS.burn AGR.PASS.fry or
 [ma’eskabebetchi].
AGR.PASS.make.into.eskabetchi.PROG
 ‘[Fish] is delicious when it’s grilled, fried, or made into *eskabetchi*.’
 (EM 75)
- c. I akangkang [mâolík] **yan** [fresku] na âmut.
the plant.sp good and fresh L medicine
 ‘The *akangkang* is a good and fresh herbal medicine.’ (CD, entry
 for *akangkang*)

Coordinate structures can also be formed from adverbs (as in (18a)), numerals (18b), or interjections (18c).

- (18)a. Siña ha’ manmâttu [pâ’gu] **o sino** [agupa’].
can EMP AGR.arrive now or tomorrow
 ‘They can come now or tomorrow.’
- b. Sumai i dengding gi hanum [tres] **pat** [kuâttu]
soak the snail LCL water three or four
mes.
months
 ‘Soak the snail in water for three or four months.’ (CD, entry for
dengdeng)
- c. Oppi [âhi’] **pat** [hunggan].
answer no or yes
 ‘Answer no or yes.’ (CD, entry for *âhi*)

Coordinate structures are rarely, if ever, formed from determiners, prepositions, tense-aspect-mood markers, and the like.

Typically, each conjunct has its own inflection in coordinate structures of this type. Conjuncts that are verbs or predicate adjectives are each marked for aspect, mood, and agreement with the subject (see 2.2).

- (19)a. Asta pâ’gu ha’ [manmamaigu’] **yan** [mandiskâkansa]
until now EMP AGR.sleep.PROG and AGR.rest.PROG
hamyu?
you.PL
 ‘Are you (pl.) still sleeping and resting?’ (NT 53)

- b. [Hu toktuk] **yan** [hu chiku] si nāna anai
AGR hug and AGR kiss UNM mother when
 mātту manbisita.
AGR.arrive AGR.INF.ANTIP.visit
 ‘I hugged and kissed grandma when she came to visit.’ (CD, entry for *toktuk*)

Conjuncts that are possessed nouns each show agreement with the possessor when the agreement option is chosen (see 7.1.1).

- (20) San Miget, guātdian i [anti-ta] **yan** [tatāotāo-ta].
St. Michael guardian.L the soul-AGR and body-AGR
 ‘St. Michael, guardian of our (incl.) souls and bodies.’ (CD, entry for *anti*)

Two exceptions should be noted. First, when transitive verbs are coordinated, speakers sometimes allow the person-and-number forms of agreement to occur just once, preceding the conjunct on the left. In such cases, the constituent that shows agreement with the subject is apparently the entire coordinate verb. Compare (19b) with the sentences in (21).

- (21)a. Ha [arekla] **yan** [na’gātбу] si Meng i lugāt
AGR arrange and make.pretty UNM Meng the place.L
 i giput.
the party
 ‘Meng arranged and beautified the party place.’ (CD, entry for *na’gātбу*)
 b. Siña un [tunu] **osino** [kāddun niyuk] i
can AGR barbeque or make.into.coconut.soup the
 aliling tulompu.
crochus
 ‘You can grill or make coconut milk soup with crochus.’ (CD, entry for *aliling tulompu*)

Second, when possessed nouns are coordinated and the linker option is chosen, or when nouns are coordinated and then combined with a following modifier, the linker is not realized on every conjunct (see 7.1.1). Instead, it appears just once, suffixed to the conjunct on the right, as shown below.

- (22)a. Ta prutehi i [kuttura] **yan** [lingguāhin] islan Saipan.
AGR protect the culture and language.L island.L Saipan

‘Let’s (incl.) protect the culture and language of the island of Saipan.’ (CD, entry for *Saipan*)

- b. Ti manhonggi ni hăyi na espiritu fuera di i
 not AGR.ANTIP.believe not any L spirit except PRT the
 [guella] **yan** [guellun] Chamorro ha’.
 grandmother and grandfather.L Chamorro EMP
 ‘He does not believe in any spirit except his Chamorro ancestors.’
 (CD, entry for *moru*)

These exceptions probably have phonological explanations. (i) The forms of agreement for transitive verbs are usually treated as proclitics rather than affixes (see 2.2.2.1). This suggests that they have some phonological independence from the word they are attached to. That independence may make it possible for the agreement in (21) to be exhibited by the entire coordinate verb, as opposed to the individual verb words from which it is formed. (In contrast, the agreement forms in (19a) are affixes, and agreement must occur on both conjuncts.) (ii) The post-head form of the linker turns the noun into a phonologically dependent element that must combine with material to its right to form a phonological word (see 7.1.1, 7.3.1, and 7.3.2). For that to happen, the noun must be next to the material it combines with—a requirement that is met by the conjunct on the right in a coordinate noun, but not by the conjunct on the left.

19.5 Coordination of phrases

All the coordinating conjunctions except *lăo* ‘but’ are used in the coordination of phrases. The phrases that are combined must be of the same type—for instance, two noun phrases—or serve the same function—for instance, two predicate phrases. Because a phrase can consist of a word or more than one word, some coordinate structures can be analyzed as involving coordination of words *or* coordination of phrases. In (23), the conjuncts could be analyzed as two adjectives or two adjective phrases.

- (23) Manparehu todū i taotăo gi matan Yu’us maseha hăo
 AGR.equal all the person LCL eye.L God whether you
 [ăttilung] **pat** [ă’paka’].
 AGR.black or AGR.white
 ‘All people are equal in the eyes of God whether you are black or white.’ (CD, entry for *ă’paka*)

Most of the examples discussed below unambiguously involve coordination of phrases.

Some examples of coordination of phrases are given below. Consider the coordinate noun phrases in (24a) and (24b), the coordinate prepositional phrase in (24c), the coordinate adjective phrase in (24d), and the coordinate verb phrase in (24e).

- (24)a. Istâba giya Tinian [un tât Johnson] **yan**
AGR.used.to.be LCL Tinian a certain Johnson and
 [i familiân-ña].
the family-AGR
 ‘There was on Tinian a certain Johnson and his family.’ (CD, entry for *tât*)
- b. Yanggin [i kannai-mu] **o sino** [i addeng-mu]
if the hand-AGR or the foot-AGR
 numa’lachi hão ...
WH[SBJ].make.wrong.PROG you
 ‘If your hand or your foot makes you stumble...’ (NT 34)
- c. I matdision na palâbra makkat para uta hunguk
the curse L word AGR.hard FUT AGR.hear
 [ginin i mañaina siha] **pat** [ginin ottru tâotão].
from the PL.parent PL or from other person
 ‘A curse is hard for us (incl.) to hear from parents or from other people.’ (CD, entry for *matdisión*)
- d. I gualâfun i pilan gi paingi [sen
the full.moon.L the moon LCL last.night AGR.extremely
 ma’lak] **yan** [gof ridondu].
bright and AGR.very round
 ‘The full moon last night was extremely bright and very round.’
 (CD, entry for *ridondu*)
- e. [Malaksiyi magâgu] **ya**
AGR.PASS.sew.for clothes and.then
 [mana’minagâgu] si Santa Maria.
AGR.PASS.make.clothed UNM Santa Maria
 ‘The blessed Mary had clothes sewn for her and was clothed.’
 (Cooreman 1982: 25)

Independent pronouns can serve as conjuncts in a coordinate noun phrase, but weak pronouns and null pronouns cannot. Compare (25a) with (25b). (However, weak pronouns and null pronouns can serve as heads of the plural pronoun construction; see 19.7.)

- (25)a. [Hågu] **yan** [guåhu] para u pinenta i liga.
you and me FUT AGR PASS.paint the wall
 ‘You and me are going to paint the wall.’ (CD, entry for *guåhu*)
- b. ***Kão** **mo’na** [**håo**] **pat** [**yu’**]?
Q AGR.ahead you or I
 (‘Are you or I ahead?’)

When noun phrases are coordinated, it is possible for both conjuncts, or just the conjunct on the left, to be marked for case. The options are illustrated for the unmarked case in (26) and the local case in (27).

- (26)a. Ha konni’ si Jesus [si Pedro], [si Santiago]
AGR take UNM Jesus UNM Peter UNM James
yan [si Juan].
and UNM John
 ‘Jesus took Peter, James, and John.’ (NT 77-78)
- b. Ha konni’ si [Pedro], [Santiago], **yan** [Juan].
AGR take UNM Peter James and John
 ‘He took Peter, and James, and John.’ (NT 91)
- (27)a. I saina i mās takkilu’ na sasatba [gi tanu’] **yan**
the parent the most high L savior LCL earth and
[gi langit].
LCL heaven
 ‘The lord is our highest savior on earth and in heaven.’ (CD, entry for *sásatba*)
- b. Todu i guaha gi [tanu’] yan [i tasi]
all the AGR.exist LCL earth and the ocean
nina’huyung Yu’us.
WH[OBJ].create.L God
 ‘All that there is in land and water was created by God.’ (CD, entry for *nina’huyung*)

Although the case markers combine with a following definite article (as in (27b)), they—like the articles—are best viewed as proclitics rather than affixes (see 5.1.1.1). This degree of phonological independence may make it possible for case marking to appear either on each conjunct or on the entire coordinate noun phrase. (See the discussion of agreement on coordinate transitive verbs in 19.4.)

Finally, predicate phrases of different types can be coordinated. In (28), the conjunct on the left is a verb phrase and the conjunct on the right is an adjective phrase.

- (28) [Tai pasiensia] yan [se'kanai] i taotão
 AGR.not.have patience and AGR.violent the person
 ya put ennão na mapresu.
 and.then because.of that COMP AGR.PASS.imprison
 'The man had no patience and was prone to violence and because of
 that he was imprisoned.' (CD, entry for *se'kanai*)

Presumably, this type of coordination is allowed because the two phrases have the same function: both serve as predicates.

19.6 Coordinate verb phrases and word order

The coordination of verb phrases and other predicate phrases interacts with the word order of the subject. As described earlier (in 3.4.1.1), when the predicate is a verb or adjective, the order of arguments following it is flexible. The dominant word order of clauses of this type is: *Predicate Subject Object Obliques*, but the subject frequently occurs in other positions, such as at the right edge of the clause or immediately after the object.

When the predicate is a coordinate verb phrase or a coordinate adjective phrase, the subject can appear after the entire coordinate structure; see (24e) and the following. (The subject is underlined in the examples below.)

- (29)a. [Ma fa'gâsi siha] **ya** [manminagâgu] palu na
 AGR wash them and.then AGR.get.dressed some L
famagu'un.
 PL.child
 'Some children washed themselves and dressed.'
- b. ...esta ki [mamâra mañâlik] **pat** [mamâra mañatfinu']
 until PRT AGR.stop AGR.laugh or AGR.stop AGR.swear
i sindâlu.
 the soldier
 '... until the soldiers stopped laughing or stopped swearing.'
 (Cooreman 1982: 26)

The subject can also appear inside the conjunct on the left—for instance, immediately after the verb or adjective of that conjunct, as in (30).²

² In the text, (30b) and (30c) are analyzed as containing coordinate predicate phrases. These examples can also be analyzed as containing coordinate sentences. (In this other analysis, the conjunct on the right is a sentence with a

- (30)a. Ti siña [apmam tumalakhiyung i palão'an gi
not can AGR.long AGR.face.out the woman LCL
 bintâna] **pat** [tumohgi lamitâ karera gi petta].
window or AGR.stand half journey LCL door
 'The woman should not stand too long by a window or stop
 momentarily on her way out the door.' (Fafa'ñague 77)
- b. [Ha bira gui' si Santa Maria **ya** [ha
AGR turn her UNM Santa Maria and.then AGR
 fâna' i liga].
face the wall
 'Blessed Mary turned around and faced the wall.' (Cooreman 1982:
 26)
- c. Hâfa, [matuhuk hâo], **pat** [magâ'an]?
what? AGR.sleepy you or AGR.awake
 'What, are you sleepy or awake?' (CD, entry for *magâ'an*)

More surprisingly, the subject can appear inside the conjunct on the right—for instance, immediately after the verb or adjective of that conjunct. This option is illustrated below.

- (31)a. Ti debi na [u gimin cha] **pat** [u chotchu i
not should COMP AGR.drink tea or AGR.ANTIP.eat the
patgon-mu pika na nengkanu'].
child-AGR spicy L food
 'Your child should not drink tea or eat spicy food.'
- b. [Ha matdisi] **ya** [ilek-ña si nanâ-ña as
AGR curse and.then say-AGR UNM mother-AGR OBL
 Sirena ...]
Sirena
 'Her mother cursed her and said to Sirena...' (Cooreman 1983: 41)
- c. Sessu yu' masailagu' yanggin [piniti] **pat** [mahâlang yu'
often I AGR.weep if AGR.sad or AGR.lonely I
 nu i famagu'on-hu].
OBL the PL.child-AGR
 'I often weep when I'm sad or feel lonely for my children.' (CD,
 entry for *masailâgu'*)

See Chung (1998: 133-141) for further discussion of these patterns.

null pronoun subject.) Notice that the intended meaning of (30a) rules out an alternative analysis involving coordinate sentences.

19.7 Comitative constructions

19.7.1 Comitative prepositional phrases

The coordinating conjunction *yan* ‘and’ is homophonous with the comitative preposition *yan*, which means ‘(together) with, in the company of’. Some uses of this preposition are illustrated below.

- (32)a. Sessu pumasehu si Mãng para Guam [yan
often AGR.travel UNM Herman to Guam with
i che’lu-ña as Francisco].
the sibling-AGR OBL Francisco
 ‘Herman often travels to Guam with his brother Francisco.’ (CD, entry for *Mãng*)
- b. Parehu [yan atyu i esta ha sangan si
AGR.same with that the already AGR say UNM
Isaias] ...
Isaiah
 ‘It is the same as what Isaiah foretold...’ (NT 286)
- c. Chuli’ i singku ya un multiplika [yan
take the five and.then AGR multiply with
tres].
three
 ‘Take five and multiply it by three.’ (CD, entry for *multiplika*)

The preposition *yan* takes an object noun phrase in the unmarked case. This noun phrase names the individual or thing that accompanies some other participant in the event named by the predicate. Usually, the noun phrase that realizes the other participant serves as the subject (see (32a-b)) or the direct object (32c).

Clauses that contain a comitative prepositional phrase can sometimes be paraphrased with clauses that contain coordinate structures. Compare (32a) and (32c) with the clauses below, which involve coordination.

- (33)a. Manhãno [si Rosa] yan [i mangga’chong-ña]
AGR.go UNM Rosa and the PL.companion-AGR
mane’fresku gi kiosku.
AGR.INF.seek.fresh LCL pavilion
 ‘Rosa and her friends went for fresh air at the pavilion.’ (CD, entry for *kiosku*)

- b. Bai suma i [dos] **yan** [kuâttru].
AGR add the two and four
 ‘I will add two and four together.’ (CD, entry for *suma*)

Nonetheless, the preposition *yan* is different from the conjunction *yan* ‘and’, and comitative prepositional phrases have a different structure from coordinate noun phrases.

The structural difference involves constituency. The conjuncts and the conjunction of a coordinate noun phrase form a single constituent. But in the clauses in (32), the subject or direct object does not form a constituent with the comitative prepositional phrase that is semantically associated with it; the two phrases are structurally independent. Thus, agreement on the verb registers the person and/or number of the subject, not the combined features of the subject and the comitative prepositional phrase, as can be seen from (34). (The combined features of the subject and the comitative phrase would be plural in (34a) and first person exclusive dual in (34b).)

- (34)a. Ti siña humugându [**yan** ottru na famagu’un
not can AGR[SG].play with other L PL.child
 siha].
PL
 ‘[Kika is such a crazy child], she cannot play with other children.’
 (CD, entry for *atmarião*)
- b. Hu nigosiu [**yan** i primu-hu] i tano’-ña.
AGR[1SG] agree.on with the cousin-AGR the land-AGR
 ‘I agreed with my cousin on his property.’ (CD, entry for *nigosiu*)

The subject can be questioned, relativized, or syntactically focused while the comitative prepositional phrase remains within the clause, to the right of the predicate.

- (35) Hâyi para u yeba [**yan** i gubietnu]?
who? FUT AGR debate with the governor
 ‘Who will debate with the governor?’ (CD, entry for *yeba*)

The subject can be the missing constituent of an infinitive clause or an imperative clause, even when that clause contains a comitative prepositional phrase to the right of the predicate. In (36), the missing constituent refers to Norbert.

- (36) Si Norbert måsga [mumu [yan
 UNM Norbert AGR.learn.lesson AGR.INF.fight with
 si Norman]].
 UNM Norman
 ‘Norbert stopped fighting with Norman because it was so
 unpleasant.’ (CD, entry for *måsga*)

Chamorro allows comitative prepositional phrases in some constructions where English would not. Consider reciprocal clauses, for instance. Reciprocal verbs in Chamorro are derived intransitive verbs created by attaching the stressed prefix *á-* to a transitive verb (see 13.3.1). In general, when the meaning of the transitive verb is ‘X’, the meaning of the derived reciprocal verb is ‘X-each-other’. One might expect the subject of a reciprocal clause always to be dual or plural. But a singular subject is possible as long as the clause also contains a comitative prepositional phrase, as in (37).

- (37)a. Umali’i’ yu’ lokkui’ [yan i doktu].
 AGR.RECP.see I also with the doctor
 ‘I also met with the doctor (lit. I saw each other with the doctor).’
 (CD, entry for *aprubecha*)
 b. Umachuli’ [yan hågu] i ma’estran Jose.
 AGR.RECP.take with you the teacher.L Jose
 ‘Jose’s teacher resembles you.’

In reciprocal clauses of this type, the subject and the comitative prepositional phrase do not combine to form a constituent, but rather are structurally independent. Their syntactic separateness is revealed by the diagnostics used earlier. The subject is cross-referenced by agreement (e.g. on the nominalized verb in (38a)), can be questioned (38b), and can serve as the missing constituent of an infinitive or imperative (38c). The comitative prepositional phrase is ignored by all these operations.

- (38)a. Ginin i ali’e’-hu [yan i manmalångu]
 from the NMLZ.RECP.see-AGR[1SG] with the PL.sick
 na muna’ sinagu yu’.
 COMP is.why AGR.have.flu I
 ‘I developed this cold from my visit (lit. my seeing each other) with
 the sick.’ (CD, entry for *ali’e’-hu*)
 b. Håyi umasudda’ [yan si Maria]?
 who? AGR.RECP.find with UNM Maria
 ‘Who met (lit. found each other) with Maria?’

- c. Akumprendi [yan i che'lu-mu palão'an].
 RECP.understand with the sibling-AGR female
 'Reach an agreement (lit. understand each other) with your sister.'
 (CD, entry for *ákumprendi*)

See 13.3.2 for further discussion of these reciprocal clauses.

19.7.2 The plural pronoun construction

Like some other languages, Chamorro uses comitative prepositional phrases to form complex noun phrases with meanings similar to certain coordinate noun phrases. In this *plural pronoun construction*, as it is sometimes called, the noun phrase consists of a dual or plural pronoun followed by an adjunct that is a comitative prepositional phrase. The adjunct provides further information about the pronoun—specifically, the information that the pronoun refers to a group whose members *include* the one(s) named by the comitative prepositional phrase.

Consider the plural pronoun constructions in the clauses below. In (39a), the subject is a complex noun phrase that consists of the 1 excl. du/pl. pronoun *ham* followed by the comitative prepositional phrase *yan si Maria* 'with Maria'. The agreement on the predicate reveals that this complex noun phrase is dual, so it means 'we two, including Maria'; in other words, it is synonymous with 'I and Maria'. In (39b), the subject is a complex noun phrase that means 'we two, including Juan', and is synonymous with 'I and Juan'.³ (Notice these noun phrases do not mean 'we and Maria' or 'we and Juan'.)

- (39)a. Prumima [ham [yan si Maria]].
 AGR.cousin we.EXCL with UNM Maria
 'Maria and I are cousins.' (CD, entry for *prima*)
 b. Umatotbus [ham [yan si Juan]] gi fila.
 AGR.RECP.collide we.EXCL with UNM Juan LCL line
 'I collided with Juan (lit. we (excl.) two, including Juan, collided) in the line.' (CD, entry for *totbus*)

Plural pronoun constructions are similar in meaning to coordinate noun phrases in which one conjunct is a pronoun. Compare the plural pronoun construction in (39a) with the coordinate noun phrase in (40).

³ The verbs in (39b) and (41) are reciprocal verbs (see 13.3 and 19.7.1).

- (40) Prima [si Ana] **yan** [guãhu].
cousin UNM Ana and I
 ‘Ana and I are cousins.’ (CD, entry for *prima*)

Moreover, clauses that contain a plural pronoun construction can sometimes be paraphrased with clauses that contain a comitative prepositional phrase. Compare (39b), which contains a plural pronoun construction, with (41), which contains a comitative prepositional phrase.

- (41) Sigi ha’ yu’ umatotbus [yan taotão]
AGR.keep.on EMP I AGR.INF.RECP.collide with person
 gi giput sa’ mampus bula.
LCL party because so.much AGR.many
 ‘I kept colliding with people in the party because it was too crowded.’ (CD, entry for *totbus*)

The upshot is that Chamorro has three ways to express the meaning of an English coordinate noun phrase in which one conjunct is a pronoun: the plural pronoun construction (as in (39)), a coordinate noun phrase (as in (40)), or a clause that contains a comitative prepositional phrase (as in (41)).

Because the plural pronoun construction is a type of noun phrase, it can bear any grammatical relation that noun phrases can bear. It can serve as the subject, the direct object, the object of a preposition, a possessor, and so on; it can also serve as a topic or be syntactically focused. Whether the pronoun itself is realized as an independent pronoun, a weak pronoun, or a null pronoun is determined by its grammatical relation, in the usual way (see Chapter 8). Some of the possibilities are illustrated below. The pronoun is a weak pronoun in (42a), an independent pronoun in (42b), and a null pronoun in (42c) and (42d).

- (42)a. Mandanña’ [ham [yan i manachahet-tu]].
AGR.gather we.EXCL with the PL.peer-AGR
 ‘My peers and I got together.’ (CD, entry for *achahit*)
- b. Guaha ginatdun gi intri [hami [yan i
AGR.exist confusion LCL among us.EXCL with the
asaguã-hu]].
spouse-AGR
 ‘There was a confusion between me and my husband.’ (CD, entry for *ginatdun*)
- c. Bai in fanhãno [[] [yan i familiãk-ku]] para
AGR AGR.go with the family-AGR to

Amerika.

America

‘My family and I will be going to America.’ (CD, entry for *bai in*)

- d. Mapeddi si Andre gi mimun-ñiha [[]] **yan** si
AGR.lose UNM Andre LCL fight-AGR with UNM
Muhamed].

Muhamed

‘Andre was defeated in his fight with Muhamed.’ (CD, entry for *mapeddi*)

Some of these examples are, in principle, ambiguous: they could contain a plural pronoun construction or simply a comitative prepositional phrase separate from the predicate’s arguments. For instance, the English translation of (42c) reveals that the subject of the Chamorro sentence is a plural pronoun construction whose head is a null pronoun. But this string of words has another possible analysis in which the subject is simply a null pronoun and the clause also contains a separate comitative prepositional phrase. In that case, the English translation would be ‘We (excl.) will be going with my family to America’, where ‘we’ might include individuals other than the speaker or the speaker’s family. Such ambiguities do not seem to pose difficulties in practice, presumably because they are often resolved by the discourse context.

Plural pronoun constructions seem to occur especially often as subjects, direct objects, or possessors. That may be connected to the fact that pronouns with these grammatical relations must be realized as weak pronouns or null pronouns. (Weak pronouns and null pronouns cannot serve as conjuncts in coordinate noun phrases; see 19.5.)

EMBEDDED CLAUSES

Embedded clauses are clauses that serve as arguments or adjuncts. The simplest such clauses are finite embedded clauses, which have the form of ordinary clauses preceded by a complementizer or subordinating conjunction.

20.1 Overview

Embedded clauses (also called subordinate clauses) are clauses that serve as arguments of a predicate, or as adjuncts associated with the predicate, the clause, or a noun phrase. Sentences that contain an embedded clause are sometimes called complex sentences. This chapter is devoted to the simplest type of embedded clause, which consists of an ordinary clause preceded by a complementizer or subordinating conjunction.

Like many other languages, Chamorro has both finite and nonfinite clauses. Finite clauses can have a tense-aspect-mood marker (see 4.2), and when their predicate is a verb or adjective, it shows agreement with the subject through forms that also indicate mood (see 2.2.2). Finite clauses have a very broad distribution. Every simple sentence in the language is a finite clause; so is the main clause of every complex sentence. In addition, finite clauses can occur as embedded clauses, in which case they are preceded by a complementizer, such as *na* ‘that’, or a subordinating conjunction, such as *sa* ‘because’ or *dispues di* ‘after’.¹ Compare the main clauses in the complex sentences in (1) with the embedded clauses, which are enclosed in brackets.

- (1) a. Sen adahi [na un maleffa].
 extremely careful COMP AGRforget
 ‘Be extremely careful lest you forget.’ (EM 17)
- b. Manmaleffa ha’ hit [dispues di manhuyung hit
 AGRforget EMP we.INCL after PRT AGR.go.out we.INCL
 gi gima’yu’us].
 LCL church

¹ Note that some types of relative clauses are not preceded by an overt complementizer (see 24.3.2).

‘We (incl.) just forget after we (incl.) get out of church.’ (*Ginen I Obispo* February 18, 2001)

Nonfinite clauses have a more limited distribution (see Chapter 21).

This chapter gives a survey of some common types of finite embedded clauses. 20.2 describes the complementizers and subordinating conjunctions used to introduce them. Then, 20.3 discusses their structure and function as arguments of the predicate; 20.4 discusses some of their uses as adjuncts; and 20.5 documents a related construction in which a finite embedded clause is introduced by the definite article.

20.2 Complementizers and conjunctions

Chamorro has two complementizers and a larger number of subordinating conjunctions. The complementizers are used to introduce finite embedded clauses whether they serve as arguments or adjuncts. The subordinating conjunctions, which have preposition-like meanings, are used only to form adverbial clauses.

20.2.1 Complementizers

The Chamorro complementizers are listed in (2), along with approximate English translations.² Note that the complementizer *na* is omitted (not pronounced) in contexts to be discussed below. The unpronounced form is symbolized with a dash in (2) but not represented in the examples.

- (2) COMPLEMENTIZERS
 kão ‘whether’
 na / – ‘that’

The complementizer *kão* (glossed Q) introduces embedded questions which could be answered ‘yes’ or ‘no’ (polar questions; see 22.2) or which explicitly present alternatives for the answer. Some examples are given in (3).

- (3) a. *Ti hu tungu’ [kão mamakãnnu’ i bukadutsi].*
 not AGR know Q AGR.edible the threadfin
 ‘I don’t know whether the threadfin is edible.’ (CD, entry for *bukadutsi*)

² Relative clauses are introduced by a different set of complementizers (see 24.3.2).

- b. Lăo nihi... ta ditetmina [kăo siña ta cho'gui pat
but let's AGR determine Q can AGR do or
 ti siña].
not can
 'But come and let us (incl.) determine whether it's possible for us
 (incl.) to do it or not.' (*Ginen I Obispo* July 30, 2000)

The complementizer *na* (glossed COMP) introduces all other finite embedded clauses that serve as arguments, and some that serve as adjuncts.

- (4) a. Magăhit [na pirfektu hăo matan tatâ-mu].
AGR.true COMP AGR.perfect you face.L father-AGR
 'It's true that you look exactly like your father.' (CD, entry for *pirfektu*)
 b. Esta ta tungu' [na metgut i tinayuyut].
already AGR know COMP AGR.strong the prayer
 'We (incl.) already know that prayer is strong.' (*Ginen I Obispo* October 21, 2001)
 c. Tăya' bidă-hu nigap [na maigu'
AGR.not.exist WH[OBJ].do-AGR yesterday COMP AGR.sleep
 ha'].
EMP
 'I did not do anything yesterday except just sleep.' (CD, entry for *bida*)

Na can be, and often is, omitted when it immediately precedes the TAM *para* 'future, subjunctive' (see 4.2.1 and 4.2.2.1). Compare the examples in (5a-b) and (5c-d), which make the point that *na* is optionally unpronounced in this context.

- (5) a. Un prumeti yu' [na para un gaigi].
AGR promise me COMP FUT AGR be.at
 'You promised me that you would be there.' (EM 71)
 b. Manmalagu' hit [na para u metgut
AGR want we.INCL COMP FUT AGR strong
 karaktet-ta].
character-AGR
 'We (incl.) want that our (incl.) character will be strong.' (*Ginen I Obispo* September 23, 2001)
 c. Ha prumeti siha [para u nina'fanmetgut].
AGR promise them FUT AGR PASS.make.AGR.strong

‘He promised them that he would make them strong.’ (*Ginen I Obispo* November 18, 2001)

- d. Dos puntu malagu’ yu’ [para ta kunsidera ...]
two point AGR.want I FUT AGR.consider
 ‘Two points I want that we (incl.) should consider....’ (*Ginen i Obispo* August 26, 2001)

Na is always omitted when it occurs right after a determiner, such as the definite article *i* (see 6.2).

- (6) a. Put i [katpinteru gui’ lokkui’], ha hãsa un
because the carpenter he also AGR.build a
 na’magoddai na kotpus.
attractive L shrine
 ‘Because he was also a carpenter, he built an attractive shrine.’ (EM 88)
- b. Bãba esti i [para ta to’lã’i i taotão].
AGR.bad this the FUT AGR.spit.at the person
 ‘It is bad for us (incl.) to spit at a person.’ (CD, entry for *to’lã’i*)

See 20.5 for further discussion of the construction illustrated in (6).

In addition, the complementizer *na* occurs in exclamatives, constituent questions, and the focus construction. In these constructions it has a different distribution (see 15.3 and 22.4.2).

20.2.2 Subordinating conjunctions

Chamorro has a number of subordinating conjunctions, many of which were originally borrowed from Spanish. These differ from the complementizers in that they have preposition-like meanings; they indicate relations in time as well as cause, purpose, condition, and so on. Subordinating conjunctions are used to form *adverbial clauses*—embedded clauses that serve as adjuncts associated with the predicate or the clause.

The most common subordinating conjunctions are listed below.

- (7) SOME SUBORDINATING CONJUNCTIONS
- | | |
|----------------|------------------|
| achuk, áchuka’ | ‘although’ |
| anai | ‘when’ (realis)’ |
| ãntis di | ‘before’ |
| asta ki | ‘until’ |
| disdi ki | ‘(ever) since’ |
| dispues di | ‘after’ |

gigun	‘as soon as’
inlugât di	‘instead of’
kada	‘whenever, each time that’
kosa ki	‘so that’
kumu	‘if’
maseha	‘even though’
mientras	‘while’
put	‘because, so that’
putnó	‘so that...not’
sa’	‘because’
sin	‘without’
yanggin, anggin, an	‘if, when (future, irrealis, habitual)’

Some subordinating conjunctions also belong to other parts of speech or serve other syntactic functions:

(i) The subordinating conjunctions *ântis di* ‘before’, *dispues di* ‘after’, *inlugât di* ‘instead of’, *put* ‘because, so that’, *sa’* ‘because’, and *sin* ‘without’ also serve as prepositions (see 5.2). Compare (8a), in which *sa’* is a preposition, with (8b), in which it is a subordinating conjunction.

- (8) a. **Sa’** hâfa na taiguini esti?
because what? COMP AGR.like.this this
 ‘Why (lit. because of what) is this like this?’ (*Ginen I Obispo*
 February 18, 2001)
- b. Ye’ti’ yu’ [**sa’** puti kannai-hu].
massage me because AGR.hurt hand-AGR
 ‘Massage me because my hand is in pain.’ (CD, entry for *ye’ti’*)

The *di* in *ântis di* ‘before’, *dispues di* ‘after’, and *inlugât di* ‘instead of’ is arguably a complementizer with a limited distribution (see 4.2.1).

(ii) *Asta ki* ‘until’ and *disdi ki* ‘(ever) since’ can be analyzed as consisting of a preposition—*asta* ‘until’ or *disdi* ‘since’—plus *ki*, which is written as an independent word but has no obvious meaning. This *ki*, which is borrowed from a Spanish complementizer (Sp. *que* ‘that’), also occurs in the subordinating conjunction *kosa ki* ‘so that’.

(iii) *Kada* ‘whenever’ and *maseha* ‘even though’ belong to other parts of speech which probably represent their primary syntactic function. *Kada* is also the quantifier ‘each’ (see 6.2.4.1); *maseha* is the modifier ‘at all, (which)ever, no matter’, which often precedes general indefinites in their free-choice use (see 9.2.2.4).

20.3 Argument clauses

Finite embedded clauses that are introduced by a complementizer routinely serve as arguments of the predicate. 20.3.1 discusses the structure and function of these embedded clauses, which are called *argument clauses* here. 20.3.2 briefly mentions two special constructions.

20.3.1 Basics

Recall (from 3.1) that the predicate dictates the structure and function of its arguments, including their grammatical relations. In line with this, the predicate determines whether any of its arguments can be an embedded clause. Consider the verb *disidi* ‘decide’, which has two arguments: one argument that names the one who does the deciding, and another argument that names what is decided. The argument that names what is decided can be a noun phrase (as in (9a)), or an embedded clause (9b).

- (9) a. Siña ha’ ma disidi i difirensian-ñiha sin mumu.
can EMP AGRdecide the difference-AGR without fight
 ‘They were able to settle (lit. decide) their difference without a fight.’ (CD, entry for *difirensia*)
- b. I amun enñão na tintãgu’ para u disidi
the master.L that L servant FUT AGRdecide
 [kão mãolik pat ti mãolik bidã-ña].
Q AGR.good or not AGR.good work-AGR
 ‘The master of that servant will decide whether his work was good or bad.’ (NT 292)

Predicates that have an argument that is an embedded clause can also dictate whether that clause expresses a question or a statement. Argument clauses that express questions either are introduced by the complementizer *kão*, as in (9b), or else are constituent questions (see 22.3). Argument clauses that express statements are introduced by the complementizer *na*, which is not pronounced in some contexts (see 20.2.1). Some examples are given in (10).³

- (10)a. Annuk ha’ [na guaha sinientem-mu
AGR.appear EMP COMP AGR.exist WH[OBJ].feel-AGR

³ In addition, the predicate can dictate whether an argument clause is finite or nonfinite (see Chapter 21).

para si Juan].
for UNM Juan

‘It appears that you have feelings for Juan.’ (CD, entry for *annuk*)

- b. Hu sedi i patgun [para u hugându].
AGR allow the child FUT AGR play
‘I allowed the child to play (lit. that he would play).’ (CD, entry for *sedi*)

Some predicates allow their argument clause to express a statement or a question. Common predicates of this type include *disidi* ‘decide’, *duda* ‘doubt’, *faisin* ‘ask’, *li’i* ‘see’, *sangâni* ‘tell’, *siguru* ‘certain, sure’, and *tungu* ‘know’.⁴

- (11)a. Siguru yu’ [na hamyu en akseptal].
AGR.certain I COMP you.PL AGR accept
‘I am certain that you (pl.) are going to accept me!’ (NT 309)
- b. Ti siguru yu’ [kâo esta hu gânnal].
not AGR.certain I Q already AGR win
‘I am not certain whether I have achieved it.’ (NT 365)
- c. Ti siguru yu’ [hâfa para bai hu atyik].
not AGR.certain I what? FUT AGR choose
‘I am not certain what I will choose.’ (NT 362)

Other predicates require their argument clause to express a statement. Common predicates of this type include *istotba* ‘disturb, bother’, *magâhit* ‘true’, *ma’â’ñão* ‘afraid’, *makkat* ‘difficult’, *malagu* ‘want’, *sedi* ‘allow’, *tâgu* ‘direct, command’, and *ya-* ‘like’. The examples in (12) show that the argument clause associated with *ma’â’ñão* ‘afraid’ can express a statement but not a question.

- (12)a. Manma’â’ñão [na u faninasa nu i
AGR.afraid COMP AGR AGR.PASS.carry.away OBL the
metgut nâpu].
strong.L wave
‘They were afraid that they would be swept out to sea by the strong current.’ (CD, entry for *inasa*)
- b. Ma’â’ñão yu’ [na / *kâo ti para un nangga yu’].
AGR.afraid I COMP Q not FUT AGR wait me

⁴ An embedded constituent question is cited in (11c) for completeness. Constituent questions usually are not introduced by *kâo* (see 22.3).

‘I’m afraid that you’re not going to wait for me.’ (Not: ‘I’m afraid whether you’re not going to wait for me.’)

Very few predicates require their argument clause to express a question. One such predicate is *chek* ‘check’.⁵

- (13)a. Chek fan [kǎo ti tete’i i ichan].
check please Q not AGR.scattered.PROG the rain
 ‘Please check whether it is sprinkling rain.’ (CD, entry for *te’i*)
- b. Chek fan [kǎo / *na gaigi i lahi-hu gi
check please Q COMP AGR.be.at the son-AGR LCL
gima’].
house
 ‘Please check if my son is at home.’ (Not: Please check that my son is at home.)
- c. Chek fan [hǎfa na nengkanu’ manmakǎnnu’].
check please what? L food AGR.PASS.eat
 ‘Please check what food was eaten.’

In addition, the predicate determines the grammatical relations of its arguments: which argument is realized as the subject, which as the direct object, etc. (see 3.1). This determination is made in the same way whether the arguments happen to be noun phrases or embedded clauses. Consider the clauses below, in which the predicates *istotba* ‘disturb’, *tungu* ‘know’, and *malagu* ‘want’ have noun phrase arguments. In (14a), *istotba* has an argument, *esti* ‘this’, which names the source of disturbance and is realized as the subject. In (14b), *tungu* has an argument, *i sikhnikasion i istoria* ‘the significance of the story’, which names what is known and is realized as the direct object. Finally, in (14c), *malagu* has an argument, *ni esti na panak tenis* ‘this tennis racket’, which names what is wanted and is realized as an oblique.

- (14)a. Kalan ha istotba hit dididi’ esti.
seems.like AGR.disturb us.INCL a.little this
 ‘It seems like this disturbs us (incl.) a little.’ (*Ginen I Obispo*
 August 18, 2002)

⁵ An embedded constituent question is cited in (13c) to make the point that the embedded clause that follows *chek* ‘check’ in these examples is not an adverbial clause (see 20.4.1).

- b. Kão un tungu' ha' i siknifikasion i istoria?
Q AGR know EMP the significance.L the story
 'Do you know the significance of the story?' (CD, entry for *siknifikasion*)
- c. Malagu' hão ni esti na panak tenis?
AGR.want you OBL this L tennis.racket
 'Do you want this tennis racket?' (CD, entry for *panak tenis*)

Several types of evidence reveal that the arguments in (14) have these grammatical relations. For instance, consider agreement with the subject (see 2.2.2 and 3.2). The fact that the verb *istotba* in (14a) agrees with *esti* 'this' identifies *esti* as the subject. The fact that the agreement on *tungu'* in (14b) is chosen from the paradigms for transitive verbs indicates the presence of a direct object, which presumably is *i siknifikasion i istoria* 'the significance of the story'. Finally, the fact that the agreement on *malagu'* in (14c) is chosen from the paradigms for intransitive verbs and adjectives reveals that *ni esti na panak tenis* 'this tennis racket' is not a direct object, but rather an oblique. Other evidence for these identifications comes from case marking (see 5.1), pronoun forms (see 8.3 and 8.4), passive (see 10.2), the person-animacy restriction (see 16.2), and wh-agreement (see 22.4.1).

Observe now that the argument of *istotba* that names the source of disturbance can be an embedded clause. The same is true for the argument of *tungu'* that names what is known, and the argument of *malagu'* that names what is wanted, as can be seen from (15).

- (15)a. Ha istotba ham [na binisita i hagan-mâmi
AGR disturb us.EXCL COMP AGR.PASS.visit the daughter-AGR
as Miguel.
 'That our (excl.) daughter was visited by Miguel disturbs us (excl.).'
- b. Ada, ti un tungu' [na esta ora ha']?
oh not AGR know COMP already hour EMP
 'Oh, you didn't know that it is time already?' (CD, entry for *adâ*)
- c. ... put malagu' hão [na bai famatkilu].
because AGR.want you COMP AGR quiet
 '[Do not pacify me just] because you want me to (lit. that I should) be quiet.' (CD, entry for *apasigua*)

Once again, agreement with the subject can be used to investigate the grammatical relations of the arguments in these clauses. Here the agreement patterns, which are the same as in (14), suggest that it is *the argument clause*

that is the subject in (15a), the direct object in (15b), and an oblique in (15c). (Further evidence comes from wh-agreement; see 22.5.2.)

Argument clauses in Chamorro have a wide range of syntactic functions. They can serve as subjects, direct objects, or obliques associated with predicates that are verbs (see (13) and (15)), adjectives (see (11) and (12)), or nouns. The predicates in the complex sentences in (16) are nouns.

- (16)a. Finu' i manamku' [na yanggin sigi ha'
speech.L the PL.elder COMP when AGR.keep.on EMP
 gumupu gi uriyâ-mu i ababbang âtilung ...]
INF.fly LCL around-AGR the butterfly.L black
 'The old saying is that when a black butterfly flies around you repeatedly...' (CD, entry for *ababbang*)
- b. Pues i finu' manamku' ... sustansiâñ-ña [na
so the speech.L PL.elder meaning-AGR COMP
 i dakun chaddik magacha' ...]
the liar AGR.quick AGR.PASS.catch.up.with
 'So the meaning of the old saying...is that the liar can quickly be caught up with...' (EM 133)

Unsurprisingly, argument clauses can also be associated with verbs that are passive (as in (17a)), antipassive (as in (17b)), applicative (as in (17c)), and causative (as in (17d)).

- (17)a. Matungu' ha' ni babui [na oran chumotchu]
AGR.PASS.know EMP OBL pig COMP hour.L AGR.INF.eat
 gigun un âgang bo.
as.soon.as AGR.call bo
 'Pigs know it is feeding time as soon as you call "bo".' (CD, entry for *bo*)
- b. Mamaisin si Juan [kâo guaha ñamñam
AGR.ANTIP.ask UNM Juan Q AGR.exist good.food
 gi halum kâhun ais].
LCL inside.L box.L ice
 'Juan asked if there is something good in the refrigerator.' (CD, entry for *ñamñam*)
- c. Hu sangâni si Juan [na ti kostâs-ña para
AGR.say.to UNM Juan COMP not issue-AGR FUT
 u sâonâo gi mumun-ñiha si Maria yan i
AGR.participate LCL fight-AGR UNM Maria and the

asaguã-ña].

spouse-AGR

‘I told Juan that it was not his issue to get involved in Maria’s fight with her husband.’ (CD, entry for *kostas*)

- d. I enkatgão muna’siguguru [na gãsgas i
 the custodian WH[SBJ].make.sure.PROG COMP AGR.clean the
 iskuela].
 school

‘The custodian is the one who makes sure that the school is clean.’
 (CD, entry for *enkatgão*)

However, argument clauses usually do not serve as objects of prepositions or as subjects of prepositional phrase predicates (but see 20.5 below).⁶

In terms of word order, an argument clause follows the predicate it is associated with. When this predicate is a verb or adjective, the argument clause is flexibly ordered with respect to the predicate’s other arguments. The argument clause in (18a) follows the subject, whereas the argument clause in (18b) precedes the subject.

- (18)a. Ha faisin yu’ si Tãta [kão tâya’ nai
 AGR ask me UNM father Q AGR.not.exist COMP
 mafuetsa yu’ chumupa].
 AGR.PASS.force I AGR.INF.smoke
 ‘My father asked me if I was never forced to smoke cigarettes.’
 (CD, entry for *tãya’ nai*)
- b. Ha faisin hit [kão siña manhita] i palão’an.
 AGR ask us.INCL Q can AGR.we.INCL the woman
 ‘The girl asked us (incl.) if she could go with us (incl.) (lit. if we
 (incl.) could go together).’

When the predicate is a noun, the argument clause follows the entire predicate phrase. Argument clauses generally do not appear to the left of the predicate, in topic or focus position.

Finally, some complex sentences in which a predicate has an argument clause can be paraphrased with asymmetric coordination (see 19.3).

⁶ Note, however, that embedded constituent questions can serve as objects of prepositions.

20.3.2 Details

Two special constructions that apparently involve argument clauses should be mentioned here:

(i) The verb *gaigi* ‘be at (a location)’ has two arguments: one argument that names an individual or object and another argument that names the individual or object’s location. The argument that names the location can be a noun phrase (as in (19a)) or an embedded clause introduced by the complementizer *na* (19b).

- (19)a. Sa’ gaigi yu’ gi sanlagu.
 because AGR.be.at I LCL DIR.west
 ‘Because I am in the States.’ (EM 58)
- b. Gaigi si Tâta [na manânanum
 AGR.be.at UNM Father COMP AGR.ANTIP.plant.PROG
 mai’is gi lanchon-ña.]
 corn LCL farm-AGR
 ‘Father is planting corn at his farm.’ (CD, entry for *mai’is*)

When the location argument is an embedded clause, the result is a progressive construction: the entire complex sentence describes an ongoing event, and the embedded predicate is typically in the progressive aspect. It is unclear how, if at all, this construction differs in meaning from a simple sentence whose predicate is in the progressive.⁷

(ii) The perception verbs *li’i* ‘see’ and *hunguk* ‘hear’ have two arguments: one argument that names the perceiver and another argument that names what is perceived. The argument that names what is perceived can be a noun phrase (as in (20a)) or an embedded clause introduced by the complementizer *na* (20b).

- (20)a. Hu li’i’ i dikiki’ na ami’ gi kantun potta.
 AGR.see the small L grasshopper LCL edge.L door
 ‘I saw the small grasshopper next to the door.’ (CD, entry for *ami*)
- b. Yanggin un li’i’ [na tumekkun yu’], disatendi ha’.
 if AGR.see COMP AGR.bend.down I disregard EMP
 ‘When you see that I put my head down, pay no attention.’ (CD, entry for *disatendi*)

⁷ The construction illustrated in (19b) is reminiscent of the progressive construction in Old English.

In addition, these verbs sometimes allow the argument that names what-is-perceived to be a constituent that looks like a finite embedded clause but is not introduced by *na*. Sometimes this constituent begins with a noun phrase that looks like an inner topic, preceding the embedded verb, as in (21c-d) (see 26.2.1.1).

- (21)a. Ha hunguk [umu'ugung tãotão].
 AGR hear AGR.groan.PROG person
 'She heard a man groaning.' (EM 98)
- b. Hassan esta ta li'i' [mahãtsa guma' saguãli'].
 seldom already AGRsee AGR.PASS.build house.L thatched.house
 'We (incl.) rarely see thatched houses being built.' (CD, entry for *saguãli*)
- c. Hu li'i' [i palão'an gi plasan hugãndu ha so'gui i
 AGRsee the woman LCL field.L play AGRscoop the
 hanum gi girifu gi patman kannai-ña].
 water LCL faucet LCL palm.L hand-AGR
 'I saw a lady at the playground scooping water from the faucet in
 the palm of her hand.' (CD, entry for *so'gui*)
- d. Ha li'i' [i lahi-ña sumen mãolik i lina'lã'-ña].
 AGRsee the son-AGR AGR.extremely good the life-AGR
 'They saw that their son's life had become very good.' (Cooreman
 1983: 73)

If the construction illustrated in (21) contained an ordinary finite embedded clause, the embedded clause ought to begin with the complementizer *na* (see 20.2.1). The absence of *na* suggests that this constituent might be smaller than an embedded clause, although it seems nonetheless to be a clause, since it can contain a subject, as (21d) shows.

20.4 Adverbial clauses

Finite embedded clauses that serve as adjuncts associated with the predicate or the clause can be called *adverbial clauses*. This section surveys some common types of adverbial clauses. 20.4.1 describes adverbial clauses introduced by a complementizer; 20.4.2 describes adverbial clauses introduced by a subordinating conjunction.

20.4.1 Introduced by a complementizer

Finite embedded clauses introduced by a complementizer can serve as adverbial clauses, although their functions as adverbial clauses are rather limited.

Embedded clauses introduced by the complementizer *kão* can be used as adverbial clauses that specify purpose. In such cases, the purpose of the event described by the main clause is to resolve the issue described by the adverbial clause. In (22a), for instance, the purpose of the speaker's smelling the meat is to resolve the issue of whether the meat is rotten; in (22b), the purpose of the addressee's looking at the carpenter's level is to resolve the issue of whether the shelf is straight. *Kão* in these adverbial clauses corresponds roughly to 'to see whether'.

- (22)a. Hu ngingi' i katni [kão bāba esta].
AGR.sniff the meat Q AGR.bad already
 'I smelled the meat to see whether it is already rotten.' (CD, entry for *ngingi'*)
- b. Atan i mubet [kão esta tunas i istānti].
look.at the level Q already AGR.straight the shelf
 'Look at the level and see if the shelf is straight.' (CD, entry for *mubét*)
- c. Chagi ennāo na sapātus [kão omlat hāo].
try that L shoes Q AGR.fit you
 'Try those shoes to see whether you fit them.'

Note that embedded polar questions can be used as adverbial clauses, but constituent questions cannot be. (Constituent questions usually are not introduced by *kão*; see 22.3.)

- (23) *Atan i lamasa [hāfa na nengkanu' manmakānnu'].
look.at the table what? L food AGR.PASS.eat
 ('Look at the table to see what foods have been eaten.')

Embedded clauses introduced by *na* can be used as adverbial clauses that specify result or purpose. *Na* in these adverbial clauses roughly corresponds to 'such that' (if the embedded clause is realis) or 'so that, in order to' (if the embedded clause is irrealis). As usual, *na* can be omitted when it comes immediately before the TAM *para* 'future, subjunctive', as in (24c) (see 20.2.1).

- (24)a. Hu hânão guatu ya hu li'i' hâfa ma chocho'gui
AGR go to.there and.then AGR see what? AGR do.PROG
 [na duru di mañâlik].
COMP hard PRT AGR.laugh
 'I'll go over there and see what they're doing such that they're laughing so hard.' (from a tape-recorded narrative)
- b. Mânggi i iha [na ti manhamyu
AGR.where.is? the daughter COMP not AGR.you.PL.PROG
 na biâhi]?
L time
 'Where is the daughter such that she is not with you this time?'
 (CD, entry for *iha*)
- c. Hu bâla' i paketi [para bai hu li'i' hâfa
AGR unwrap the package FUT AGR see what?
 sanhalom-ña].
DIR.inside-AGR
 'I unwrapped the package in order to find out what was in it.' (CD, entry for *bâla'*)

Embedded clauses introduced by the complementizer *na* can also be used as adverbial clauses that specify exceptions. Then, the main clause is typically a negative clause, and the adverbial clause states an exception to it. See (25).

- (25)a. Ti para un gimin i maneska [na para un
not FUT AGR drink the alcohol COMP FUT AGR
 boyu' ha'].
spit.out EMP
 'You are not to drink the alcohol, only spit it out.' (CD, entry for *boyu'*)
- b. Pues tâya' chi'chocho'-ña esti i dos umasagua
so AGR.not.exist work-AGR.PROG this the two AGR.married
 [na humâhanão para i sadduk para u fa'gâsi
COMP AGR.go.PROG to the river FUT AGR wash
 i magagun-ñiha].
the clothes-AGR
 'So these two married people had no job but going to the river to wash their clothes.' (Cooreman 1983: 107)
- c. Esti, ti isão i flores [na isão-mu].
this not fault.L the flowers COMP fault-AGR
 'This is not the fault of the flowers, but it's your fault.' (EM 135)

Na in some instances of this use, such as (25c), seems close in meaning to ‘but’.

Adverbial clauses introduced by a complementizer seem to have a more restricted word order than other adjuncts (see 3.4.2 and below). They are generally found at the right edge of the (higher) clause. Adverbial clauses introduced by an overt complementizer generally do not occur at the left edge of the clause, preceding the predicate. But this word order is evidently possible when the complementizer is omitted before *para* ‘future, subjunctive’, as in (26).

- (26) [Para ta kumprendi hâfa masusedi] maila’
FUT AGRunderstand what? AGR.PASS.happen come
 ya ta ekkunguk esti un râtu.
and.then AGRlisten this awhile
 ‘In order for us (incl.) to understand what happened, come and let’s (incl.) listen to this for awhile.’ (*Ginen I Obispo* July 9, 2000)

20.4.2 Introduced by a subordinating conjunction

20.4.2.1 Basics

Finite clauses introduced by a subordinating conjunction serve exclusively as adverbial clauses. There is a wide range of such adverbial clauses, as can be inferred from the number of subordinating conjunctions listed in 20.2.2. Some examples are cited below.

- (27)a. Siempri un chuda’ i hanum [gigun un totpi i
indeed AGRspill the water as.soon.as AGR bump the
 batdi].
bucket
 ‘You are going to spill the water as soon as you bump the bucket.’
 (CD, entry for *gigun*)
- b. Ta arienda i tanu’ [kosa ki siña hit
AGR lease the land so.that can we.INCL
 mulalibiânu].
AGR.a.little.more.easy
 ‘We (incl.) will lease the land so that our (incl.) lives can be a little easier.’ (CD, entry for *arienda*)
- c. [Yanggin mârchum i atdâo], i mannuk manetnun
when AGR.set the sun the chicken AGR.gather
 gi ramas alageta.
LCL branch.L avocado
 ‘When the sun sets, the chickens gather on the branches of the

- avocado tree.’ (EM 87)
- d. [Achuka’ mamakkat i che’chu’], u
although AGR.hard.PROG the work AGR
 na’pusisipbli ha’ mo’na.
make.possible.PROG EMP ahead
 ‘Although the work is hard, it makes things possible.’ (CD, entry
 for *pusipbli*)

Adverbial clauses that are introduced by subordinating conjunctions can specify relations in time as well as cause, result, condition, contrast, and so on. These adverbial clauses can occur at the left or right edge of the (higher) clause, where they are apparently freely ordered with respect to other adjuncts (see 3.4.2). The following examples are representative. In (28), the adverbial clause *gigun un âgang bo* ‘as soon as you call “bo”’ occurs at the right edge of the higher clause, following the argument clause *na oran chumotchu* ‘that it is feeding time’.

- (28) Matungu’ ha’ ni babui [na oran chumotchu]
AGR.PASS.know EMP OBL pig COMP hour.L AGR.INF.eat
 [gigun un âgang bo].
as.soon.as AGR call bo
 ‘Pigs know it is feeding time as soon as you call “bo”.’ (CD, entry
 for *bo*)

The complex sentences in (29) each contain two adverbial clauses. In (29a), one adverbial clause occurs at the left edge of the higher clause and the other occurs at the right edge; in (29b), both adverbial clauses occur at the right edge; and in (29c), both occur at the left edge.

- (29)a. [Anai tumetetti i ichan dididi’ gi puengi],
when AGR.sprinkle.PROG the rain a.little LCL night
 si nanâ-hu ha bâţbaruyi humuyung huyung ...
UNM mother-AGR AGR bold.to AGR.INF.go.out outside
 [put taigui esta i asaguâ-ña].
because AGR.not.be.at already the spouse-AGR
 ‘When it was sprinkling a little at night, my mother was bold
 enough to go outside...because her husband was no longer there.’
 (EM 98)
- b. Tâya’ donseyu [anai umasagua si
AGR.not.exist best.man when AGR.get.married UNM

Jesus], [sa' i patlinu-ña dumimuyi].
Jess because the godfather-AGR WH[SBJ].kneel.for
 'There was no best man when Jess got married, because his
 godfather stood for him.' (CD, entry for *donseyu*)

- c. Lăo [anai ti māmatai si tatā-hu],
but when not AGR.die.PROG UNM father-AGR
 [yanggin bakasíon i iskuela], manhãhanão
if AGR.on.vacation the school AGR.go.PROG
 ham para i lanchu.
we.EXCL to the farm
 'But when my father had not yet died, when school was on
 vacation, we (excl.) would go to the farm.' (EM 95)

Adverbial clauses that are introduced by a subordinating conjunction can also be focused, in which case they appear at the left edge of the higher clause, preceding the predicate. In (30), an adverbial clause that specifies location in time has been focused. Note the complementizer *nai* that immediately follows, which realizes complementizer agreement and indicates that the focused constituent specifies location (see 23.4.2).

- (30) [Yanggin masahalum hão] nai mās lalálu'
when AGR.perspire you COMP more AGR.angry
 i gupu' na chetnut.
the skin.fungus L wound
 'When you sweat is when the skin fungus gets more aggressive.'
 (CD, entry for *gupu*')

20.4.2.2 Details

The meaning of certain subordinating conjunctions has an impact on the mood of the embedded clause they introduce. Specifically:

- (i) An embedded clause introduced by *ântis di* 'before' is always in the irrealis mood, whether or not the event it describes has already occurred. In (31), the arrival of the Spanish, Germans, Japanese, and Americans clearly happened in the past, but because the adverbial clause that describes this is introduced by *ântis di*, the verb of the embedded clause is irrealis.

- (31) Tăya' ga'lăgu [ântis di u fanmăttu i
AGR.not.exist dog before PRT AGR.AGR.arrive the
 Españót, Alimăn, Chapanís yan Amerikănu].
Spanish German Japanese and American

‘There were no dogs [in the Mariana Islands] before the Spanish, Germans, Japanese, and Americans arrived.’ (EM 109)

(ii) An embedded clause introduced by *put* ‘because, so that’ is in the realis mood when *put* specifies cause (see (32a)), but in the irrealis mood when *put* specifies purpose (32b).

- (32)a. Ti bai fã’um si Ana [put ti umiskuela].
not AGR knock.down UNM Ana because not AGR.go.to.school
 ‘I will not knock down Ana because she didn’t go to school.’ (CD, entry for fã’um)
- b. Hu dommu’ i lamasa [put para bai hu lipa i
AGR punch the table so.that FUT AGR let.off the
binibu-hu].
anger-AGR
 ‘I hit the table in order to let off my anger.’ (CD, entry for lipa)

(iii) When an embedded clause introduced by *sa* ‘because’ is in irrealis mood, its meaning depends on whether the embedded clause contains the TAM *para* ‘future, subjunctive’ (see 4.2.2.1). When *para* is present, the embedded clause describes a future event that gives a positive reason for the event described by the main clause; see (33a). When *para* is absent, the embedded clause describes an unfavorable potential event that the event described by the main clause is intended to prevent from happening; see (33b). In such cases, *sa* corresponds roughly to ‘because otherwise’.

- (33)a. Si tâta umattuk gi liyang [sa’ para pâkyu].
UNM father AGR.hide LCL cave because FUT typhoon
 ‘Dad sought shelter in the cave because there was going to be a typhoon.’ (CD, entry for pâkyu).
- b. Gimin âmut [sa’ un sinagu].
drink medicine because AGR have.flu
 ‘Drink the medicine or otherwise you’ll get the flu.’ (CD, entry for sinagu)

(iv) Finally, the subordinating conjunctions *yanggin* ‘if, when’ and *anai* ‘when’ appear in different types of adverbial clauses. Embedded clauses introduced by *yanggin* can specify a condition, as in (34).

- (34)a. [Yanggin taigui guini], pues esta guaha
if AGR.not.be.at here then already AGR.exist

chumuli’.

WH[SB].take

‘If it’s not here, then someone took it.’ (CD, entry for *guini*)

- b. Måolik ha’ chinago’-ña [yanggin para un
AGR.good EMP NMLZ.far-AGR if FUT AGR
 famokkat].

walk

‘It’s far if you are going to walk.’ (CD, entry for *chinagu*)

Embedded clauses introduced by *yanggin* can also specify a location in time. In this use, the event described by the entire complex sentence either has not yet occurred, as in (35a-b), or is habitual or generic, as in (35c-d).

- (35)a. Para u fanatkila si Henry kareta [yanggin
FUT AGR ANTIP.rent UNM Henry car when
 mattu Guam].
AGR.arrive Guam
 ‘Henry will rent a car when he gets to Guam.’ (CD, entry for *atkila*)
- b. Chuli’ mągi i papāya [yanggin para un fattu].
bring to.here the papaya when FUT AGR arrive
 ‘Bring the papaya on your way over (lit. when you are going to come).’ (CD, entry for *chuli’ mągi*)
- c. Bunita si Ana [yanggin ha usa i alāhas].
AGR.pretty UNM Ana when AGR wear the jewelry
 ‘Ana looks beautiful when she wears the jewelry.’ (CD, entry for *halāhas*)
- d. [Yanggin mababa i bainan niyuk], manannuk
when AGR.PASS.open the sheath.L coconut AGR.appear
 i floris.
the flower
 ‘When the covering of the shoot of the coconut flower opens, the flowers appear.’ (CD, entry for *bainan niyuk*)

Embedded clauses introduced by *anai* always specify a location in time. When *anai* is used, the entire complex sentence describes an event that has already occurred; see the examples below.

- (36)a. Kumāti si John [anai ma’āgang totku].
AGR.cry UNM John when AGR.PASS.call idiotic
 ‘John cried when he was called an idiot.’ (CD, entry for *totku*)

- b. [Anai kumuleleka i punidera], duru tumutugåk.
when AGR.lay.eggs.PROG the hen hard AGR.cluck
 ‘When the hen was incubating, it was making a clucking sound.’
 (CD, entry for *tuktugåk*)
- c. Mañonggi yu’ oddu gi paingi [anai
AGR.ANTIP.burn I mosquito.coil LCL last.night when
para bai in fanmaigu’].
FUT AGR AGR.sleep
 ‘Last night, I burnt a mosquito coil when we (excl.) were about to
 go to sleep.’ (CD, entry for *oddu*)
- d. Para bai hu o’mak gi paingi [anai måttu
FUT AGR shower LCL last.night when AGR.arrive
si Jean].
UNM Jean
 ‘I was about to shower last night when Jean came.’ (CD, entry for
o’mak).

20.5 Embedded clauses introduced by the definite article

Chamorro allows an embedded clause to be preceded by the definite article *i*. In this construction, which can be called the *i* construction, the embedded clause expresses a statement, as can be seen from the representative examples below. Note that the complementizer *na*, which introduces finite embedded clauses and can be omitted in some contexts, is always omitted here (see 20.2.1).

- (37)a. Ma fa’huegu i [para u fanápanak].
AGR.make.into.game the FUT AGR AGR.RECP.hit
 ‘They made a game of hitting each other.’ (CD, entry for *ápanak*)
- b. I As Mintagua ma’ã’agang ha’ nu esti na
the As Mintagua AGR.PASS.call.PROG EMP OBL this L
nã’an sa’ put i [sumåga si Antonio Borja ...].
name because the AGR.live UNM Antonio Borja
 ‘Mintagua is called by this name because Antonio Borja...lived
 there.’ (CD, entry for *As Mintagua*)
- c. Yanggin ilelek-mu na disgråsia i [ti para un
if say-AGR.PROG COMP disgrace the not FUT AGR
li’i’ bunitå-ña i palåo’an ni un guaiya ...]
see beauty-AGR the woman COMP AGR love
 ‘If you say that it’s a shame that you will not see the beauty of the
 woman you love...’ (*Ginen I Obispo* April 3, 2011)

- d. Atyu ha' nila'la'-ñiñiha, i [humãhanão
that EMP NMLZ.alive-AGR.PROG the AGR.go.PROG
 fanggualu'an put fanggualu'an tãotão ya
field by field.L person and.then
 mañãñakki i dos ...]
AGR.ANTIP.steal.PROG the two
 'That was their life, that the two would go from field to field and
 would steal...' (from a tape-recorded narrative)

The structure of the *i* construction is straightforward in certain respects. The embedded clause that is introduced by *i* has the full structure of a sentence. For instance, it can begin with a TAM (as in (37a)) or the sentential negative *ti* (37c). It can also be modified by an adverbial clause, as can be seen from (38) (The adverbial clauses in the examples below are surrounded by the inner set of brackets.)

- (38)a. Kulan che'chu' tattamudu ennão i [[kada
seems.like work.L stupid that the whenever
 mapãsa i lai], ma'amenda gi sigenti notchi].
AGR.PASS.pass the law AGR.PASS.amend LCL following night
 'It seems idiotic that whenever a law is passed, it is amended the
 following night.' (CD, entry for *taktamudu*)
- b. Gof na'piniti guini gi tano'-ta i [[achuka'
AGR.very sad LCL.this LCL land-AGR the although
 guaha pribilihu-mu], mafa'baba hão ha'].
AGR.exist privilege-AGR AGR.PASS.deceive you EMP
 'The sad thing here in our (incl.) place is even though you have
 personal rights, you are still being fooled.' (CD, entry for *pribilehu*)

The *i* in this construction is the definite article, and the constituent that it forms with the embedded clause is a noun phrase. This can be seen from the following:

- (i) Like the definite article, the *i* that introduces the embedded clause can be preceded by a demonstrative (see 6.2.2). The demonstratives are in boldface in (39); note that (39b) contains an *i* construction embedded inside another *i* construction.

- (39)a. Bisiu esta **ennão** i [para un fãtta kada Lunis].
habit already that the FUT AGR.absent each Monday
 'It is already becoming a habit for you to be absent every Monday.'
 (CD, entry for *Lunis*)

- b. Na'chatsaga **esti** i [para ta hassu i [mangahulu'
AGR.bothersome this the FUT AGR.think the AGR.go.up
 i presiu siha gi tenda]].
the price PL LCL store
 'It is bothersome for us (incl.) just to think about the fact that prices
 are rising at the store.' (CD, entry for *na'chatsaga*)

(ii) Like other noun phrases, the *i* construction is marked for case. The *i* constructions in the examples above are in the unmarked case; the *i* construction in (40) is in the oblique case.

- (40) Dispásiu hão nu ennão i [para un
AGR.slow you OBL that the FUT AGR
 fanhannan].
ANTIP.threaten.w.finger
 'You better slow down when threatening with raised forefinger.'
 (CD, entry for *hanhan*)

(iii) Like other noun phrases, the *i* construction can serve as the object of a preposition. In (41), this preposition is *put* 'because, so that'.

- (41) Put i [ti umeksisiu yu'], kulang
because the not AGR.exercise I seems.like
 bumãobão i tataotão-hu.
AGR.full.of.liquid the body-AGR
 'Because I did not exercise, my body seems to be full of liquid.'
 (CD, entry for *bãobão*)

(iv) Like other noun phrases, the *i* construction can appear at the left edge of the main clause. In (42), the complex sentence begins with an *i* construction that specifies a location in time.

- (42) I [para bai hu atan ha' i batku gi pantalân],
the FUT AGR watch EMP the ship LCL dock
 esta yu' bulâchu.
already I AGR.dizzy
 'Just looking at the ship at the dock, I get dizzy.' (CD, entry for *bulâchu*)

(v) Observe finally that in Chamorro, no argument contained within a noun phrase, except the possessor, can be questioned, focused or relativized.

This can be seen from the contrast between the statement and the corresponding question in (43). (The relevant noun phrase is enclosed in brackets.)

- (43)a. Ha kuntetesta si Lucy [i katta ginin i
AGRreply.PROG UNM Lucy the letter from the
 chi'lu-ña].
sibling.AGR
 'Lucy is answering the letter from her sister.'
- b. *Ginin hăyi na ha kuntetesta si Lucy [i
from who? COMP AGRreply.PROG UNM Lucy the
 katta]?
letter
 ('From whom is Lucy answering the letter?')

Similarly, no argument contained within the *i* construction can be questioned, focused or relativized. Compare the statement and the corresponding question in (44).

- (44)a. Băba i [para un fâla' i guihan].
AGR.bad the FUT AGR eat.raw the fish
 'For you to eat the fish raw is not good.'
- b. *Kuântu na klâsin guihan băba i [para un
how.many? L sort.L fish AGR.bad the FUT AGR
 fâla']?
eat.raw
 ('How many kinds of fish is it not good for you to eat raw?')

This is yet another respect in which the *i* construction resembles a noun phrase and differs from an embedded clause introduced by *na*. When an embedded clause is introduced by *na*, the arguments it contains can routinely be questioned, focused, or relativized, as (45) is intended to suggest.

- (45)a. Băba [na para un fâla' i guihan].
AGR.bad COMP FUT AGR eat.raw the fish
 'It is not good for you to eat the fish raw.'
- b. Kuântu na klâsin guihan băba na [para un
how.many? L sort.L fish AGR.bad COMP FUT AGR
 fâla']?
eat.raw
 'How many kinds of fish is it not good for you to eat raw?'

In short, the *i* construction is a noun phrase in which the definite article is followed by an embedded clause.

It is more difficult to pinpoint how, if at all, the *i* construction differs in meaning or function from a finite embedded clause introduced by the complementizer *na*. Since the *i* construction is introduced by the definite article (see 6.2.1.2.1), one might imagine that the statement expressed by the embedded clause is already familiar to both speaker and addressee (i.e. it is part of the common ground). And indeed, the *i* construction typically occurs in contexts that meet this description. It often serves as the subject of predicates that are evaluative adjectives or noun phrases; see e.g. (37c), (38), (39), and (44a).

The *i* construction may well be the Chamorro analogue of English noun phrases in which a noun like *fact* or *idea* is followed by a finite embedded clause (which is sometimes called an appositive clause). Further research is needed to take this conjecture further. Note that Chamorro does have noun phrases in which an overt noun is followed by an appositive clause, such as the embedded clause enclosed in brackets in (46), but these are relatively infrequent.

- (46) Pues i finu' manamku' na ["Guse'ña
 so the speech.L PL.elder COMP AGR.quick.COMPAR
 magacha' i dakun kini un kohu"] sustansiân-ña ...
 AGR.PASS.catch the liar than a lame meaning-AGR
 'So the old saying that "A liar is caught up with more quickly
 than a lame man", its meaning is...' (EM 133)

21

INFINITIVES AND REDUCED CLAUSES

Chamorro has nonfinite embedded clauses and clause-like constituents. Infinitive clauses, which are formed from an infinitive predicate, must have a ‘missing’ subject. Reduced clauses are predicate phrases that are smaller than clauses, but serve some of the same functions as infinitive clauses.

21.1 Overview

In addition to finite embedded clauses (see Chapter 20), Chamorro has two types of nonfinite embedded clauses or clause-like constituents. Infinitive clauses, which are formed from an infinitive predicate, have a ‘missing’ subject. So-called *reduced clauses* are predicate phrases that are smaller than clauses, but serve some of the same functions as infinitive clauses. Both types of constituents have limited distributions.

This chapter is devoted to infinitive clauses and reduced clauses. The structure and function of infinitive clauses is discussed first (in 21.2). The spotlight then shifts to two constructions in which infinitive clauses occur, known as raising (21.3) and control (21.4). Two differences between control and raising are briefly discussed (in 21.5). Finally, reduced clauses are described (in 21.6).

21.2 Infinitive clauses

21.2.1 Infinitive predicates

An infinitive predicate in Chamorro can be formed from a verb, an adjective, or a noun. These predicates are marked for aspect in the usual way (see 2.2.1). But instead of the normal (finite) forms of agreement with the subject, which also indicate mood (see 2.2.2), they show infinitival agreement with the subject. The forms of this agreement are listed in (1).

(1) AGREEMENT FOR PREDICATES OF INFINITIVE CLAUSES

- a. *Transitive verbs*
[invariant] -um-
- b. *Intransitive predicates*
Sg./Du. -um- / —
Pl. man-

Infinitival agreement does not indicate the person of the subject. This agreement is always realized as *-um-* when the predicate is a transitive verb; see (2a) for an illustration. When the predicate is an intransitive verb, the forms of infinitival agreement are the same as the normal (finite) realis forms of agreement (see 2.2.2.2.1). The similarity extends to which affix the verb uses to indicate a sg./du. subject, as can be seen from (2b-c). The infinitive verb *hãnão* ‘go’ in (2b), whose missing subject is dual, is marked with the infix *-um-*; the infinitive verb *ma’udai* ‘ride’ in (2c), whose missing subject is singular, shows no special marking. These are the same affixes that these verbs would use in the corresponding finite realis clauses.

- (2) a. Hita lokkui’ ta nisisita [t**umungu**’ taimanu para ta
we.INCL also AGRneed INF.know how? FUT AGR
maneha i chathinassu].
manage the worry
‘We (incl.) too need to know how we (incl.) should manage worry.’
(*Ginen I Obispo* November 18, 2001)
- b. Ha tutuhun i dos [h**umãnão** para u fanayuyut].
AGRbegin the two AGR.INF.go FUT AGRANTIP.pray
‘The two began to go to pray.’ (*Ginen I Obispo* July 2, 2000)
- c. Ti malagu’ si Juan [m**a’udai** gi andas].
not AGR.want UNM Juan AGR.INF.ride LCL stretcher
‘Juan did not want to ride on the stretcher.’ (CD, entry for *ãndas*)
- d. Manmalagu’ [m**anhuyung** gi tasi].
AGR.want AGR.INF.go.out LCL ocean
‘They wished to go out to sea.’ (CD, entry for *inasa*)

Otherwise, when the predicate is an adjective or noun, the forms of infinitival agreement are similar to the (finite) realis forms of agreement, but not the same. The difference is that infinitival agreement treats the adjective or noun as if it were an intransitive verb that describes an event. Thus, infinitival agreement on an adjective whose missing subject is singular or dual is realized as the infix *-um-*, even when the agreement in the corresponding finite realis clause would be realized by no special marking; see

(3a). Similarly, infinitival agreement is realized by the overt affixes in (1b) when the predicate is a noun, even though predicates that are nouns do not show agreement with the subject in finite clauses; see (3c-d).¹

- (3) a. Esta ti ya-hu [umettigu / *ettigu].
already not like-AGR AGR.INF.short
 ‘I don’t like being short anymore.’
- b. I famagu’un ti yan-ñiha [manyayas].
the PL.child not like-AGR AGR.INF.tired
 ‘The children don’t like being tired.’
- c. Todu tãotão malagu’ [mumã’gas].
every person AGR.want AGR.INF.boss
 ‘Everybody wants to be boss.’ (CD, entry for *mã’gas*)
- d. ... hãfa para u mapadesi ni atyu siha ni
what? FUT AGR.PASS.endure by that PL COMP
 manhãlum [mandisipulu-ña].
AGR.go.in AGR.INF.disciple-AGR
 ‘(He said) what would be endured by those who became his disciples.’ (*Ginen I Obispo* September 8, 2013)

Most verbs, adjectives, and nouns can serve as infinitive predicates, including impersonal predicates (see 14.2) and verbs of possession (14.3). However, prepositions evidently cannot serve as infinitive predicates (see 4.3.2); neither can transitive verbs that show agreement as if they were nouns (see 14.4).

When an infinitive predicate in the control construction is formed from a passive verb, the passive affix used is *ma-* (see 10.2.2.3).

- (4) a. Hu nisisita [malasa] sa’ manmamuti tod
AGR.need AGR.INF.PASS.message because AGR.ache all
 i gugãt-tu.
the joint-AGR
 ‘I need to be massaged because all my joints ache.’ (CD, entry for *gugat*)
- b. Esta mano’sun i famagu’un [manmalalãtdi] as
already AGR.tired the PL.child AGR.INF.PASS.scold OBL

¹ The prefix *man-* in *mandisipulu-ña* ‘to be his disciples’ in (3d) could be analyzed as infinitival agreement or as the plural prefix on nouns. The *-um-* infix in *mumã’gas* ‘to be boss’ in (3c) has only one analysis, as infinitival agreement.

tatan-ñiha].

father-AGR

‘The children are tired of being scolded by their father.’

21.2.2 Structure and function

Infinitive clauses cannot serve as simple sentences, main clauses of complex sentences, or adjuncts. Instead, they occur as arguments of the predicate in just two constructions, which are called *raising* and *control*. The dependent character of infinitive clauses is related to certain aspects of their structure.

First of all, an infinitive clause cannot begin with any of the tense-aspect-mood markers found in finite clauses (see 4.2). Instead, the semantic mood of an infinitive clause is determined by the *higher predicate*; that is, by the predicate that has the infinitive clause as an argument. Consider the complex sentences below. In (5a), the higher predicate is *malagu* ‘want’, so the event of knowing described by the infinitive clause is non-actual and desired. If this event happens at all, it will be in the future relative to the event of wanting. In (5b), the higher predicate is *atotga* ‘dare’, so the event of saying described by the infinitive clause is simultaneous with the event of daring. If the event of daring has already occurred, then so has the event of saying.

- (5) a. *Malagu*’ *yu*’ [*tumungu*’ *taimanu macho*’ *guen-ña* *esti*
 AGR.want *I* *INF.know* *how?* *WH[DJ].PASS.make-AGR* *this*
 i *buñelus* *mânha*].
 the doughnut.L *green.coconut*
 ‘I want to know how this coconut doughnut is made.’ (CD, entry for
 buñelus mânha)
- b. *Pues* *si* *Pedro* *ha* *atotga* [*sumangâni Gui*’] ...
 then *UNM* *Pedro* *AGR.dare* *INF.say.to* *him*
 ‘Then Peter dared to say to Him...’ (NT 81)

Second, an infinitive clause must have a subject that is ‘missing’—necessarily unpronounced. The identity of this missing subject is determined by the complex sentence in which the infinitive clause occurs. In (6a), for instance, the infinitive clause is an argument of the higher verb *pâra* ‘stop’ in a raising sentence, so its missing subject is realized as the subject of this higher verb, namely, *hâo* ‘you (sg.)’. In (6b), the infinitive clause is an argument of the higher verb *ayuda* ‘help’ in a control sentence, so its missing subject is identified with *gui* ‘her’, the argument of *ayuda* that names the one who is helped.

- (6) a. Ma anña hão teniki kumu ti pumãra hão
 AGR.harm you surely if not AGR.stop you
 [umistotba siha].
 INF.disturb them
 ‘They will harm you if you don’t stop bothering them.’ (CD, entry for *anña*)
- b. Ha ayuda gui’ [tumohgi hulu’].
 AGR.help her AGR.INF.stand up
 ‘He helped her to stand up.’ (NT 230)

When the infinitive clause is passive, the missing subject is the internal argument of the passive verb, as in (4) (see 10.2.2.1).

Nonetheless, infinitive clauses *are* clauses. Like other clauses, an infinitive clause can be negated with the sentential negative *ti* (see 4.1 and 17.2).

- (7) a. Ha tutuhun dispues i lahi-hu [ti mumaguf].
 AGR.begin then the son-AGR not AGR.INF.happy
 ‘Then my son began to be unhappy.’
- b. Ma’ã’ñaõ si Dolores [ti umosgi si nanã-ña].
 AGR.afraid UNM Dolores not INF.obey UNM mother-AGR
 ‘Dolores is afraid not to obey her mother.’
- c. Pues en sedi ha’ gui’ [ti umayuda si
 so AGR.allow EMP him not INF.help UNM
 tatã-ña o sino si nanã-ña].
 father-AGR or UNM mother-AGR
 ‘You (pl.) even allow him not to help his father or his mother.’ (NT 74)

Moreover, an infinitive clause has the same effect as other embedded clauses on the pattern of wh-agreement in Chamorro. In long-distance questions, relative clauses, and focus constructions, when an argument of an embedded clause is displaced to the left edge of a higher clause, the *higher* verb or adjective can show the special agreement known as wh-agreement (see 22.5.2, 23.5.2, and 24.5). In such cases, the form of wh-agreement on the higher predicate signals the grammatical relation of the embedded clause out of which the argument has been displaced. Infinitive clauses pattern just like finite embedded clauses in this respect. For instance, the long-distance relative clauses in (8) are formed by relativizing the direct object of an infinitive clause. The higher verbs in these relative clauses show wh-agreement, and the form of this agreement signals the grammatical relation of the infinitive clause. In (8a), *tungu* ‘know’ shows the object form of wh-agree-

ment (which here is not realized overtly), because the infinitive clause serves as its direct object. In (8b), *malagu* ‘want’ shows the oblique form of wh-agreement, because the infinitive clause serves as an oblique. (Note that the relative clause in these examples is surrounded by the outer set of brackets and the infinitive clause, by the inner set of brackets.)

- (8) a. Mungnga machansa hảo para un cho’gui i [ti
don’t AGR.PASS.risk you FUT AGR.do the not
un tungu’ [chumo’gui]].
AGR.know INF.do
 ‘Don’t take the risk of doing what you don’t know how to do.’ (CD,
 entry for *chansa*)
- b. I katni ni [malago’-hu [kumannu’]],
the meat COMP WH[OBL].want-AGR INF.eat
 taigui guennão.
AGR.not.be.at there
 ‘The meat that I wanted to eat was not there.’

These similarities to other embedded clauses make it clear that infinitive clauses are indeed clauses. (Reduced clauses, on the other hand, are smaller than clauses; see 21.6.2.)

An infinitive clause can be embedded within another infinitive clause. This can be seen from (9).

- (9) a. Malagu’ yu’ [tumungu’ [mama’tinas brohas]].
AGR.want I INF.know AGR.INF.ANTIP.make sponge.cake
 ‘I want to learn to make sponge cake.’ (CD, entry for *brohas*)
- b. Ma’agoddai si Joey ya ti malagu’
AGR.excited UNM Joey and.then not AGR.want
 [pumâra [pumeska]] sa’ bula guihan.
AGR.INF.stop AGR.INF.fish because AGR.many fish
 ‘Joey was so excited and didn’t want to stop fishing because there
 was a lot of fish.’ (CD, entry for *ma’agoddai*)

The higher predicate determines much of the structure and function of an infinitive clause, including whether it occurs in the raising construction or the control construction. Raising and control are discussed next.

21.3 Raising

In the raising construction, the higher predicate has just one argument, an infinitive clause that names an event. The missing subject of the infinitive clause is realized as the subject of the higher predicate.

Only a few higher predicates in Chamorro occur in the raising construction, and most or all of them are aspectual verbs. Some of these verbs are listed in (10).

- (10) SOME RAISING PREDICATES
- | | |
|---------|------------|
| kuntuha | ‘continue’ |
| påra | ‘stop’ |
| tutuhun | ‘begin’ |

Some examples of raising sentences were given above in (2b), (6a), and (7a); more are cited below.

- (11)a. I imang pumalolo’pu’ ya ma tutuhun
the hermit.crab WH[SBJ].fall.on.PROG and.then AGR begin
 [kumånnu’] asta ki manana.
INF.eat until PRT AGR.daylight
 ‘The hermit crabs would fall on [the leftover coconut] and they would begin to eat it until dawn.’ (EM 88)
- b. Låo åntis di ta kuntuha [umakusa esti na tåotåo] ...
but before PRT AGR continue INF.accuse this L person
 ‘But before we (incl.) continue to accuse this person...’ (Ginen I Obispo September 30, 2001)
- c. Ti u ppara [gumuaha tåotåo mo’na].
not AGR stop AGR.INF.exist people.L before
 ‘There are not going to stop coming into existence *taotao mo’na*.’ (Cooreman 1983: 4)

In the raising sentences in (11), the missing subject of the infinitive clause is realized as a null pronoun that serves as the subject of the higher verb. The null pronoun subject of *tutuhun* ‘begin’ in (11a) names the ones (‘they’) who did the eating; the null pronoun subject of *kuntuha* ‘continue’ in (11b) names the ones (‘we (incl.)’) who did the accusing. In (11c), the infinitive clause contains an impersonal verb (see 14.2.2), so the null dummy that is its subject is realized as the subject of *ppara* ‘stop’. In the raising sentences cited earlier, the missing subject of the infinitive clause is realized as an overt noun phrase that serves as the subject of the higher verb. These noun phrases

are *i dos* ‘the two’ in (2b), the weak pronoun *hăo* ‘you’ in (6a), and *i lahi-hu* ‘my son’ in (7a).

Although higher predicates that allow raising can have an argument that is an infinitive clause, they seem to prefer for this argument to be a reduced clause (see 21.6).

21.4 Control

In the control construction, the higher predicate has several arguments. One argument is an embedded clause with a missing noun phrase. Another argument, called the *controller*, is a noun phrase that serves as the antecedent of the missing noun phrase. To put it differently, the controller is the argument of the higher predicate that the missing noun phrase is identified with.

The higher predicate plays an important role in control: it determines which of its arguments serves as the controller and whether control is required or merely allowed. In addition, it determines whether the embedded clause—the clause with the missing noun phrase—is nonfinite or finite. Chamorro is one of the few languages of the world that allow control into both infinitive clauses and finite clauses. Control into infinitive clauses is described in 21.4.1, and control into finite clauses, in 21.4.2.

21.4.1 Into infinitive clauses

When control is into an infinitive clause, the missing noun phrase is always the missing subject of the infinitive (see 21.2.2). The higher predicate determines which of its other arguments serves as the controller.

Higher predicates in control can be classified according to the number of arguments they have, the semantic role of the controller, and whether control is allowed or merely required. The broad outlines of this classification are as follows.

In the simplest case, the higher predicate has just two arguments: an embedded clause, which in this part of the discussion is an infinitive clause, and the noun phrase that serves as the controller. The controller is typically the argument that names the one who causes the event, or experiences the state, that the higher predicate describes.

Consider the control sentences in (12). The higher predicate *ma’ă’ñăo* ‘afraid’ in (12a) has two arguments: the noun phrase *i famagu’un* ‘the children’, which names the ones who experience fear, and an infinitive clause (enclosed in brackets), which names what is feared. The noun phrase *i famagu’un* serves as the controller of the missing subject of the infinitive clause, which names the ones who ask permission. The higher predicate *chagi* ‘try’

in (12b) has two arguments: the null pronoun ‘you (sg.)’, which names the one who tries, and an infinitive clause, which names what is tried. The null pronoun serves as the controller of the missing subject of the infinitive clause, which names the one who does the eating.

- (12)a. I famagu’un manma’ă’ñão [ti manmamaisin
the PL.child AGR.afraid not AGR.INF.ANTIP.ask
 petmisu gi halum tânu’ ântis di u fantinani’].
permission LCL inside.L land before PRT AGR.AGR.go.to.toilet
 ‘The children are afraid not to ask permission in the jungle before
 they urinate or defecate.’ (CD, entry for *ma’ă’ñão*)
- b. Kão guaha na un chagi [kumânnu’ aga’,
Q AGR.exist COMP AGR try INF.eat banana
 mângga, pat âbas]?
mango or guava
 ‘Have you ever tried to eat bananas, mangos, or guavas?’ (EM 82)

The predicate dictates the semantic role of the controller, not its grammatical relation. In control sentences formed from the higher verb *tungu* ‘know’, for instance, the controller is the argument that names the one who knows. This argument serves as the controller whether it is realized as the subject (as in (13a)) or the passive agent (13b).

- (13)a. Ha tungu’ i neni [tumugi’ i na’ân-hu].
AGR.know the baby INF.write the name-AGR
 ‘The baby knows how to write my name.’
- b. Matungu’ ni famagu’un [tumugi’ i na’ân-hu].
AGR.PASS.know OBL PL.child INF.write the name-AGR
 ‘The children know how to write my name (lit. how to write my name is known by the children).’

In control sentences formed from the higher verb *ayuda* ‘help’, the controller is the argument that names the one who receives help. This argument serves as the controller whether it is realized as the direct object (as in (14a)) or the derived subject of passive (14b).

- (14)a. Ha na’falak guatu si Pedro i kannai-ña
AGR.make.go.to to.there UNM Pedro the hand-AGR
 ya ha ayuda gui’ [tumohgi hulu’].
and.then AGR.help her AGR.INF.stand up
 ‘Peter gave her his hand and helped her to stand up.’ (NT 230)

- b. Lảo gine'ti kannai-ña as Jesus ya
but AGR.PASS.hold hand-AGR OBL Jesus and.then
 inayuda gui' [tumohgi].
AGR.PASS.help he AGR.INF.stand
 'But his hand was taken by Jesus and he was helped to stand.' (NT 79)

The higher predicate may require control or merely allow it. When the higher predicate merely allows control, its embedded clause can contain a missing noun phrase identified with the controller, but does not have to do so. The two options are illustrated below for *malagu* 'want'. In (15), this verb takes an infinitive clause and occurs in the control construction; in (16), it takes a finite embedded clause and control does not occur.

- (15)a. Malagu' yu' [tumaitai esti na katta ginin un sindálu
AGR.want I INF.read this L letter from a soldier
 ni gumera giya Vietnam].
COMP AGR.make.war LCL Vietnam
 'I want to read this letter from a soldier who fought in Vietnam.'
 (Ginen I Obispo July 16, 2000)
- b. Ti malagu' [kalamtin] esti na kândit.
not AGR.want AGR.INF.start.action this L lamp
 'This lamp cannot (lit. does not want to) work.' (CD, entry for *kândit*)
- (16)a. Malagu' yu' [na u fanadingan i familia put
AGR.want I COMP AGR.AGR.converse the family about
 i mamamaila' na guput].
the upcoming L party
 'I want the family to talk about the upcoming party.' (CD, entry for *adingan*)
- b. Ti malagu' si Tang [para ta usa i fayão].
not AGR.want UNM Dad FUT AGR.use the pestle
 'Dad does not want us (incl.) to use the wooden pestle.' (CD, entry for *fayão*)

Some common higher predicates that have two arguments and allow control, but do not require it, are listed in (17).

- (17) SOME PREDICATES THAT ALLOW CONTROL
- | | |
|--------|----------|
| disidi | 'decide' |
| ga'o- | 'prefer' |

hassu	‘remember, think’
ma’ă’ňăo	‘afraid’
malagu’	‘want’
nisisita	‘need’
tungu’	‘know’
ya-	‘like’

In contrast, a higher predicate that requires control *must* occur in the control construction: its embedded clause must have a missing noun phrase that is identified with the controller. Two higher predicates of this type, *atotga* ‘dare’ and *o’sun* ‘tired, bored’, appear in control sentences in (18).

- (18)a. Ti ha atotga [umatan ta’lu].
not AGR.dare INF.look.at again
 ‘He would not venture to look (lit. he did not dare to look at it again).’ (NT 224)
- b. O’sun yu’ [humunguk i kantâm-mu].
AGR.bored I INF.hear the song-AGR
 ‘I’m bored of listening to your song.’ (CD, entry for *o’sun*)

When the embedded clause contains no missing noun phrase identified with the controller, the result is ungrammatical, as is illustrated in (19). (Finite embedded clauses are used to make this point, because infinitive clauses *must* have a missing noun phrase; see 21.2.2.)

- (19)a. *I palăo’an ha atotga [para u fanmumu].
the woman AGR.dare FUT AGR.AGR.fight
 (‘The woman dared for them to fight.’)
- b. *O’sun yu’ [na gaigi hăo guini].
AGR.bored I COMP AGR.be.at you here
 (‘I’m bored of you being here.’)

Some common higher predicates that have two arguments and require control are listed in (20).²

² The higher predicate *tutuhun* ‘begin’ has two uses. It can have just one argument, in which case it occurs in the raising construction; or it can have two arguments, in which case it occurs in the control construction and requires control (see 21.5).

- (20) SOME PREDICATES THAT REQUIRE CONTROL
- | | |
|---------|---------------------------------|
| atotga | ‘dare’ |
| bãsta | ‘stop, quit, enough; let it be’ |
| chagi | ‘try’ |
| etyak | ‘copy, imitate, learn’ |
| o’sun | ‘tired, bored’ |
| tutuhun | ‘begin’ |
| yayas | ‘tired’ |

Finally, the higher predicate can have three arguments: an embedded clause, a noun phrase that serves as the controller, and another noun phrase. In such cases, the controller is typically the argument that names the one who is affected by the event that the higher predicate describes, or toward whom the event is directed.

Two higher predicates of this type that require control are listed in (21).

- (21) MORE PREDICATES THAT REQUIRE CONTROL
- | | |
|-------|-----------------|
| ayuda | ‘help’ |
| sedi | ‘allow, permit’ |

Control sentences formed from these predicates are cited in (14) and below.

- (22)a. I katgân-ña era i [para u ayuda ottru
the load-AGR actually the FUT AGR help other
 tâotão siha [umuma i katgan-ñiha]].
person PL INF.carry the load-AGR
 ‘His burden, as it turned out, was to help others carry their burdens.’
 (Ginen I Obispo July 7, 2002)
- b. Pues en sedi ha’ gui’ [ti umayuda si
then AGR allow EMP him not INF.help UNM
 tatã-ña o sino si nanã-ña].
father-AGR or UNM mother-AGR
 ‘You (pl.) even allow him not to help his father or his mother.’ (NT 74)

As expected if these predicates require control, their embedded clause must contain a missing noun phrase identified with the controller. When no such noun phrase occurs, the result is ungrammatical; see (23).³

³ The higher verb *sedi* ‘allow, permit’ has two uses. In the use illustrated in the text, it is a control predicate that has three arguments: a noun phrase that

- (23)a. ***Hu** **sedi** **si** **Chai'** [**para** **un konni'** **si**
AGR allow UNM Chai' FUT AGR take UNM
Ampan para i espitât].
Ampan to the hospital
 ('I allowed Chai' for you to take Ampan to the hospital.')
- b. ***In ayuda i ma'estra siha** [**na para u**
AGR help the teacher PL COMP FUT AGR
na'funhâyan si Iku i che'chu'].
make.finished UNM Iku the work
 ('We (excl.) helped the teachers for Iku to finish the job.')

21.4.2 Into finite clauses

In addition to allowing control into an infinitive clause, Chamorro allows control into a finite clause. This is typologically unusual: many languages have control into infinitive clauses, and many other languages have control into finite clauses, but few languages have both. In Chamorro, when control is into a finite clause, the embedded clause is in the irrealis mood; the missing noun phrase is usually the embedded subject, but not always (see below). The higher predicate determines the semantic role of the controller, and whether control is required or merely allowed, in the just same way as when control is into an infinitive clause.

Control into a finite clause is an option for all the higher predicates described earlier in 21.4.1. This is particularly clear when the higher predicate requires control; that is, when it demands that the embedded clause have a missing noun phrase identified with the controller. The control sentences in (24) and (25) involve higher predicates of this type.

- (24)a. **Ti ha atotga si Miguel** [**para u kundena i**
not AGR dare UNM Miguel FUT AGR condemn the
Aniti ...]
Devil
 'Michael did not dare to condemn the Devil...' (NT 457)
- b. **Mânu ni o'sun hâo** [**para un famokkâti**?]
where? COMP AGR.bored you FUT AGR walk.to

names the one who allows, another noun phrase that names who is allowed, and an embedded clause that names what is allowed. The controller is the argument that names who is allowed. *Sedi* has a different use in which it has just two arguments: a noun phrase that names the one who allows, and an embedded clause that names what is allowed. In this second use, it is not a control predicate.

- ‘Where are you tired of walking to?’
- c. Si Tevey ha chagi kuantu i siña [para u
 UNM Tevey AGR try how.much the can FUT AGR
 na’kumprendi i asaguã-ña].
 make.understand the spouse-AGR
 ‘Tevey tried as much as possible to make his wife understand.’
 (Ginen I Obispo October 27, 2002)
- (25)a. I patgun ha sangan na [inayuda gui’ [para
 the child AGR say COMP AGR.PASS.help he FUT
 u kuntuha manayuyut ...]]
 AGR continue AGR.INF.ANTIP.pray
 ‘The child said that he was helped to continue to pray...’ (Ginen I
 Obispo October 21, 2001)
- b. Bai hu sedi hao [na un chiku yu’].
 AGR allow you COMP AGR kiss me
 ‘I will allow you to (lit. that you will) kiss me.’ (EM 67)

In these sentences, the higher predicate has a finite embedded clause as one of its arguments, and that clause has a missing noun phrase identified with the controller. In (24a), for instance, *atotga* ‘dare’ has two arguments, the noun phrase *si Miguel*, which names the one who dares, and the embedded clause, which names what is dared. *Si Miguel* serves as the antecedent of the missing noun phrase in the embedded clause, which is the subject of *kundena* ‘condemn’. Because the higher predicate *requires* control, the fact that these sentences are grammatical reveals that control is involved. What is unusual is that the language has infinitives, but nonetheless allows control into a finite clause.

Control into a finite clause is widespread and frequent in Chamorro. Note, though, that it is ultimately the higher predicate that determines whether control is into an infinitive clause or a finite clause. Individual higher predicates differ from one another in this respect. Naturally-occurring data suggest that *chagi* ‘try’ and *ayuda* ‘help’ freely allow control into an infinitive or a finite clause; *atotga* ‘dare’ and *etyak* ‘learn’ prefer control into an infinitive clause; *o’sun* ‘tired, bored’ almost always involves control into an infinitive clause; and *sedi* ‘allow, permit’ almost always involves control into a finite clause.

Other higher predicates both require control and require it to be into a finite clause. These predicates do not allow their embedded clause to be an infinitive clause. Predicates with this profile typically have three arguments; a few are listed in (26).

- (26) SOME PREDICATES THAT REQUIRE CONTROL
 INTO A FINITE CLAUSE
 afuetsas 'force'
 sohyu' 'encourage, urge'
 tâgu' 'direct'

Some illustrative examples are cited in (27).

- (27)a. Para bai hu sohyu' esti siha i mañe'lu-ta [para
FUT AGR urge this PL the PL.sibling-AGR FUT
 u fanmofo'na ya ...]
AGR AGR.ahead.PROG and.then
 'I would urge our (incl.) brethren to go ahead and...' (NT 334)
 b. Ha tâgu' yu' si tâta [para bai lâbbun i floris].
AGR.direct me UNM father FUT AGR.trim the flower
 'Father told me to trim the flowers.' (CD, entry for *lâbbun*)

It is unclear whether Chamorro has any higher predicates that both require control and require that it be into an infinitive clause.

Recall that when control is into a infinitive clause, the missing noun phrase identified with the controller is always the missing subject of the infinitive (see 21.4.1). A wider range of options is available when control is into a finite clause. Then the missing noun phrase is typically the embedded subject, as can be seen from the sentences cited earlier. But the missing noun phrase can also be a passive agent. This happens routinely when passive is used to evade a violation of the person-animacy restriction, as in (28a-b) (see 16.2). (The control sentences in (28) and (29) involve higher predicates that require control.)

- (28) a. Kão ha atotga ennão na tâotão [para un
Q AGR dare that L person FUT AGR
 finaisin [kão kasão hão]]?
PASS.ask Q AGR.married you
 'Did that man dare to ask you (lit. that you would be asked by him) if you are married?'
 b. Cha'-miyu sesedi ni hãyi [para en
better.not-AGR allow.PROG not anyone FUT AGR
 fanfina'baba].
AGR.PASS.deceive
 'Do (pl.) not let anyone deceive you (pl.) (lit. that you (pl.) would be deceived by him).' (NT 382)

- c. Ha tâgu' i muchâcha [para u nina'i fina'mamis].
AGR direct the maid FUT AGR PASS.give pastry
 'He asked the maid to give him a pastry (lit. that he would be given a pastry by her).' (*Ginen I Obispo* July 4, 2002)

Very occasionally, the missing noun phrase can be the possessor of the embedded subject, as in (29).

- (29)a. Put ihemplu, atyu i che'lu ni ha atotga [para
for example that the sibling COMP AGR dare FUT
 u machuli' unu na riñon-ña ...]
AGR PASS.take one L kidney-AGR
 'For example, that sibling who dares for one of his kidneys to be taken out [to give to his other sibling]' (*Ginen I Obispo* April 6, 2003)
- b. Puedi si Yu'us ... en faninayuda [para u
perhaps UNM God AGR AGR.PASS.help FUT AGR
 fanparehu hinassun-miyu].
AGR.similar thought-AGR
 'Now may God...help you (pl.) to be of the same mind (lit. perhaps you (pl.) will be helped by God that your (pl.) thoughts be the same)...' (NT 294)

In this respect, control into a finite clause is more liberal than control into an infinitive clause.

What unites the grammatical relations of the missing noun phrase when control is into a finite clause is that they all count as prominent in one way or another. The subject is the most prominent constituent of the clause (see 3.2.1). The passive agent is the most prominent argument of the clause—the external argument (see 10.2.2.1). Arguably, the possessor of the subject counts as prominent as well, given the subject's prominence and the fact that the possessor is its most prominent subpart. The missing noun phrase in control cannot bear any other grammatical relation. In the ungrammatical (30), for instance, the missing noun phrase is the embedded direct object.

- (30) *Ha chagi si Ling [na si Carmen u
AGR try UNM Ling COMP UNM Carmen AGR
 sodda gui' gi giput].
find her LCL party
 ('Ling tried that Carmen find her at the party.')

Finally, control into a finite clause is also an option for higher predicates that merely allow control, such as *malagu* ‘want’. This might seem obvious, given sentences like those in (31), in which the subject of the embedded clause is evidently identified with the controller.

- (31)a. *Malagu’ gui’ [para u fāhan esti na tānu’].*
AGR.want he FUT AGR buy this L land
 ‘He wanted to buy this land.’ (*Ginen I Obispo* July 28, 2002)
- b. *Masāsangan me’nan Yu’us yanggin malagu’ i*
AGR.PASS.say.PROG before.L God if AGR.want the
kumekuentus [para u mahonggi].
AGR.speak.PROG FUT AGR PASS.believe
 ‘Honest to God is used if the speaker wants to be believed.’ (CD, entry for *me’nan Yu’us*)
- c. *Malagu’ yu’ [na bai hu falak atyu na songsung].*
AGR.want I COMP AGR go.to that L village
 ‘I want to go to that village.’ (Cooreman 1983: 109)

However, exactly because *malagu* ‘want’ does not *require* control, it is not clear whether the embedded subjects in (31) are identified with the controller or merely ordinary null pronouns that happen accidentally to pick out the same referent as the controller. See Chung (2019) for evidence that control is indeed involved in sentences of this type.

21.5 Control versus raising

Much research in generative syntax has been devoted to the differences between control and raising. This section highlights two contrasts between these constructions in Chamorro.

First, in Chamorro as in many other languages, the noun phrase that serves as the controller in the control construction is an argument of the higher predicate. But the noun phrase that serves as the higher subject of the raising construction is *not* an argument of the higher predicate; it merely realizes the missing subject of the infinitive clause. Consequently, the controller cannot be a meaningless null dummy—given that meaningless null dummies are never arguments—but the higher subject in raising can be.

Second, in Chamorro, both control and raising can be formed from an infinitive clause. But only the control construction has the option of being formed from a finite embedded clause; the raising construction does not.⁴

⁴ This is an area where there is considerable crosslinguistic variation.

These contrasts can be used to determine whether a particular higher predicate in Chamorro is a control predicate or a raising predicate—that is, whether it occurs in the control construction or the raising construction. Consider the verbs *nisisita* ‘need’ and *påra* ‘stop’. Both verbs can have an argument that is an infinitive clause, as can be seen from (32).

- (32)a. Ta nisisita [prumutehi kontra binenu todū i tipu’ gi
*AGR**need* *INF**protect* *against* *poison* *all* *the* *well* *LCL*
 isla].
island
 ‘We (incl.) need to protect all the wells on the islands from contamination.’ (CD, entry for *tupu*)
- b. Åhi’, ti kumeke’ilek-ku na mampåra hamyu
no *not* *meaning-AGR* *COMP* *AGR**stop* *you.PL*
 [umasisti yu’].
*INF**assist* *me*
 ‘No, I don’t mean that you (pl.) stopped assisting me.’ (NT 367)

However, the constructions in (32) are not the same. *Nisisita* ‘need’ cannot have a meaningless null dummy as its subject (see (33a-b)). Moreover, it can have an infinitive clause or a finite embedded clause as an argument (33c). These patterns are evidence that *nisisita* is a control predicate, and therefore (32a) is a control construction.

- (33)a. *Ha nisisita [gumuaha mås ayudu para i
AGR *need* *AGR**INF**exist* *more* *help* *for* *the*
 manhobin].
*PL**young*
 (‘There needs to be more help for youth.’)
- b. *Ha nisisita [umuchan giya Luta].
AGR *need* *AGR**INF**rain* *LCL* *Luta*
 (‘It needs to rain on Rota.’)
- c. Låo mås ki esti — ta nisisita [na para ta
but *more* *than* *this* *AGR**need* *COMP* *FUT* *AGR*
 fanmanisisita].
*AGR**PASS**need*
 ‘But more than this—we (incl.) need to be needed.’ (*Ginen I Obispo*
 September 30, 2001)

Påra ‘stop’ shows the opposite pattern. This verb can have a meaningless null dummy as its subject (see (11c) and (34a)), and it has an argument that

can be an infinitive clause, but not a finite embedded clause (34b). This is evidence that *påra* is a raising predicate, and therefore (32b) is a raising construction.

- (34)a. *Pumåra* [umuchan].
AGR.stop AGR.INF.rain
 ‘It stopped raining.’
- b. **Para u pãra [para u chotchu] i neni.*
FUT AGR.stop FUT AGR.ANTIP.eat the baby
 (‘The baby is going to stop eating.’)

Chamorro has a few higher predicates that can serve as raising predicates *or* control predicates. One such verb is *tutuhun* ‘begin’, which has an argument that is an infinitive clause in (35).

- (35)a. *Ha tutuhun esti na palão’an [tumattiyi si Pablo yan hami].*
AGR.begin this L woman INF.follow UNM Paul and us.EXCL
 ‘This woman began to follow Paul and us (excl.).’ (NT 244)
- b. *Ennã na mumentu na ha tutuhun [tumailayi] i rilihon-mu.*
that L moment COMP AGR.begin AGR.INF.cruel the religion-AGR
 ‘It’s at that moment that your religion begins to be unkind.’ (*Ginen I Obispo* November 3, 2002)

The diagnostics used earlier make the point that this verb has two uses. On the one hand, *tutuhun* can have a meaningless null dummy as its subject, as shown in (36). In such cases, it serves as a raising predicate: it has just one argument—an infinitive clause that names an event—and occurs in the raising construction.

- (36) *Ha tutuhun [humomhum] gi sanhiyung.*
AGR.begin AGR.INF.dark LCL DIR.outside
 ‘It began to get dark outside.’

On the other hand, *tutuhun* can also have a finite embedded clause as an argument, as (37) shows. In such cases it serves as a control predicate: it has two arguments—a noun phrase that names the one who begins and an

embedded clause that names what is begun—and occurs in the control construction.

- (37)a. Ha tutuhun i palão'an [na ti para u gof
AGR begin the woman COMP not FUT AGR very
 tangis].
cry
 'The girl began not to cry so much.'
- b. ... para ta tutuhun dinuebu [para ta fanlâ'la'
FUT AGR begin over.again FUT AGR AGR.live
 sigun gi manmatago'-ta].
according LCL WH[OBL].AGR.PASS.direct-AGR
 '[We (incl.) are being invited...that] we (incl.) might begin again to
 live as we (incl.) were told.' (Ginen I Obispo August 6, 2000)

These two uses of *tutuhun* are distinct. When *tutuhun* has a dummy subject, and therefore serves as a raising predicate, its embedded clause must be infinitival, not finite.

- (38)a. Ha tutuhun [umuchan].
AGR begin AGR.INF.rain
 'It began to rain.'
- b. ?*Ha tutuhun [para u uchan].
AGR begin FUT AGR rain
 ('It began to rain.')

This is expected if *tutuhun* is not (also) a control predicate in (38a).

Although *tutuhun* has two uses, there are circumstances in which these uses can lead to indistinguishable outcomes. When the subject of *tutuhun* is meaningful and the embedded clause is an infinitive clause, as in (35), the sentence could involve raising or control. Linguists often assume that only animate noun phrases can serve as controllers in the control construction. Adopting this point of view, sentences like (35b), in which *tutuhun* has an inanimate subject, must involve raising. But sentences like (35a) have two possible analyses: they could involve raising or control.

21.6 Reduced clauses

Reduced clauses are embedded predicate phrases. Though smaller than clauses, they serve some of the same functions as infinitive clauses. (Constructions that involve a reduced clause are sometimes referred to as

restructuring or *clause reduction*.) Like infinitive clauses, reduced clauses occur only as arguments of a higher predicate. But unlike infinitive clauses, they form part of the same clause as the higher predicate. This section briefly surveys their form and function. 21.6.1 describes the form of the predicate of a reduced clause (called *the embedded predicate* below). 21.6.2 discusses the structure and function of reduced clauses, and 21.6.3 looks briefly at the higher predicates that allow or require them. Finally, 21.6.4 describes how they are used to form impersonal sentences with an implicit argument.

21.6.1 The embedded predicate

The embedded predicate of a reduced clause is generally a verb or adjective. This predicate is marked for aspect in the usual way (see 2.2.1), and shows agreement with the subject. Because reduced clauses are not clauses but merely predicate phrases, the embedded predicate agrees with the subject of the higher predicate—that is, with the subject of the clause that contains the reduced clause. The form of this agreement is determined partly by the agreement on the *higher* predicate. If the higher predicate shows agreement through the person-and-number forms, then the embedded predicate shows infinitival agreement (see 21.2.1). But if higher predicate shows agreement through the number affixes alone (i.e. it does not indicate person), then the embedded predicate shows (finite) realis agreement (see 2.2.2). Intuitively, this unusual pattern maximizes the chances that the form of agreement on *some* predicate of the clause—ideally the higher predicate, but failing that, the embedded predicate—will register the person of the subject.

Recall that intransitive verbs and adjectives in the realis mood show agreement through the number affixes alone. When the higher predicate has this profile (e.g. *pâra* ‘stop’, *malagu* ‘want’), the embedded predicate of the reduced clause shows (finite) realis agreement, as in (39). (The agreement on the embedded predicate in these examples is represented in boldface.)

- (39)a. Pumâra **[hu]** senti i taotão siha gi uriyã-hu].
 AGR.stop AGR.feel the person PL LCL around-AGR
 ‘I stopped feeling the people around me.’ (*Ginen I Obispo* July 16, 2000)
- b. Ti malagu’ si Maria **[ha]** tulaika apiyidu-ña].
 not AGR.want UNM Maria AGR.change surname-AGR
 ‘Maria does not want to change her surname.’ (CD, entry for *apiyidu*)
- c. Yanggin ti manmalagu’ hit **[ta]** tulaika i baban
 if not AGR.want we.INCL AGR.change the bad.L

kustumbret-ta] ...
habit-AGR
 ‘If we (incl.) don’t want to change our (incl.) bad habits...’ (*Ginen I Obispo* July 9, 2000)

The result is that the agreement on the embedded predicate signals the person and number of the subject (e.g. the 1 sg. *hu* in (39a)).

Otherwise, the embedded predicate shows infinitival agreement. This happens when the higher predicate is transitive (e.g. *tutuhun* ‘begin’ in (40a-b)) or in the irrealis mood (40b-c).⁵ Then, the higher predicate’s agreement indicates the person and number of the subject, and the embedded predicate cannot show finite agreement, whether realis (as in (40c)) or irrealis (40b).

- (40)a. Ha tutuhun [kumuentusi si Pedro i MamPaganu
AGR begin INF.speak.to UNM Pedro the PL.Pagan
 ni esti siha na palâbras].
OBL this PL L words
 ‘Peter began to speak to the Pagans with these words.’ (NT 232)
- b. Para bai in tutuhun [muna’gâsgas / ***bai in na’gâsgas** i
FUT AGR begin INF.make clean AGR make.clean the
 kusina].
kitchen
 ‘We (excl.) are going to begin to clean the kitchen.’
- c. Para u pâra [bumisita / ***ha bisita** si Dolores].
FUT AGR stop INF.visit AGR visit UNM Dolores
 ‘He’s going to stop visiting Dolores.’

This agreement pattern is quite clear when the embedded predicate is a transitive verb (as in (39-40)). The pattern is presumably the same when the embedded predicate is an intransitive verb or adjective, but then the paradigms for infinitival agreement and (finite) realis agreement fall together (see 2.2.2.2.1 and 21.2.1). Consider the sentences in (41), which are in the realis mood and contain a reduced clause whose predicate is an intransitive verb (*gera* ‘make war’). This embedded predicate can be assumed to show (finite) realis agreement in (41a), because the higher predicate (*pâra* ‘stop’) is intransitive, but infinitival agreement in (41b), because the higher predicate (*tutuhun* ‘begin’) is transitive.

⁵ In (40a), *si Pedro* ‘Peter’, the subject of the higher verb *tutuhun* ‘begin’, appears inside the reduced clause (see 21.6.2).

- (41)a. Manhinalang i Chapanis ya manpara
 AGR.PASS.make.dread the Japanese and.then AGR.stop
 [manggera].
 AGR.make.war
 ‘The Japanese surrendered and they stopped fighting.’ (CD, entry
 for *halang*)
- b. Ma tutuhun [manggera] i taotao giya Bosnia ...
 AGR.begin AGR.INF.make.war the person LCL Bosnia
 ‘The people began to make war in Bosnia...’ (*Ginen I Obispo* July
 23, 2000)

To sum up, reduced clauses can be differentiated from infinitive clauses by their agreement with the subject. But the difference is obvious from inspection only when the embedded predicate is transitive. Other differences between reduced clauses and infinitive clauses are discussed immediately below.

21.6.2 Structure and function

Like infinitive clauses, reduced clauses are syntactically dependent. They occur only as arguments of a higher predicate; they cannot begin with any of the tense-aspect-mood markers found in finite clauses (see 4.2); and their subject is usually realized outside them (but see below). However, reduced clauses are unlike infinitive clauses in that they are not clauses in their own right. Instead, they form part of the same clause as the higher predicate.

One indication of this is provided by the agreement pattern discussed just above (in 21.6.1): the form of the embedded predicate’s agreement with the higher subject depends on the form of the *higher* predicate’s agreement. This strongly suggests that the two predicates belong to the same clause. Other patterns that reveal that reduced clauses are smaller than clauses include the following:

- (i) Clauses can be negated with the sentential negative *ti*, which precedes the predicate (see 17.2). But reduced clauses cannot be negated with *ti*. Compare the finite embedded clause in (42a) and the infinitive clause in (42b) with the reduced clause in (42c).

- (42)a. Kao ha prumeti siha [na ti para u
 Q AGR.promise them COMP not FUT AGR
 fanchetnudan]?
 AGR.injured
 ‘Did he promise them that they would not be hurt?’ (*Ginen I Obispo*
 November 18, 2001)

- b. Ma'â'ñão si Maria [ti bumisita si nanâ-ña].
AGR.afraid UNM Maria not INF.visit UNM mother-AGR
 'Maria is afraid not to visit her mother.'
- c. *Ma'â'ñão si Maria [ti ha bisita si nanâ-ña].
AGR.afraid UNM Maria not AGR.visit UNM mother-AGR
 ('Maria is afraid not to visit her mother.')

Unsurprisingly, when a clause that contains a reduced clause is negated, the sentential negative *ti* precedes the higher predicate, as in (43).

- (43) Ti malagu' si Juan [ha ângkas i che'lu-ña].
not AGR.want UNM Juan AGR.ride.with the sibling-AGR
 'Juan did not want to ride together with his sibling.' (CD, entry for *ângkas*)

This is the expected pattern if a reduced clause forms part of the same clause as the higher predicate.

(ii) A subject cannot appear in a clause more deeply embedded than the clause in which it originated. In a complex sentence, for instance, the subject of the higher predicate cannot occur inside an embedded clause. This holds true even in control sentences in which the subject of the higher predicate is the controller of the missing subject of the infinitive clause, as in (44). (The subjects in these examples are represented in boldface.)

- (44)a. Yan-ñiha **i famalão'an** [kumassi si Juan].
like-AGR the PL.woman INF.tease UNM Juan
 'The women like teasing Juan.'
- b. *Yan-ñiha [kumassi **i famalão'an** si Juan].
like-AGR INF.tease the PL.woman UNM Juan
 ('The women like teasing Juan.')

However, in sentences containing a reduced clause, the subject of the higher predicate can occur right after the higher predicate or appear *inside* the reduced clause, following the embedded predicate. The two options are illustrated below. In (45), the subject occurs right after the higher predicate (see also (39b-c) and (43)).

- (45) Lão tâya' nai pumâra **i Saina** [ha
but AGR.not.exist COMP AGR.stop the Lord AGR
 honggi na i taotão siña mañotsut].
believe COMP the person can AGR.regretful

‘But God never stopped believing that people can feel remorse.’
(*Ginen I Obispo* July 21, 2002)

In (46), the subject appears inside the reduced clause, following the embedded predicate but preceding other constituents of the reduced clause (see also (40a)).

- (46)a. Ha tutuhun [hinatmi i boti ni hanum].
AGR begin AGR.INF.PASS.penetrate the boat OBL water
‘The boat began to be filled with water (lit. be penetrated by
water).’ (NT 68)
- b. I fine’nena na biâhi anai ha chagi [umusa si
the first L time COMP AGR try INF.use UNM
Ana lupis â’paka’ ...]
Ana skirt.L white
‘The first time that Ana wore a slip...’ (CD, entry for *lupis â ’paka’*)

These word order options reveal that reduced clauses are not clauses. Instead, both the embedded predicate and the higher predicate belong to the same clause; that is why the subject can appear after either of them.

(iii) Still more evidence comes from passive clauses. Passive clauses differ systematically from transitive clauses in the grammatical relations used to realize the verb's arguments (see 10.2.2). The internal argument—the argument that would be the direct object of the transitive clause—is realized as the subject of the corresponding passive clause, and the external argument—the argument that would be the subject of the transitive clause—is realized as an oblique (the passive agent). Compare the transitive clause in (47a) with the corresponding passive clause in (47b).

- (47)a. Ha lalâtdi si Carmen i famagu'un.
AGR scold UNM Carmen the PL.child
 'Carmen scolded the children.'
- b. Manlinalât-di i famagu'un as Carmen.
AGR.PASS.scold the PL.child OBL Carmen
 'The children were scolded by Carmen.'

Interestingly, a passive clause can be formed from a clause that contains a reduced clause. In these *long passives*, the embedded predicate and the higher predicate act as a single complex predicate. The embedded predicate, which must be (originally) transitive, is realized as a passive verb, and the higher predicate is either a passive verb (as in (48)) or a stative intransitive

verb or adjective (49). (As can be seen from these examples, most long passives have no literal English translation.)

- (48)a. Kinenni' Gui' as Pedro gi un bānda ya
 AGR.PASS.take he OBL Pedro LCL a side and.then
 tinituhun linalātdi.
 AGR.PASS.scold AGR.PASS.scold
 'Peter took Him aside and began to rebuke Him (lit. he was begun
 to be scolded by him).' (NT 32)
- b. Matutuhun mafaisin Gui' ni mandisipulu-ña.
 AGR.PASS.begin AGR.PASS.ask he OBL PL.disciple-AGR
 'His disciples began to question Him (lit. he was begun to be asked
 by his disciples)' (NT 117)
- (49)a. Chumaddik inagang si Miguel gi as Maria.
 AGR.fast AGR.PASS.call UNM Miguel OBL Maria
 'Maria hurried to call Miguel.'
- b. O'sun manbinisita i famalão'an ni mediku.
 AGR.bored AGR.PASS.visit the PL.woman OBL doctor
 'The doctor is tired of visiting the women.'

In a long passive, the internal argument of the embedded predicate serves as the subject of the (entire) clause. This can be seen from its form: it is in the unmarked case (see e.g. (49)), it can be realized as a weak pronoun (see (48b)), and both passive predicates can show agreement with it.⁶ The argument that would normally be the subject of the higher predicate is realized as the passive agent.

Although speakers freely produce and accept long passives, sentences of this type cannot be formed from all higher predicates. There is considerable individual variation in the range of higher predicates allowed. Generally, long passives can be formed from most or all of the higher predicates listed in (50) below and from at least some of the higher predicates listed in (52). What matters here is that this construction is possible at all. This fact provides additional evidence that reduced clauses form part of the same clause as the higher predicate.

⁶ However, when the higher predicate is a stative intransitive verb, it generally does not show agreement or else agrees with the external argument; see (49b).

21.6.3 The higher predicate

A reduced clause consists of the embedded predicate plus all its arguments except the argument that would normally be realized as the subject. This *unassigned argument* is generally realized as, or identified with, the subject of the higher predicate, in ways reminiscent of raising and control (see 21.3, 21.4, and 21.5). The difference, in the account given here, is that the embedded clause in raising and control contains a subject that is necessarily unpronounced, whereas a reduced clause contains no subject at all.⁷

When the higher predicate has just one argument (namely, the reduced clause), the unassigned argument of the embedded predicate is realized as subject of the higher predicate. Some common higher predicates of this type are listed in (50). Notice that they overlap with the raising predicates listed earlier in (10), but do not coincide with them.

- (50) PREDICATES THAT ALLOW A ‘RAISING’ REDUCED CLAUSE
- | | |
|----------|---------------------|
| makkat | ‘hard, difficult’ |
| mapput | ‘hard, complicated’ |
| munhâyan | ‘done, finished’ |
| pâra | ‘stop’ |
| sessu | ‘often’ |
| tutuhun | ‘begin’ |

Some illustrative examples were cited earlier (in 21.6.1 and 21.6.2); several more appear below.

- (51)a. Yanggin munhâyan hamyu [en katkulu i
if AGR.done you.DU AGR calculate the
 matiriât], sangâni si tâta.
material say.to UNM father
 ‘When you (du.) are done calculating the material, tell Father.’ (CD,
 entry for *katkulu*)
- b. Mansessu [ma bisita si Tita giya Luta].
AGR.often AGR.visit UNM Tita LCL Luta
 ‘They often visit Tita on Rota.’

When the higher predicate has two arguments, the argument that is not the reduced clause is realized as the subject, and the unassigned argument of

⁷ Alternatively, one could say that embedded clauses and reduced clauses both have subjects, but the subjects occupy different positions in constituent structure.

the embedded predicate is identified with it. Some very common higher predicates of this type are listed in (52). As might be expected, these overlap with some of the control predicates listed earlier in (17) and (20).

- (52) PREDICATES THAT ALLOW A ‘CONTROL’ REDUCED CLAUSE
- | | |
|----------|----------------------|
| bâsta | ‘stop, quit, enough’ |
| chaddik | ‘fast, hurried’ |
| chagi | ‘try’ |
| hassu | ‘think’ |
| ma’â’ñaô | ‘afraid’ |
| malagu’ | ‘want’ |
| ya- | ‘like’ |

See the examples cited earlier in 21.6.1 and 21.6.2, as well as the following.

- (53)a. Ma’â’ñaô [humãñaô i patgun para i iskuela] ...
AGR.afraid AGR.go the child to the school
 ‘The child is afraid to go to school [because he is often threatened].’
 (CD, entry for *ma’â’ñaô*)
- b. Ti ya-ña [gumimin si Pete âmut
not like-AGR AGR.INF.ANTIP.drink UNM Pete medicine.L
 Chamorro].
Chamorro
 ‘Pete doesn’t like to drink Chamorro medicine.’ (CD, entry for *gimin*)

There are apparently no higher predicates that have a reduced clause argument and two other arguments.

Speakers vary considerably in their views of which higher predicates can have an argument that is a reduced clause. For some speakers, almost every control predicate that has just two arguments allows one of these arguments to be an infinitive clause or a reduced clause. For other speakers, the range of predicates that allow a reduced clause is more limited. This is an area where further investigation is needed.

21.6.4 Sentences with an implicit argument

Reduced clauses can be used to form an impersonal construction in which the unassigned argument of the embedded predicate is an indefinite implicit argument. Curiously, infinitive clauses cannot be used in this construction.

The construction is formed from adjectives, such as *mãoлик* ‘good’ and *mapput* ‘hard, difficult’, that have an argument that can describe an event. This argument can be a finite embedded clause, as (54) shows.

- (54)a. *Mãolekña* [na un chotchu gollai] yanggin
AGR.good.COMPAR COMP AGR.ANTIP.eat vegetable if
malângu hảo.
AGR.sick you
 ‘It is better that you eat vegetables if you’re sick.’ (CD, entry for *chotchu*)
- b. Sa’ ti mapput [para ta fa’baban maisa hit
because not AGR.hard FUT AGR.deceive.L self us.INCL
ya ta na’atlibis i minagâhit].
and.then AGR.make.opposite the truth
 ‘Because it’s not hard for us (incl.) to deceive ourselves (incl.) and for us (incl.) to turn the truth upside-down.’ (*Ginen I Obispo* October 28, 2001)

Alternatively, the argument can be a reduced clause. Then it is possible for the unassigned argument of the embedded predicate to be an indefinite implicit argument—an argument that has no syntactic realization at all and is understood to be nonspecific (see 9.3.2). The result is an impersonal construction that makes a general statement, as in the following.

- (55)a. *Mãolekña* [humânão adilantão] ki i
AGR.good.COMPAR AGR.go in.advance than the
madingu.
AGR.PASS.leave
 ‘It is better to go in advance than to be left behind.’ (CD, entry for *adilantão*)
- b. Ha kumprendi na mapput [lumâ’la’ yan ottru
AGR.understand COMP AGR.hard AGR.live with other
tâotâo].
person
 ‘He understood that it is hard to live with other people.’ (*Ginen I Obispo* September 8, 2002)
- c. *Mãoлик* [manngasan an hafnut].
AGR.good AGR.ANTIP.trap.fish if incoming.tide
 ‘It’s good to trap fish during high tide.’ (CD, entry for *ngasan*)

These examples involve reduced clauses whose embedded predicate is intransitive (in (55a-b)) or antipassive (55c). Otherwise, when the embedded predicate is originally transitive but not in the antipassive, long passive must occur (see 21.6.2). Then the embedded predicate appears in the *ma*-passive, and its unassigned argument—the implicit argument—corresponds to the passive agent. (The use of the *ma*-passive is expected, given that the *ma*-passive allows the passive agent to be an implicit argument; see 9.3.2.2.)

- (56)a. Måolik manmafa'nâ'gui i famagu'un
 AGR.good AGR.PASS.teach the PL.child
 manngasan.
 AGR.INF.ANTIP.trap.fish
 'It's good to teach children to catch fish by trapping them.' (CD, entry for *ngasan*)
- b. Mapput masâtba esti na problema gi halum
 AGR.hard AGR.PASS.solve this L problem LCL inside.L
 familia.
 family
 'It is difficult to solve this problem within the family.' (CD, entry for *mapput*)

The fact that long passive is required when the embedded predicate is transitive reveals that this construction involves a reduced clause, not an infinitive clause. In fact, infinitive clauses are not allowed, as can be seen from (57).

- (57)a. *Måolekña [muna'lâgu i nengkanu' pâ'gu].
 AGR.good.COMPAR INF.cook the food now
 ('It's better to cook the food now.')
- b. *Mapput [tumattiyi i areklamentu siha].
 AGR.hard INF.follow the rule PL
 ('It's hard to follow the rules.')

More generally, infinitive clauses in Chamorro do not permit their missing subject to be an indefinite implicit argument. This is another way in which they differ from reduced clauses, which allow their unassigned argument to be implicit.

Impersonal constructions of the type shown in (55-56) can be formed from many higher predicates that are adjectives. More examples are cited below.

- (58)a. Pribidu makonni' i aliling tulompu.
AGR.forbidden AGR.PASS.take the sea.shell.L top
'It is forbidden to harvest *aliling tulompu*.' (CD, entry for *aliling tulompu*)
- b. Na'maguf ma'atan i buton agaga' siha.
AGR.pleasant AGR.PASS.look.at the flower.sp PL
'It is so pleasing to see the *Gomphrena globosa*.' (CD, entry for *butón agaga'*)

21.7 Further reading

See Chung (2019) for discussion of control into infinitive clauses and finite clauses. The discussion of restructuring in 21.6 improves on the description in Chung (2006).

22

QUESTIONS

Chamorro has several strategies for forming questions. One strategy involves the dependency known as *wh*-movement. When an interrogative word or phrase is displaced to the left edge of a question by *wh*-movement, special types of agreement are used to register information about the displaced constituent.

22.1 Overview

Chamorro has several strategies for forming questions. One strategy for forming constituent questions involves the dependency known as *wh*-movement. When an interrogative word or phrase is displaced to the left edge of a question by *wh*-movement, special types of agreement, called *wh*-agreement and *complementizer agreement*, are used to register information about the constituent that has been displaced.

This chapter is devoted to questions. 22.2 describes the formation of polar questions and alternative questions. Then, 22.3 lays out the basics of constituent questions, 22.4 describes the details of *wh*-agreement and complementizer agreement, and 22.5 discusses embedded questions and long-distance questions.

22.2 Polar questions and alternative questions

Polar questions are questions that can be answered *hunggan* ‘yes’ or *ãhi* ‘no’. Alternative questions explicitly present two (or more) alternatives for the answer. Like many other languages, Chamorro treats polar questions and alternative questions alike. When these questions serve as main clauses, they are either introduced by the complementizer *kão* (glossed *Q*) or else distinguished from statements merely by question intonation. (Question intonation is indicated by a sharp final rise; see Topping and Dungca 1973: 163-164.) The options are illustrated for polar questions in (1).

- (1) a. **Kão** guaha nai manli’i’ hão lu’ão?
 Q *AGR.exist* *COMP* *AGR.ANTIP.see* *you* *bird.sp.*
 ‘Have you ever seen a brown booby?’ (CD, entry for *lu’ão*)

- b. **Kão** para un ika gi as Tun Antonio?
Q FUT AGR donate LCL Mr. Antonio
 ‘Are you going to give a donation to Tun Antonio?’ (CD, entry for *ika*)
- c. Para u guaha pãstit gi giput?
FUT AGR exist pastry LCL party
 ‘Will there be pastries at the party?’ (CD, entry for *pãstit*)
- d. Ya-mu mumatlina?
like-AGR AGR.INF.godmother
 ‘Do you like being a godmother?’ (CD, entry for *matlina*)

They are illustrated for alternative questions in (2).

- (2) a. **Kão** ga’ñam-mu otubai’ pat karetan guaka para
Q prefer-AGR motor.scooter or cart.L cow for
i lanchu?
the farm
 ‘Would you prefer a motor scooter or a bulcart for the farm?’ (CD, entry for *otubai’*)
- b. **Kao** manmasepãra i familia pat manmapo’lu ha’
Q AGR.PASS.separate the family or AGR.PASS.put EMP
gi un lugat?
LCL one place
 ‘Were the families separated or were they just put in one place?’
 (MM 14)¹
- c. Pa un nã’i yu’ ni malago’-hu pat âhi’?
FUT AGR give me OBL WH[OBL].want-AGR or no
 ‘Are you going to give me what I want or not?’ (CD, entry for *paun*)

Both polar questions and alternative questions can occur as finite embedded clauses in complex sentences. Then they must be introduced by the complementizer *kão* (see 20.2.1, 20.3.1, and 20.4.1). Consider the embedded polar questions in (3) and the embedded alternative questions in (4).

- (3) a. Ti hu tungu’ [**kão** mǎolik
not AGR know Q AGR.good

¹ The examples cited from MM are from transcribed interviews in the Rota dialect, and are presented in the orthography used in that work.

- mafa'âmüt esti i palapan hilitai.
AGR.PASS.make.into.medicine this the plant.sp.
'I don't know if this *palapan hilitai* is medicinal (lit. good to make
into medicine).' (CD, entry for *palapan hilitai*)
b. Ha hahassu [kǎo para u re'enggancha ta'lu].
AGR.think.PROG Q FUT AGR.re-enlist again
'He is thinking about whether he will re-enlist again.' (CD, entry for
re'enggancha)
c. Ispiha i chiba [kǎo gaddun].
look.for the goat Q AGR.entangled
'Check the goat to see if it is entangled.' (CD, entry for *chiba*)
(4) a. Ti hu tungu' [kǎo lokka' pat e'baba' esti i
not AGR.know Q AGR.tall or AGR.short this the
cha'guan Saigon].
Cinderella.weed
'I don't know if this Cinderella weed is tall or short.' (CD, entry for
chả'guan Saigón)
b. Ha hahassu [kǎo para u kǎnnu' pat mungnga].
AGR.think.PROG Q FUT AGR.eat or don't
'He is thinking about whether he should eat it or not.' (CD, entry for
mungnga)

22.3 Constituent questions: basics

Constituent questions are questions formed from interrogative words. In Chamorro, almost all interrogative words are general indefinites (see 9.2.1). Interrogative words can serve as predicates, arguments, or adjuncts. They can also be part of phrases that serve as predicates, arguments, or adjuncts, in which case the phrase is called an *interrogative phrase*. The syntactic function of interrogative words and phrases affects the form of the question, including whether wh-movement and the special types of agreement associated with it are involved. The details are described below.

22.3.1 Questions of the predicate

Interrogative words can serve as the predicate of a constituent question, as can be seen from the following.

- (5) a. **Hǎyi** na'an-mu?
who? *name-AGR*
 'What is your name (lit. who is your name)?'

- b. **Hâfa** ennao na tinanum i guma' mela?
what? that L plant the plant.sp.
 'What is that *hibiscus rosa-sinensis* plant?' (CD, entry for *guma' mela*)
- c. **Ngai'an** i sagun i ayuyu?
when? the season.L the coconut.crab
 'When is the coconut crab hunting season?' (CD, entry for *sâgu*)
- d. **Taimanu** mineddong-ña i mangga?
how? size-AGR the mango
 'How big is the size of the mango?' (CD, entry for *mineddung*)
- e. **Manmânggi** i panglão orus siha?
AGR.where.is the golden.crab PL
 'Where are the golden crabs?' (CD, entry for *panglão orus*)

Most interrogative words that can serve as predicates can serve as adjuncts or arguments as well. However, a few interrogative words, such as the interrogative verb *mânggi* 'where is?', must serve as predicates.²

Interrogative words can also serve as part of the predicate when the predicate is a noun phrase or prepositional phrase (see 3.4.1.2). For instance, when the predicate is a noun phrase, an interrogative word can serve as its determiner (see (6a)) or the determiner of its possessor (6b-c).³ When the predicate is a prepositional phrase, an interrogative word can serve as its object (6d).⁴

² Topping and Dungca (1973: 235-236) suggest that *mânggi* is derived from *mânu nai gaigi*, which literally means 'where is?'.
³ Although an interrogative word can serve as the possessor of a noun phrase predicate, that happens only rarely. Other constructions, such as verbs of possession, are used instead (see 14.3).
⁴ Often when an interrogative word is part of a predicate that is a noun phrase or prepositional phrase, it forms part of the same phonological word as the noun or preposition, although this is not represented in the orthographies. Prepositions in Chamorro are phonologically dependent elements that lean on material to their right to form a phonological word. In (6d), the preposition *ginin* 'from' forms a phonological word with *mânu* 'where?', which serves as its object. Similarly, nouns that marked with the post-head form of the linker form a phonological word with material to their right (see 7.3.1). In (6b-c), the nouns *pulu* 'hair' and *siudadânu* 'citizen, resident' are marked with this form of the linker, so they form part of the same phonological word as *hâfa* 'what?' and *mânu* 'which?'.

- (6) a. [**Hâfa** na klâsin] talâya ennâo?
what? L sort.L fishing.net that
 ‘What kind of fishing net is that?’ (CD, entry for *talâya*)
- b. Pulun [**hâfa** na gâ’ga’] mohon esti?
hair.L what? L animal UNREAL this
 ‘What kind of animal fur is this (lit. Fur of what animal is this)?’
 (CD, entry for *pulun gâ’ga’*)
- c. Siudadânun [**mânu** hâo na lugât]?
resident.L which? you L place
 ‘Which state are you a resident of?’ (CD, entry for *siudadânu*)
- d. [Ginin **manu**] mângi i salang?
from where? to.here the land.slug
 ‘Where do the land slugs come from?’ (CD, entry for *sâlang*)

Finally, Chamorro has a small number of phonologically dependent verbs that must lean on material to their right to form a phonological word (see 2.2.1.1.2). One such verb is the phonologically dependent verb *malak* ‘go to’. *Malak* can combine with a goal argument that is an interrogative word, as in (7). When that happens, the two form a single phonological word, although this is not reflected in the orthographies.⁵

- (7) Manmalak **mânu** hamyu anai matututuhun i
AGR.go.to where? you.PL when AGR.PASS.begin.PROG the
gera?
war
 ‘Where did you (pl.) go when the war was beginning?’ (MM 109)

These types of constituent questions are quite common. In all of them, the interrogative word occurs ‘in place’ (*in situ*), meaning that its location is determined by its function as the predicate, or by its syntactic category, not by its status as an interrogative word. The interrogative words in (5) occur in the same location as other predicates, at the beginning of the clause. The interrogative words in (6) and (7) occur in positions normally occupied by other noun phrases (see (6d) and (7)) or other determiners (6a-c). (The same positions can be occupied by demonstratives, such as *atyû* ‘that (near third

⁵ Although the verbs of possession, *gai* ‘have’ and *tai* ‘not have’, are phonologically dependent, they cannot combine with an interrogative word. This is because *gai* and *tai* must combine with a head noun (see 14.3), but no interrogative words are nouns. (Instead, they are general indefinites, which could be considered a type of pronoun.)

person)', for instance; see 6.2.2.) The fact that the interrogative word occurs *in situ* distinguishes questions of the predicate from other types of constituent questions.

22.3.2 Questions of arguments

Interrogative words or phrases can serve as arguments, or parts of arguments, of the predicate. Specifically, they can serve as subjects, direct objects, or obliques associated with a verb or adjective, or as subjects of a predicate that is a noun or preposition. These interrogative words or phrases differ from other arguments in that they do not follow the predicate, but instead occur at the left edge of the question. Their location is determined by their interrogative status, in other words. The discussion here assumes that they are displaced to the left edge of the question by wh-movement.

When a noun phrase is displaced by wh-movement, it appears in the unmarked case, even if it would have been in some other case if wh-movement had not occurred. Consider the questions in (8) below, which have an interrogative word that is a noun phrase. In (8a-b), the interrogative word is a subject; in (8c), a passive agent; and in (8d), an oblique argument that specifies location. Even though passive agents are normally in the oblique case (see 5.1.2.2) and noun phrases that specify location are normally in the local case (see 5.1.2.3), all these interrogative words are in the unmarked case.

- (8) a. **Hâyi** fafa'tinas guini na guma'?
 who? one.who.cooks LCL.this L house
 'Who is the cook in this house?' (CD, entry for *fâfa'tinas*)
- b. **Hâfa** sumatba hamyu gi durantin i gera?
 what? WH[SBJ].save you.PL LCL during.L the war
 'What saved you (pl.) during the war?' (MM 116)
- c. **Hâyi** para u inaprubetcha todû siha i
 who? FUT AGR PASS.make.use.of all PL the
 guinaha-mu?
 possession-AGR
 'Who is going to make use of all your possessions?' (*Ginen I*
 Obispo October 6, 2002)
- d. **Amânu** nai umatuk hao?
 where? COMP AGR.hide you
 'Where did you hide?' (MM 44)

One exception to the generalization: some speakers of the Saipan dialect allow a noun phrase to be marked for the local case even when it is displaced

by wh-movement. For these speakers, a noun phrase that would normally be in the local case, such as *hãy* ‘who’ in (9), can appear either in the unmarked case or the local case when it is displaced.

- (9) (Gi) **hãy** ni mamahlão hảo?
LCL who? COMP AGR.ashamed you
 ‘Who are you ashamed of?’

When an interrogative word serves as part of an argument, the syntactic categories of the interrogative word and the argument determine whether the entire interrogative phrase, or just the interrogative word, is displaced by wh-movement. Specifically:

When the interrogative word is the determiner of a noun phrase, the entire noun phrase is usually displaced by wh-movement, as shown in (10). (The noun phrase is enclosed in brackets below.)

- (10)a. [**Hãy** na pãli'] para u sãonão gi interu?
who? L priest FUT AGRparticipate LCL funeral
 ‘Which priest will participate in the funeral?’ (CD, entry for *pãli*)
 b. [**Kuântu** na guihan] makonni' ni chinchulu?
how.many? L fish AGR.PASS.catch OBL fishing.net
 ‘How many fish were caught with the long flat fishing net?’ (CD, entry for *chinchulu*)
 c. [**Hãfa** na klasin nengkanu'] in kanu' durantin i
what? L sort.L food AGR eat during.L the
gera?
war
 ‘What types of food did you (pl.) eat during the war?’ (MM 13)

But it is also possible for the interrogative determiner to be displaced on its own, leaving the rest of the noun phrase in place, as in (11) (see Vincent 2017).

- (11)a. **Kuântu** un konni' [na papangpang]?
how.many? AGR catch L slipper.lobster
 ‘How many slipper lobsters did you catch?’ (CD, entry for *pápangpang*)
 b. **Mãnu** malago'-mu [na sãsi'], i plastik pat i
which? WH[OBL].want-AGR L ruler the plastic or the
hayu?
wood

‘Which measuring stick do you want, the plastic or the wood?’ (CD, entry for *sâsi*)

When the interrogative word is the object of a prepositional phrase, or that object’s determiner, the entire prepositional phrase is displaced by wh-movement, as shown in (12). Note that the interrogative noun phrase cannot be displaced on its own.

- (12)a. [Ginin **hâyi**] nai un risibi i katta?
from who? COMP you receive the letter
 ‘From whom did you receive the letter?’
 b. [Ginin **mânu** na fandânggu] na manmâfattu
from which? L wedding COMP AGR.arrive.PROG
 atyu siha na tâotâo?
that PL L person
 ‘From what wedding are those people coming?’

Finally, an interrogative word can be the possessor of an argument, or the possessor’s determiner, in certain limited contexts; namely, when the possessed noun has the null indefinite article as its determiner and serves as the direct object or the subject of an intransitive (state) predicate (see Chung 1998). In such cases the possessor is displaced by wh-movement, leaving behind the possessed noun, which shows possessor agreement (see 7.1.1).

- (13)a. **Hâyi** mās tatkilu’ [tatos-ña]?
who? more AGR.high bet-AGR
 ‘Who has the highest bet (lit. whose bet is the highest)?’ (CD, entry for *tâtus*)
 b. [**Hâfa** na kareta] kâ’ka’ [bintanâ-ña]?
what? L car AGR.crack window-AGR
 ‘What car’s window cracked?’

Questions of arguments are discussed further in 22.4.

22.3.3 Questions of adjuncts

Interrogative words or phrases can serve as adjuncts to the predicate or to the clause. Adjuncts are optional constituents that provide information about the event or state’s location in time or space, duration, frequency, manner, means, degree, cause, purpose, and so on (see 3.3). Adjuncts that are interrogative words or phrases are displaced to the left edge of the question by wh-movement. Some examples are given below.

- (14)a. **Hâfa taimanu** in seda' i nengkanu'?
how? AGRfind the food
 'How did you (pl.) find the food?' (MM 13)
- b. [Para **hâfa**] di un chachathinassu put hâfa
for what? PRT AGRworry.PROG about what?
 kinannono'-hu?
WH[OBJ].eat-AGR.PROG
 'Why (lit. for what) are you worrying about what I've been eating?'
 (from a tape-recorded narrative)
- c. **Ngai'an** nai mafañngu hâo?
when? COMP AGR.born you
 'When were you born?' (CD, entry for *ngai'an*)
- d. [**Kuântus** tiempu] para un ekstendi i bakasion-mu?
how.much? time FUT AGRextend the vacation-AGR
 'How long will you extend your vacation?' (CD, entry for *ekstendi*)

Many adjuncts have no case marking. When an adjunct that would normally be marked for case is displaced by wh-movement, it appears in the unmarked case. But, just as with questions of arguments (22.3.2), some speakers of the Saipan dialect allow an adjunct to be marked for the local case even when it has been displaced by wh-movement. The two options are illustrated in (15).

- (15)a. **Amânu** nai siña hit manmamâhan pân para
where? COMP can we.INCL AGR.ANTIP.buy bread for
 esti siha na tâotâo?
this PL L person
 'Where can we (incl.) buy bread for these people?' (*Ginen I Obispo*
 July 30, 2000)
- b. [Gi **mânu** na lanchu] ni para un na'fandokku'
LCL which? L farm COMP FUT AGRmake.AGR.sprout
 i mangga?
the mango
 'In which farm will you grow your mango trees?' (CD, entry for *dokku'*)

Questions of adjuncts are discussed further in 22.4.

22.4 Wh-agreement and complementizer agreement

When an interrogative word or phrase is placed at the left edge of the question by wh-movement, information about the displaced constituent is registered elsewhere by two special types of agreement, which are called wh-agreement and complementizer agreement (see Chung 1998 and the references cited there). Wh-agreement, which is described in 22.4.1, registers the grammatical relation of the displaced constituent on the predicate. Complementizer agreement, which is described in 22.4.2, registers other information about the displaced constituent on the complementizer of the question. Although the discussion here is limited to questions, these distinctive types of agreement are also found in the focus construction and in relative clauses (see Chapters 23 and 24).

22.4.1 Wh-agreement

When an interrogative word or phrase is displaced by wh-movement, its grammatical relation is registered on the predicate associated with it by wh-agreement. This special agreement indicates whether the displaced constituent is a subject, object, oblique argument, or adjunct. Like normal agreement with the subject, wh-agreement appears only on verbs or adjectives, is sensitive to mood and transitivity, and has both overt (pronounced) and null forms. The overt forms replace the normal forms of agreement with the subject. Otherwise, if wh-agreement is not realized overtly, the predicate of the question shows agreement with the subject as usual.

The overt forms of wh-agreement involve morphology that otherwise appears on nonfinite predicates in Chamorro; namely, the infinitival agreement infix *-um-*, and a process of nominalization (abbreviated NMLZ in (16)) that causes the predicate to have the form of a noun (see 28.6). (These types of morphology are descended historically from Proto-Austronesian voice morphology; see Chen 2017.) Nominalized predicates show agreement as if their subject were a possessor (see 7.1.1); their direct object, if any, appears in the oblique case rather than the unmarked case. Some forms of wh-agreement combine nominalization with the infix *-in-*; others involve nominalization without *-in-*.

The forms of wh-agreement are listed below. Note that object wh-agreement and adjunct wh-agreement are realized optionally; that is, their overt forms alternate with a null form that allows the predicate to show normal agreement with the subject.

(16)	WH-AGREEMENT when the displaced constituent is a:	
	<i>Subject</i>	
	Of realis transitive verb	-um-
	Other subject	—
	<i>Object [wh-agreement is realized optionally]</i>	
	Direct object of transitive or causative verb; oblique object of applicative, causative, or passive verb	NMLZ plus -in- (but -in- is omitted on passive verbs)
	Direct object of applicative verb	—
	<i>Oblique</i>	
	Instrument; oblique argument of intransitive verb or adjective	NMLZ, with optional -in- on state predicates
	Passive agent	—
	<i>Adjunct [wh-agreement is realized optionally]</i>	
	Manner, means	NMLZ
	Other adjunct	—
	<i>Possessor</i>	—

These forms are discussed and illustrated below.

22.4.1.1 With a subject

Subject wh-agreement registers the grammatical relation of a displaced constituent that is a subject. This form of wh-agreement is sensitive to mood and transitivity. It is realized as the infix *-um-* when the predicate is a transitive verb in the realis mood. (Predicates that show an overt form of wh-agreement appear in boldface in the questions below.)

- (17)a. Hâyi **gumugu'ut** esti na pattida?
who WH[SBJ].support.PROG this L party
 'Who is supporting this party?' (CD, entry for *gu'ut*)
- b. Hâyi na pitsona **tumungu'** hâfa masusedi?
who? L person WH[SBJ].know what? AGR.PASS.experience
 'What person knows what happened?' (CD, entry for *pitsona*)

Otherwise, subject wh-agreement has no overt realization. The displaced constituent in the questions in (18) is a subject, but the predicate is intransitive: a verb in (18a), an adjective in (18b), a passive verb in (18c), and an antipassive verb in (18d). Because wh-agreement is not realized overtly, the predicate shows normal agreement with the subject.

- (18)a. Hăyi ottru humănăo para i lisăyu?
who? other AGR.go to the rosary
 ‘Who else went to the rosary?’ (CD, entry for *ottru*)
- b. Hăyi măs la’mun gi halum tănū’?
who? more AGR.familiar LCL inside.L land
 ‘Who is most familiar with the woods in this area?’ (CD, entry for *la’mun*)
- c. Hăyi sinaolak as Jose?
who? AGR.PASS.spank OBL Jose
 ‘Who was spanked by Jose?’ (CD, entry for *sinaolak*)
- d. Hăyi manggubiebietna guini gi islan Tinian?
who? AGR.ANTIP.govern.PROG LCL.this LCL island.L Tinian
 ‘Who is governing here on the island of Tinian?’ (CD, entry for *gubietna*)

Similarly, the displaced constituent in the constituent questions in (19) is a subject, but these questions are in the irrealis mood. Once again, wh-agreement is not realized overtly, and the predicate shows normal agreement with the subject.

- (19)a. Hăyi para u hănăo kuentăk-ku?
who? FUT AGR go account-AGR
 ‘Who will go on my behalf?’ (CD, entry for *u*)
- b. Hăyi para u yaka’ esti na titiyas?
who? FUT AGR knead this L tortillas
 ‘Who will knead these tortillas?’ (CD, entry for *yaka’*)

Many Chamorro speakers prefer not to question the subject of a transitive verb in the irrealis mood, especially when the direct object is animate. Such questions are typically expressed as questions of the agent of the corresponding passive verb, as in (20) (see Chung 1989). Wh-agreement with a displaced passive agent is not realized overtly, so once again, the predicate shows normal agreement with the subject.

- (20)a. Hăyi para u faninatan i famagu’un mientras
who? FUT AGR AGR.PASS.watch the PL.child while
machocho’chu’ hăo?
AGR.work.PROG you
 ‘Who will watch the children (lit. by whom will the children be watched) while you work?’ (CD, entry for *inatan*)

- b. Hâyi para u chinili' i ginanna gi ileksion?
who? FUT AGR PASS.take the victory LCL election
 'Who is going to take the victory (lit. by whom is the victory going to be taken) in the election?' (CD, entry for *ginanna*)

22.4.1.2 With an object

Object wh-agreement registers the grammatical relation of a displaced constituent that is a direct object or related to a direct object, as described below. This form of wh-agreement is also sensitive to transitivity. It is realized, optionally, as the combination of the infix *-in-* plus nominalization when the displaced constituent is the direct object of an ordinary transitive verb. Compare (21a), which illustrates the overt form, with (21b), which shows that this form is optional.

- (21)a. Ya hâfa **hinaso-mu** put i
and.then what? WH[OBJ].remember-AGR about the
eskuelan-ñiha i Chapanis?
school-AGR the Japanese
 'And what do you remember about the Japanese school?' (MM 167)
- b. Hâfa un hasu put i gera?
what? AGR remember about the war
 'What do you remember about the war?' (MM 192)

Object wh-agreement has the same optional realization in two other contexts. First, when the displaced constituent is the direct object of a causative verb. This is expected, since causative verbs are transitive (see 12.1).

- (22)a. Hâyi **nina'kati-mu**?
who? WH[OBJ].make.cry-AGR
 'Who did you make cry?'
 b. Hâyi un na'kâti?
who? AGR make.cry
 'Who did you make cry?'

Second, when the displaced constituent is the oblique object of an applicative or causative verb; that is, when it realizes the internal argument of the original transitive verb from which the applicative or causative is derived (see 11.3.2.3, 11.5, and 12.3.4.2). The displaced constituent is the oblique object of an applicative verb in (23) and the oblique object of a causative verb in (24).

- (23)a. Håfa si Maria **sinanganen-ña** as Joaquin?
what? UNM Maria WH[OBJ].say.to-AGR OBL Joaquin
 ‘What did Maria tell Joaquin?’
- b. Håfa si Maria ha sangani si Joaquin?
what? UNM Maria AGR say.to UNM Joaquin
 ‘What did Maria tell Joaquin?’
- (24)a. Håfa **nina’li’e’-ña** i patgun palao’an as
what? WH[OBJ].make.see-AGR the child.L female OBL
nanã-ña?
mother-AGR
 ‘What did the girl show her mother (lit. cause her mother to see)?’
- b. Håfa ha na’li’i’ i patgun palao’an si
what? AGR make.see the child.L female UNM
nanã-ña?
mother-AGR
 ‘What did the girl show her mother (lit. cause her mother to see)?’

When the displaced constituent is the oblique object of the passive of an applicative or causative verb, object wh-agreement is realized, optionally, as nominalization, but *-in-* does not appear. (Nominalizations of passive verbs are formed from the *ma*-passive; see 10.2.2.3. In general, the passive prefix *ma-* and the infix *-in-* do not co-occur.)

- (25)a. Gi finakpu’ i gera, hafa **manmafa’na’guen-ñiha**
LCL end.L the war what? WH[OBJ].AGR.PASS.teach-AGR
 i famagu’un Chamorro?
the PL.child.L Chamorro
 ‘At the end of the war, what were the Chamorro children taught?’
 (MM 76)
- b. Dispues di WWII, hafa manmafa’na’gui na linguahi i
after PRT WWII what? AGR.PASS.teach L language the
famagu’un?
PL.child
 ‘After WWII, what language were the children taught?’ (MM 72)

Finally, note that object wh-agreement has no overt realization when the displaced constituent is the direct object of an applicative verb (i.e. the applicative object; see 11.2.2.3, 11.3.2.3, and 11.5). This is perhaps surprising, given that applicatives—like causatives—are transitive.

- (26)a. Hâyi un kuentusi put i problema?
who? AGR speak.to about the problem
 ‘Who did you speak to about the problem?’ (CD, entry for *kuentusi*)
- b. Hâyi un chuli’i nu i amut?
who? AGR take.to OBL the medicine
 ‘Who did you take the medicine to?’

22.4.1.3 With an oblique

Wh-agreement with a displaced oblique is realized as nominalization in two specific contexts. First, when the displaced constituent is an instrument, as in (27).

- (27)a. Hâfa **chachâk-mu** nu hâgu?
what? WH[OBL].cut-AGR OBL you
 ‘What did you cut yourself with?’
- b. Hâfa para **goddet-ta** ni chiba?
what? FUT WH[OBL].tie-AGR OBL goat
 ‘What are we (incl.) going to tie up the goat with?’

Second, when the displaced constituent is the oblique argument of an adjective or intransitive verb. (One such oblique argument is the comitative associated with a reciprocal verb; see (28c-d) and 13.3.2.) When the predicate describes a state, nominalization can be accompanied by the *-in-* infix, as in (28b).

- (28)a. Hâfa **malagu’-ñiha?**
what? WH[OBL].want-AGR
 ‘What did they want?’ (MM 193)
- b. Hâyi **ma’a’ñão-ñiha / mina’a’ñão-ñiha?**
who? WH[OBL].afraid-AGR
 ‘Who are they afraid of?’
- c. Hâyi **akuentusesen-ña** si Carmen?
who? WH[OBL].RECP.speak.to-AGR.PROG UNM Carmen
 ‘Who is Carmen speaking (lit. speaking to each other) with?’
- d. Hâyi para **ali’e’-ta?**
who? FUT WH[OBL].RECP.see-AGR
 ‘Who are we (incl.) going to meet (lit. see each other) with?’

Other obliques do not show this form of wh-agreement. Instead, either they are cross-referenced by a different form of wh-agreement when they are

displaced by wh-movement, or else they cannot be displaced at all. More specifically:

(i) A passive agent (= the oblique that realizes the external argument of a passive verb) can be displaced by wh-movement when the verb is in the irrealis mood, but—for most speakers—not otherwise.⁶ In such cases, wh-agreement has no overt realization (see 22.4.1.1).

(ii) An antipassive oblique (= the oblique that realizes the internal argument of an antipassive verb) cannot be displaced by wh-movement.

(iii) Oblique objects of applicative or causative verbs can be displaced by wh-movement, but in such cases, the predicate shows object wh-agreement (see 22.4.1.2).

22.4.1.4 With an adjunct

Wh-agreement with a displaced adjunct is realized, optionally, as nominalization when the adjunct is a manner or means phrase.

- (29)a. Estaimanu **manmatratan-mimiyu** nu i taotao
how? WH[DJ].AGR.PASS.treat-AGR.PROG OBL the person.L
 tãnu' nu i Chapanis?
land OBL the Japanese
 'How were you (pl.) local people being treated by the Japanese?'
 (MM 224)
- b. Hãfa taimanu manmatrata hamyu nai Chapanis?
how? AGR.PASS.treat you.PL OBL Japanese
 'How were you (pl.) treated by the Japanese?' (MM 154)
- (30)a. Hãfa taimanu **tungo'-mu** na mattu i
how? WH[DJ].know-AGR COMP AGR.arrive the
 batkunairi?
plane
 'How did you know that the airplanes had arrived?' (MM 171)
- b. Hãfa taimanu para un dollan gi atuf i gima'?
how? FUT AGR.balance LCL roof.L the house
 'How would you balance yourself on the rooftop?' (CD, entry for *dollan*)

Wh-agreement with other displaced adjuncts has no overt realization.

⁶ Some speakers allow a passive agent to be displaced when the verb is in the realis mood, especially when the corresponding transitive clause might violate the person-animacy restriction; e.g. when the passive agent is third person and the derived subject of passive is second person (see 16.2).

22.4.2 Complementizer agreement

Complementizer agreement uses the complementizer of the constituent question to register information about the displaced constituent's syntactic category and meaning. This agreement replaces the normal finite complementizer, if any, with a special form of the complementizer that follows the displaced constituent, and is sometimes overt and other times null. The special complementizer has three overt realizations, *na*, *nai*, and *ni*, whose use is subject to some regional and individual variation. (The realizations are different in most relative clauses; see 24.3.2 and 24.4.) One realization, *na*, looks like the complementizer for finite embedded clauses (see 20.2.1); the other realizations apparently do not occur outside complementizer agreement. *Na* is used most commonly in Guam, *nai* in Rota, and *ni* in Saipan, but many speakers choose freely among several of these forms. The key contrast is between the overt realizations and the null realization (abbreviated 'null COMP' in (31)). The forms of complementizer agreement are listed below.

(31) COMPLEMENTIZER AGREEMENT

When the displaced constituent is a:

Prepositional phrase	<i>na</i> / <i>nai</i> / <i>ni</i>
Noun phrase that names a location in time or space	<i>na</i> / <i>nai</i> / <i>ni</i>
Other	[null COMP]

Complementizer agreement is realized as *na*, *nai*, or *ni* when the displaced constituent is a prepositional phrase. See (12) as well as (32). (The overt forms of complementizer agreement are represented in boldface in the questions below.)

- (32)a. [Disdi ngai'an] **ni** tumaiguihi gui'?'
 since when? COMP AGR.like.that he
 'Since when did he become like that?' (CD, entry for *disdi ngai'an*)
- b. [Sa' hãfa] **na** un na'fa'it i tinala' guihan?
 because what? COMP AGR.make.salty the dried.L fish
 'Why did you make the dried fish salty?' (CD, entry for *fa'it*)

Complementizer agreement has the same realizations—*na*, *nai*, or *ni*—when the displaced constituent is a noun phrase that names a location in time or space; in other words, if it would be in the local case if it had not been displaced (see 22.3.2 and 22.3.3).

- (33)a. Ya amãnu **nai** manmachuchuli' i tipu?
and.then where? COMP AGR.PASS.take.PROG the sugar.cane
 'And where was the sugar cane being harvested?' (MM 88)
- b. Ngai'an **na** para un hãnã?
when? COMP FUT AGR go
 'When are you going to leave?'
- c. Ki ora **nai** un tutuhun i che'chu'?
what.time? COMP AGR begin the work
 'What time did you begin work?' (MM 220)
- d. [Gi hãyi] **ni** un chuli' ennã na lepblu?
LCL who? COMP AGR take that L book
 'Who did you get that book from?'

Otherwise, when the displaced constituent is a noun phrase that does not name a location in time or space, complementizer agreement is realized as a null complementizer. Many examples were cited earlier in 22.3.2 and 22.3.3; a few more are given below.

- (34)a. Kuãntu guaha na pisão gi gimã'-mu?
how.many? AGR.exist L fishing.pole LCL house-AGR
 'How many fishing poles are there at your house?' (CD, entry for *pisão*)
- b. Kuãntu biãhi bai na'hassu hão?
how.many? time AGR make.remember you
 'How many times do I have to remind you?' (CD, entry for *kuãntu*)

Complementizer agreement occasionally responds to a displaced manner or means phrase as if it were a noun phrase that names a location. In such cases the predicate does not show adjunct wh-agreement (which is realized optionally), and an overt form of the special complementizer appears. Compare (35), in which the displaced constituent is treated like a manner or means phrase, with (36), in which is treated like a noun phrase that names a location.

- (35)a. Taimanu **matulaika-ña** i lina'la'-mu anai
how? WH[DJ].PASS.change-AGR the life-AGR when
 makpu' i gera?
AGR.ended the war
 'How was your life changed when the war ended?' (MM 22)
- b. Taimanu madilitreha esti na palãbra?
how? AGR.PASS.spell this L word

- (36)a. Håfa taimanu **na** un tungu' na guaha gera?
how? COMP AGR know COMP AGR.exist war
 'How is this word spelled?' (CD, entry for *dilitreha*)
 'How did you know that there was a war?' (MM 240)
- b. Taimanu **nai** in singun esti na sinisedi?
how? COMP AGR endure this L experience
 'How did you (pl.) endure this experience?' (MM 143)

Overt realizations of complementizer agreement and wh-agreement do not co-occur. That is, an overt complementizer that realizes complementizer agreement cannot introduce a predicate that shows an overt form of wh-agreement. This is perhaps not surprising, given that the overt forms of wh-agreement make use of nonfinite morphology (see 22.4.1), but the overt complementizers in Chamorro are finite (see 20.2.1).

22.5 Constituent questions in complex sentences

22.5.1 Embedded questions

Like polar questions and alternative questions (see 22.2), constituent questions can be embedded in complex sentences, where they serve as arguments of a higher predicate (see 20.3.1 and 20.4.1). Embedded constituent questions have the same form as constituent questions in simple sentences. The interrogative word or phrase can occur as the (embedded) predicate, or it can be displaced by wh-movement, accompanied by wh-agreement and complementizer agreement.

In embedded questions of the predicate, the interrogative word or phrase occurs *in situ* (see 22.3.1), as illustrated in (37). These questions generally are not introduced by an overt complementizer.

- (37)a. Ripåra [**håyi** achahit-miyu].
notice who? peer-AGR
 'Be aware of who your (pl.) peers are.' (CD, entry for *achahit*)
- b. Rastreha [ginin **manu** i hale'-mu mągi].
track from where? the root-AGR to.here
 'Trace where your family originates from.' (CD, entry for *håli*)
- c. Pues i mañaina ti ma tungu' [malak **mānu** i
then the PL.parent not AGR know go.to where? the
patgun-ñiha].
child-AGR
 'So the parents didn't know where their child had gone.' (Cooreman 1983: 144)

- d. Pues yanggin manmalagu' hit [para ta ke'tungu'
 then if AGR.want we.INCL FUT AGR try.know
 [hâyi hit na tâotâo]] ...
 who? we.INCL L person
 'So if we (incl.) want to learn who we (incl.) are...' (Ginen I Obispo
 August 25, 2002)

In embedded questions of arguments or adjuncts, the interrogative word or phrase is displaced to the left edge of the embedded question (see 22.3.2 and 22.3.3), and information about the displaced constituent is registered by wh-agreement and complementizer agreement (see 22.4). This means, among other things, that complementizer agreement dictates the form of the complementizer of the embedded question. Some examples of embedded questions of arguments are cited in (38). (Note that in (38a) and (38e), the entire complex sentence is a polar question introduced by the complementizer *kâo*. In (38d), the embedded questions are coordinated; the first is a question of a direct object and the second, a question of an adjunct.)

- (38)a. Kao un tungu' [hâyi manggera]?
Q AGR know who? AGR.at.war
 'Did you know who were at war?' (MM 68)
- b. Ti hu tungu' [hâyi na tâotâo gumu'ut si
not AGR know who? L person WH[SB].hold UNM
 Jun].
Jun
 'I don't know what person restrained Jun.' (CD, entry for *gu'ut*)
- c. Ti hu atituyi [hâfa sinangan Ben gi
not AGR pay.attention.to what? WH[OBJ].say.L Ben LCL
 hunta].
meeting
 'I did not pay attention to what Ben said at the meeting.' (CD, entry
 for *atituyi*)
- d. Cha'-miyu fanchachathinassu [[hâfa para en sangan]
better.not-AGR AGR.worry.PROG what? FUT AGR say
 o sino [taimanu para sangan-miyu]].
or how? FUT WH[DJ].say-AGR
 'Do not (pl.) worry about what you (pl.) are to say or how you (pl.)
 are to say it.' (NT 17)
- e. Kâo un tungu' [mânu nai gaigi na siudâ i
Q AGR know where? COMP AGR.be.at L city the

ofisinan abugão as Guerrero yan Aldan]?
office.L lawyer OBL Guerrero and Aldan
 ‘Do you know in which town the law office of Guerrero and Aldan
 is located?’ (CD, entry for *siudã*)

Some embedded questions of adjuncts are cited in (38d) and (39). (Note that the embedded questions in (39b) are coordinated. The interrogative word *ngai’an* ‘when?’ serves as an adjunct in the first question, and as the embedded predicate of the second question.)

- (39)a. Marikunosi si Jack put **[taimanu**
AGR.PASS.investigate UNM Jack about how?
 na malingu i salåppi’].
COMP AGR.disappear the money
 ‘Jack was investigated concerning how the money was lost.’ (CD,
 entry for *rikunosi*)
- b. Kao un hasu **[[ngai’an** na matutuhun i
Q AGR.remember when? COMP AGR.begin the
 gera] yan **[ngai’an** finakpo’-ña]]?
war and when? conclusion-AGR
 ‘Do you remember when the war began and when it ended?’ (MM
 143)

Note that Chamorro does not have infinitival questions—embedded questions in which an infinitive clause is introduced by the interrogative complementizer *kão* or begins with a displaced interrogative word or phrase. There are no exact Chamorro equivalents of English infinitival questions like *They wondered whether to leave early* or *It was unclear who to invite*. Embedded questions formed with *taimanu* ‘how?’ are sometimes translated into English as infinitival questions, as in (40). But these Chamorro questions are finite embedded questions in which *taimanu* ‘how?’ serves as the embedded predicate, and the apparent infinitive is a reduced clause that serves as the embedded subject (see 21.6.4).

- (40) Mafa’nå’gui i lahi-hu **[taimanu** mañugun
AGR.PASS.teach the son-AGR how? AGR.ANTIP.drive
 fodo’] gi as tihu-ña.
bulldozer OBL uncle-AGR
 ‘My son was taught how to operate a bulldozer by his uncle.’ (CD,
 entry for *fodo*)

22.5.2 Long-distance questions

In a complex sentence, it is possible for an interrogative word or phrase from an embedded clause—either a finite embedded clause or an infinitive clause—to be displaced to the left edge of a higher clause. The result is a long-distance dependency: the displaced constituent ends up one or more clauses removed from the predicate it is associated with. Consider the long-distance questions in (41).

- (41)a. **Håyi** i doktu ma po'lu [na esta māmāolik]?
who? the doctor AGR.assume COMP already AGR.good.PROG
 ‘Who do the doctors assume is getting better?’
- b. [**Håfa** na disgrâsia] hinassun-miyu [para u cho'gui
what? L disaster WH[OBJ].think-AGR FUT AGR.do
 i dueñun i gualu' nu atyu i manmanatkikila]?
the owner.L the farm OBL that the AGR.ANTIP.rent.PROG
 ‘What disaster do you (pl.) think the owner of the farm will bring upon the renters?’ (NT 146)
- c. [**Gi mǎnu**] na manmalagu' siha [na para un
LCL where? COMP AGR.want they COMP FUT AGR
 fanaligão un nuebu na kareta]?
ANTIP.look.for a new L car
 ‘Where do they want you to look for a new car?’

In these questions, the interrogative word or phrase at the left edge of the higher clause has been displaced from the embedded clause. In (41a), *håyi* ‘who?’ is the subject of the embedded adjective *māolik* ‘good’; in (41b), *håfa na disgrâsia* ‘what disaster?’ is the direct object of the embedded verb *cho'gui* ‘make, do’; and in (41c), *gi mǎnu* ‘where?’ is an adjunct of the embedded verb phrase. Long-distance questions in Chamorro must involve wh-movement. Consequently, the interrogative word or phrase can be an argument or adjunct, but not a predicate, because predicates in Chamorro are not displaced by wh-movement (see 22.3.1).

As expected, information about the displaced constituent in a long-distance question is registered by wh-agreement and complementizer agreement. Complementizer agreement registers information about the displaced constituent on the complementizer of the question (see 22.4.2). This special agreement is responsible for the fact that the interrogative word or phrase is followed by the complementizer *na* in (41c), but by the null complementizer in (41a-b). Wh-agreement registers the grammatical relation of the displaced constituent on the predicate associated with it (see 22.4.1). This special

agreement is overtly realized on the embedded predicates in the long-distance questions in (42).

- (42)a. Hãyi sinangãni hão gi as nanã-mu
who? AGR.PASS.say.to you OBL mother-AGR
[muna'manman] si Juan]?
WH[SB].make.astonished UNM Juan
 'Who did your mother tell you surprised Juan?'
 b. Hãfa sinangani hão as nanã-mu **[finahãn-ñã]**?
what? AGR.PASS.say.to you OBL mother-AGR WH[OBJ].buy-AGR
 'What did your mother tell you that she bought?'
 c. Taimanu malago'-mu [para **areklão-ñã** si
how? AGR[OBL].want-AGR FUT WH[DJ].fix-AGR UNM
 Pedro ni kareta]?
Pedro OBL car
 'How do you want Pedro to fix the car?'

Over and above this, the *higher* predicates within a long-distance question also show wh-agreement. Wh-agreement on a higher predicate does not register the grammatical relation of the displaced constituent, but rather the grammatical relation of the embedded clause from which it has been displaced. This can be seen from the pairs of questions below. Consider first the long-distance question in (43a) and the embedded long-distance question in (43b).

- (43)a. Hãfa **dinisehan-ñiha** [para uma kumpli]?
what? WH[OBJ].wish-AGR FUT AGR accomplish
 'What do they hope to (lit. that they will) accomplish?' (NT 321)
 b. Kão siña un na'fitmi [hãfa **malago'-mu**
Q can AGR make.certain what? WH[OBL].want-AGR
 [para un cho'gui]]?
FUT AGR do
 'Can you make certain of what you want to do?' (CD, entry for *na'fitmi*)

The displaced interrogative word (*hãfa* 'what?') is the direct object of the embedded verb *kumpli* 'accomplish' in (43a) and the direct object of the embedded verb *cho'gui* 'do' in (43b). Consequently, both of these verbs show (the null form of) object wh-agreement. The higher verbs within these long-distance questions also show wh-agreement. In (43a), the verb *diseha* 'wish' shows (the overt form of) object wh-agreement; this is because the

embedded clause *para uma kumpli* ‘they will accomplish’ serves as its direct object. But in (43b), the verb *malagu* ‘want’ shows oblique wh-agreement, because the embedded clause *para un cho’gui* ‘you will do’ serves as its oblique argument.

The overall pattern is similar in the pair of questions in (44).

- (44)a. Hâfa na sapâtus **hinassom-mu** [ti **omlâp-mu**]?
what? L shoes WH[OBJ].think-AGR not WH[OBL].fit-AGR
 ‘Which shoes do you think you don’t fit?’
- b. Hâyi **malago’-ña** si tata-mu [para
who? WH[OBL].want-AGR UNM father-AGR FUT
asuddâ’-ña?
WH[OBL].RECP.find-AGR
 ‘Who does your father want to meet (lit. find each other) with?’

Here the displaced constituents are oblique arguments of embedded intransitive verbs: *hâfa na sapâtus* ‘which shoes?’ in (44a) is the oblique argument of *omlap* ‘fit’, and *hâyi* ‘who?’ in (44b) is the oblique argument of *asudda* ‘meet (lit. find each other)’. Consequently, both *omlap* and *asudda* show oblique wh-agreement. The higher verbs within these questions also show wh-agreement. In (44a), *hassu* ‘think’ shows (the overt form of) object wh-agreement, because the embedded clause from which *hâfa na sapatus* has been displaced serves as its direct object. But in (44b), *malagu* ‘want’ shows oblique wh-agreement, because the embedded clause from which *hâyi* has been displaced serves as its oblique argument.

Higher predicates in a long-distance question generally show wh-agreement when the interrogative word or phrase is an argument or a ‘close’ adjunct—an instrument, manner phrase, or means phrase (see Chung 1994; 1998). In long-distance questions of other types of adjuncts, higher predicates might or might not show wh-agreement. Compare (45), in which the higher predicate shows wh-agreement, with (41c), in which it does not.

- (45) Gi mânu **malagu’-ñiha** [na para un
LCL where? WH[OBL].want-AGR COMP FUT AGR
fanaligão un nuebu na kareta?
ANTIP.look.for a new L car
 ‘Where do they want you to look for a new car?’

This pair of examples illustrates, once again, that overt realizations of complementizer agreement and wh-agreement do not co-occur (see 22.4.2). More specifically, an overt complementizer that realizes complementizer

agreement cannot introduce a predicate that shows an overt form of wh-agreement.

22.6 Further reading

See Chung (1982; 1994; 1998) for discussion of constituent questions, wh-agreement, and complementizer agreement, as well as Goldberg (1985), Dukes (1992), and Watanabe (1996) for other analyses of wh-agreement.

23

FOCUS

Chamorro has several ways of signaling focus. The focused word or phrase can be marked with the emphatic particle *ha'*, or it can be syntactically focused—displaced to the left edge of the sentence by wh-movement. When wh-movement occurs, special types of agreement are used to register information about the displaced constituent.

23.1 Overview

Chamorro has several ways of signaling focus; that is, indicating that the information conveyed by a word or phrase is contrastive (singled out from a set of alternatives) or contrary to expectations. The focused word or phrase can be marked with a focus morpheme, such as the emphatic particle *ha'*, or it can be syntactically focused—displaced to the left edge of the sentence by wh-movement in the focus construction. When wh-movement occurs, wh-agreement and complementizer agreement are used to register information about the displaced constituent.

23.2 describes the emphatic particle *ha'* and its distribution. The rest of this chapter is devoted to syntactic focus. 23.3 introduces the focus construction and the types of constituents that can be syntactically focused. 23.4 discusses wh-agreement and complementizer agreement in the focus construction. 23.5 describes embedded focus and long-distance focus. Finally, 23.6 asks whether the focus construction and constituent questions should be reanalyzed as types of complex sentences.

23.2 The emphatic particle

The emphatic particle *ha'* indicates that the immediately preceding word or phrase is focused. It is often translated into English using adverbs associated with focus, such as 'even', 'only', 'just', 'really', 'still', or 'alone'. *Ha'* is an unstressed morpheme that must lean on material to its left to form a phonological word. Consequently, the material to its left must be either a phonological word or else some other phonologically dependent element that must lean to the left, such as a weak pronoun (see 8.3) or *fan* 'please', the politeness particle found in imperatives (see 18.4).

Ha' has a very wide distribution. It is routinely used to mark the predicate as focused. In the sentences below, *ha'* comes right after a predicate that is a verb (in (1a)), an adjective (1b), a noun phrase (1c), or a prepositional phrase (1d). Notice that the predicate appears in its usual word order in the clause.

- (1) a. Hu siesienti **ha'** i animas i mañaina-hu kada
AGR.feel.PROG EMP the spirit.L the PL.parent-AGR each
rātu.
while
 'Every now and then I feel my parents' spirit.' (CD, entry for *animas*)
- b. Todu i tiempu bobohbu **ha'** kannai-hu yan
all the time AGR.swollen.PROG EMP hand-AGR and
addeng-hu.
foot-AGR
 'My hands and feet are swollen all the time.' (CD, entry for *bobohbu*)
- c. Håfa taimanu tungo'-mu na dos kilometru **ha'**
how? WH[DJ].know-AGR COMP two kilometers EMP
i distânsia esta i sengsung?
the distance until the village
 'How do you know that the distance to the village is only two kilometers?' (CD, entry for *kilometru*)
- d. Para hami **ha'** esti na inetnun.
for us.EXCL EMP this L group
 'This gathering is only for us (excl.).' (CD, entry for *hami*)

Ha' can also mark a noun phrase or prepositional phrase as focused. In the sentences in (2), *ha'* comes right after a noun phrase or prepositional phrase that occurs in its usual word order, following the predicate.

- (2) a. Fåtta un puntu **ha'** para u gånna i tes.
AGR.absent one point EMP FUT AGR.win the test
 'He needed only one point (lit. only one point was missing) to pass the test.' (CD, entry for *puntu*)
- b. I bisinun-måmi gof hambrentu gi todû **ha'**.
the neighbor-AGR AGR.very greedy LCL all EMP
 'Our (excl.) neighbor is so rapacious in everything.' (CD, entry for *hambrentu*)
- c. Ti uma'akuentusi i dos put agumentu **ha'**.
not AGR.RECP.speak.to.PROG the two because.of argument EMP

‘The two don’t talk to each other because of an argument.’ (CD, entry for *agumentu*)

In (3), *ha’* comes right after a syntactically focused noun phrase or prepositional phrase that has been displaced to the left edge of the sentence by wh-movement (see 23.3).

- (3) a. Tres klâsin floris chuchurika **ha’** tiningo’-hu.
three sort.L flower periwinkle EMP WH[OBJ].know-AGR
 ‘There’s only three kinds of periwinkle flowers that I know of.’
 (CD, entry for *chuchurika*)
- b. Gi ha’âni **ha’** ni machocho’chu’ yu’.
LCL day EMP COMP AGR.work.PROG I
 ‘During daytime only is when I work.’ (CD, entry for *ha’âni*)
- c. Para âmut sanhiyung **ha’** ni
for medicine.L DIR.outside EMP COMP
 ma’u’usa i siempribiba.
AGR.PASS.use.PROG the plant.sp
 ‘Spider wort is only used for external remedies.’ (CD, entry for *siempribiba*)

Ha’ can mark an adverb or an auxiliary as focused. Consider the adverbs *kulang* ‘seems like’ and *mediu diha* ‘half a day’ in (4a-b) and the auxiliary *siña* ‘can, possible’ in (4c).

- (4) a. Kulang **ha’** otdut i chichigit.
seems.like EMP ant the black.insect
 ‘The *chichigit* is like ants.’ (CD, entry for *chichigit*)
- b. Si Rosa mama’gâsi mediu diha **ha’** nigap.
UNM Rosa AGR.ANTIP.wash half day EMP yesterday
 ‘Rosa washed for only half a day yesterday.’ (CD, entry for *mediu diha*)
- c. Siña **ha’** mafa’tali i alaihai.
can EMP AGR.PASS.make.into.rope the morning.glory
 ‘The morning glory vine can be used as rope.’ (CD, entry for *alaihai*)

Ha’ can mark a demonstrative, numeral, or adjective within the noun phrase as focused, regardless of the noun phrase’s function. The noun phrase in which *ha’* occurs serves as the predicate in (5a), as an argument following the predicate in (5b), and as a syntactically focused constituent in (5c).

- (5) a. [Bunitu **ha'** na tinanum] esti i butonsiyu.
nice EMP L plant this the plant.sp
 'This *butonsiyu* is a nice plant.' (CD, entry for *butonsiyu*)
- b. Yanggin umasagua yu', bai na'guaha [dos **ha'**
if AGR.marry I AGR.make.exist two EMP
na donseyan nobia].
L maid.L bride
 'When I get married, I will have only two bridesmaids.' (CD, entry
 for *donseyan nobia*)
- c. [Kana' esti **ha'** na kandi] guaha ântis na tiempu.
almost this EMP L candy AGR.exist before L time
 'This was about the only candy in the old days.' (CD, entry for
bukâyu)

Finally, *ha'* can mark certain subordinating conjunctions as focused.

- (6) Pues gigun **ha'** måttu atyu gi hinasson-ña,
then as.soon.as EMP AGR.arrive that LCL thought-AGR
malâgu.
AGR.ran
 'Then just as soon as that thought came to his mind, he ran away.'
 (from a tape-recorded narrative)

Practically the only elements that *ha'* cannot mark as focused are phonologically dependent elements that must lean to the right. These include articles, case markers, most prepositions, tense-aspect-mood markers that are not auxiliaries, complementizers, coordinating conjunctions, and many subordinating conjunctions.

As observed earlier, *ha'* can co-occur with syntactic focus. Then it can mark a range of words and phrases as focused, including the syntactically focused constituent at the left edge of the sentence (see (3)), part of that constituent (see (5c)), or some different constituent. In (7), the prepositional phrase *put ennâo na rason* 'for that reason' is syntactically focused, but *ha'* marks the verb *atotga* 'dare' as focused.

- (7) Put ennâo na rason na hu atototga **ha'**
because that L reason COMP AGR.dare.PROG EMP
ti maigu' an puengi.
not INF.sleep if night
 'For that reason, I dare not to sleep at night.' (CD, entry for *put ennâo*)

23.3 Syntactic focus: basics

Noun phrases, parts of noun phrases, and prepositional phrases can be syntactically focused in the focus construction. In this construction, the focused constituent appears at the left edge of the sentence, in the same position as the displaced interrogative word or phrase in a constituent question. The assumption here is that syntactically focused constituents, like interrogative words or phrases, are displaced to the left edge of the sentence by wh-movement (see 23.6).

Sentences with a syntactically focused constituent share many characteristics with constituent questions formed by wh-movement—so much so that one might be tempted to treat constituent questions as a subtype of focus construction. At the same time, the two constructions differ in certain details.

A much wider range of noun phrases can be displaced by wh-movement in the focus construction than in constituent questions (see 22.3.2 and 22.3.3). Syntactically focused noun phrases can be definite, indefinite, or quantified, as illustrated below (with the focused noun phrase in boldface).

- (8) a. **I guella** **ha'** **gi bandan nanã-hu** hu fakcha'i.
 the grandmother *EMP* *LCL side.L* *mother-AGR* *AGR find*
 'Only my grandmother from my mom's side I saw.' (CD, entry for *guella*)
- b. ... yanggin **Chamorro** gui' kumuentutusi.
 if *Chamorro* *him* *WH[SBJ].speak.to.PROG*
 '...if a Chamorro was speaking to him.' (from a conference presentation)
- c. **Kada unu** **giya** **hita** gai abilidad.
 each *one* *LCL* *us.INCL* *AGR.have* *ability*
 'Each one of us (incl.) has a natural talent.' (CD, entry for *abilidad*)
- d. **Tres biãhi sigidu** na masãolak si
 three *time* *successively* *COMP* *AGR.PASS.spank* *UNM*
 Jennifer gi as nanã-ña.
 Jennifer *OBL* *mother-AGR*
 'Jennifer was spanked three consecutive times by her mother.' (CD, entry for *sigidu*)
- e. **Ni unu** lokkui' muli'i' i haggan.
 not one *also* *WH[SBJ].see the* *turtle*
 'No one also saw the turtle.' (from a tape-recorded narrative)

The head of a focused noun phrase can be a common noun (as in (8a-b) and (8d)), a name (9a), or an independent pronoun (9b).

- (9) a. **Si Juan** dumoti i tanu' giya Langa'sat.
UNM Juan WH[SB].inherit the land LCL Langa'sat
 'John inherited the land at Langa'sat.' (CD, entry for *doti*)
- b. **Hãgu** abok-ku.
you pal-AGR
 'You are my pal.' (CD, entry for *abuk*)

In other respects, syntactically focused constituents have the same distribution as displaced interrogative words and phrases. They can serve as arguments of the predicate: as subjects, direct objects, or obliques associated with a verb or adjective, or as subjects of a predicate that is a noun or preposition. They can also serve as parts of arguments, or as adjuncts, but not as the predicate. In addition:

Like displaced interrogative noun phrases (see 22.3.2), syntactically focused noun phrases appear in the unmarked case, even if they would have occurred in some other case if they had not been displaced by *wh*-movement. For instance, passive agents are normally in the oblique case, and noun phrases that specify location in time are normally in the local case. Nonetheless, these noun phrases appear in the unmarked case when they are syntactically focused, as (10) shows.

- (10)a. **Kão i pulusia pat si tatan-ñiha** para u
Q the police or UNM father-AGR FUT AGR
faninaligão?
AGR.PASS.look.for
 'Are they going to be looked for by the police or by their father?'
- b. **I mit nuebi sientus nubenta na sãkkan**
the thousand nine hundreds ninety L year
nai mafañãgu yu'.
COMP AGR.born I
 'I was born in the year 1990.' (CD, entry for *nubenta*)

This generalization has an exception: some speakers of the Saipan dialect allow a noun phrase to appear the local case even when it is syntactically focused. Compare (10b) with the following.

- (11) **Gi ma'pus na sãkkan** nai mâtai i
LCL last L year COMP AGR.die the

bisabuellu-hu John.
great.grandfather-AGR John
 ‘My great-grandfather John passed away last year.’ (CD, entry for *bisabuellu*)

Parts of noun phrases that serve as arguments can be syntactically focused. Demonstratives, numerals, and certain quantifiers can be displaced to the left edge of the sentence on their own, leaving the rest of the noun phrase in place. Compare (12a), in which the entire noun phrase is syntactically focused, with (12b), in which only the numeral *tres* ‘three’ is focused.

- (12)a. [**Tres na tintâgu**] manmasotta ni ma’gas.
three L servant AGR.PASS.release OBL boss
 ‘Three servants were released by the boss.’ (CD, entry for *tintâgu*)
- b. **Tres** guaha [na râmas gubetnu], i esekutibu,
three AGR.exist L branch.L government the executive
legislature and judicial
 ‘There are three branches of government, the executive, legislative, and judicial.’ (CD, entry for *eksekutibu*)

The possessor of a noun phrase can be syntactically focused, but only when the possessed noun is introduced by the null indefinite article and serves as the direct object or the subject of an intransitive (state) predicate.

- (13) **Meggai na ababbang** mansen bunitu [kulot-ñiha].
many L butterfly AGR.extremely pretty color-AGR
 ‘Many butterflies have beautiful colors (lit. their colors are very beautiful).’ (CD, entry for *ababbang*)

Prepositional phrases can be syntactically focused, whether they serve as arguments or adjuncts. (Objects of prepositional phrases cannot be syntactically focused on their own.) The focused prepositional phrases in (14) are adjuncts.

- (14)a. **Ginin i atbettura gi satgi** na humâhalum i
from the opening LCL floor COMP AGR.go.in.PROG the
cha’ka.
rat
 ‘The rat is getting in from the opening in the floor.’ (CD, entry for *atbettura*)

- b. **Put** **ennão** na manmalagu' para uma chonnik
because that COMP AGR.want FUT AGR push
 gui' huyung.
him outside
 'Because of that they wanted to push him out.' (*Ginen I Obispo*
 March 2, 2003)

Essentially the same patterns were documented earlier for displaced interrogative phrases (in 22.3.2 and 22.3.3).

In terms of function, the focus construction provides one way—but not the only way—of answering a constituent question formed by *wh*-movement. Consider the question in (15a), in which the subject is a displaced interrogative word. This question can be answered with the ordinary transitive clause in (15b) or with the focus construction in (15c). The difference is that (15b) allows for the possibility that there are others besides Jose's teacher who also know the answer, but (15c) does not.

- (15)a. **Hãyi** tumungu' i ansa?
who? WH[SB].know the answer
 'Who knows the answer?'
 b. Ha tungu' i ansa i ma'estrã Jose.
AGR know the answer the teacher.L Jose
 'Jose's teacher knows the answer.'
 c. **I** **ma'estrã** **Jose** tumungu' i ansa.
the teacher.L Jose WH[SB].know the answer
 'Jose's teacher (is the one who) knows the answer.'

Note that the focus construction can occur inside a polar or alternative question. In such cases, the syntactically focused constituent is preceded by the complementizer *kão*.

- (16)a. **Kão** **hamyu** lokkui' ti siña manmangumprendi?
Q you.PL also not can AGR.ANTIP.understand
 'Are you (pl.) so lacking in understanding also?' (NT 74)
 b. **Kão** **tres** **libra** **na** **siboyas** un fãhan?
Q three pound L onions AGR buy
 'Did you buy three pounds of onions?' (CD, entry for *tres*)

See 23.5.1 and 23.6 for a little more discussion of questions of this type.

23.4 Syntactic focus and agreement

Information about the syntactically focused constituent in the focus construction is registered by two special types of agreement, wh-agreement and complementizer agreement. These types of agreement were described earlier in some detail (see 22.4). The fact that they occur in the focus construction is further evidence that the syntactically focused constituent is displaced to the left edge of the sentence by wh-movement.

23.4.1 Wh-agreement

Wh-agreement registers the grammatical relation of the syntactically focused constituent on the predicate associated with it. This special agreement signals whether the focused constituent is a subject, object, oblique, or adjunct. Like agreement with the subject, wh-agreement appears only on verbs or adjectives, and is sensitive to mood and transitivity. The overt forms of wh-agreement replace the normal forms of agreement with the subject. Otherwise, if wh-agreement is not realized overtly, the verb or adjective shows agreement with the subject as usual.

The forms of wh-agreement used in the focus construction are the same as in constituent questions formed by wh-movement. The basic patterns are illustrated below; see 22.4.1 for more details.

Wh-agreement with a syntactically focused subject is realized as the infix *-um-* when the predicate is a transitive verb in the realis mood (see (17a)); otherwise, it has no overt realization (17b).

- (17)a. I kusturera **lumâksi** i chininâ-hu.
 the seamstress WH[SBJ].sew the shirt-AGR
 ‘The seamstress sewed my shirt.’ (CD, entry for *kusturera*)
- b. Tres ha’ na palitun machis sopbla.
 three EMP L small.stick.L match AGR.left.over
 ‘Only three match sticks are left.’ (CD, entry for *palitu*)

Wh-agreement with a syntactically focused object is realized, optionally, as the combination of the infix *-in-* plus nominalization when the object is the direct object of an ordinary transitive verb. Compare (18a), which illustrates the overt form of this agreement, with (18b), which shows that the overt form is optional. (The forms of wh-agreement with other types of objects are described in 22.4.1.2.)

- (18)a. Dies sigidu **kinenne’-ña** na guihan.
 ten successively WH[OBJ].catch-AGR L fish

- ‘He caught ten fish successively.’ (CD, entry for *sigidu*)
- b. I fine’nina na kolumna un usa para un fitma hảo.
 the first L column AGR use FUT AGR sign you
 ‘You use the first column to write your signature.’ (CD, entry for *kolumna*)

Wh-agreement with a syntactically focused oblique is realized as nominalization when the oblique is an argument of an adjective or intransitive verb. (The forms of wh-agreement with other types of obliques are described in 22.4.1.3.)

- (19) Pues an ennao **malago’-mu,** fãhan fan.
 then if that WH[OBL].want-AGR buy please
 ‘Then if that’s what you want, please buy it.’ (from a tape-recorded narrative)

Finally, wh-agreement with a syntactically focused adjunct is not overtly realized. This can be seen from (10b), (11), and (14), as well as (20), in which the focused adjunct is an adverbial clause.

- (20) Piot [sa’ ginin hiyung] nai tâya’
 especially because from outside COMP AGR.not.exist
 ni hãfa siña ta cho’gui.
 not anything can AGR do
 ‘Especially because it’s from outside, there’s nothing we (incl.) can do.’ (*Saipan Tribune* January 6, 2000)

23.4.2 Complementizer agreement

Complementizer agreement uses the complementizer of the focus construction to register information about the syntactic category and meaning of the focused constituent. This agreement is realized as a special form of the complementizer that follows the focused constituent, and is sometimes overt and other times null.

The forms of complementizer agreement used in the focus construction are largely the same as in constituent questions formed by wh-movement (see 22.4.2). The overt complementizer has three realizations, *na*, *nai*, and *ni*, whose use is subject to some regional and individual variation. One realization, *na*, looks like the complementizer for finite embedded clauses (see 20.2.1); the other realizations apparently do not occur outside the context of complementizer agreement. *Na* is used most commonly in Guam, *nai* in Rota, and *ni* in Saipan, but many speakers choose freely among several of

these forms. The key contrast is between the overt realizations and the null realization of this agreement.

Complementizer agreement is realized as *na*, *nai*, or *ni* when the syntactically focused constituent is a prepositional phrase, as in (14) and (21).

- (21) Ginin i finu' Juan **na** matungu' as
from the speech.L Juan COMP AGR.PASS.know OBL
 nanâ-ña yan tatâ-ña ...
mother-AGR and father-AGR
 'From Juan's words, his mother and father knew...' (Cooreman 1983: 86)

Complementizer agreement has the same realizations—*na*, *nai*, or *ni*—when the focused constituent is a noun phrase that names a location in time or space; in other words, if it would appear in the local case if it had not been syntactically focused. See (10b), (11), and the following.

- (22)a. I chalan ha' yan i sagan gimin **nai**
the road EMP and the place.L drink COMP
 sumâsaga esti na pâtgun.
AGR.stay.PROG this L child
 'Only on the road and in the bar did this child hang out.' (Cooreman 1983: 125)
- b. Alas sais **ni** para u fanmâttu i bisita.
six.o'clock COMP FUT AGR.AGR.arrive the visitor
 'At six is when the visitors are going to arrive.'
- c. Pues gi tattin atyu na dos âmku' **na**
then LCL behind.L that L two old COMP
 dumimu i dos.
AGR.kneel the two
 'So behind those two old people is where the two knelt.' (Cooreman 1983: 71)

Complementizer agreement is also realized as *na*, *nai*, or *ni* when the syntactically focused constituent is an adjunct or adverbial clause. See (20) and the examples below. (Note that complementizer agreement is overt in the focus construction in (23a), but would be null in a constituent question formed from the interrogative phrase *kuântu biâhi* 'how many times?'.)

- (23)a. Meggai na biâhi **na** ha atan i kahun gi halum
many L times COMP AGRlook.at the box LCL inside.L

gumã'-ña ...

house-AGR

'Many times he looked at the box in his house...' (from a tape-recorded narrative)

- b. [Anai mākpu' i sena] **na** manistudia i
when AGR.ended the dinner COMP AGR.ANTIP.study the
 famagu'un.
PL.child
 'The children studied when dinner was over.'

Otherwise, complementizer agreement is realized as a null complementizer, as can be seen from (8a-c) and other examples cited earlier.

Note finally that an overt complementizer that realizes complementizer agreement cannot introduce a predicate that shows an overt form of wh-agreement. This pattern too is familiar from constituent questions formed by wh-movement.

23.5 Syntactic focus in complex sentences

23.5.1 Embedded focus

The focus construction can occur in embedded clauses. In (24), the focus construction occurs inside an embedded clause that serves as an argument of the higher predicate. (The syntactically focused constituent is represented in boldface in these examples.)

- (24)a. Hu diseseha [na **i finattun** **esti i kattāk-ku**
AGR.wish.PROG COMP the NMLZ.arrive.L this the letter-AGR
 en fansinedda' todus manbrābu]
AGR.AGR.PASS.find all AGR.healthy
 'I'm hoping that the arrival of my letter will find you all well...'
 (from a letter)
- b. Makatkukula [na **mās ki \$53 miyon na**
AGR.PASS.estimate.PROG COMP more than \$53 million L
dibin pupbliku guaha].
debt.L public AGR.exist
 'It is estimated that there is more than fifty-three million dollars of public debt.' (Saipan Tribune December 10, 1998)

In (25), the focus construction occurs inside an adverbial clause.

- (25)a. Misalappi' si Tun Kiku' [sa' **guiya**
AGR.have.much.money UNM Mr. Kiku' because he
 sessu kasadot gi gayera].
often coverer.of.bets LCL cockfight
 'Tun Kiku' has a lot of money, because he's often the one who
 covers the bets at the cockfight.' (CD, entry for *kasadót*)
- b. ... [kosa ki **ni unu** u famadesi gi karera mo'na].
so.that not one AGR ANTIP.suffer LCL journey ahead
 '...so that no one will suffer in the journey ahead.' (*Saipan Tribune*
 March 5, 1998)

The focus construction has basically the same form in embedded clauses as in simple sentences. The syntactically focused constituent is displaced to the left edge of the construction by wh-movement, and information about its grammatical relation, syntactic category, and meaning is registered by wh-agreement and complementizer agreement. Wh-agreement is realized overtly (and represented in boldface) on the predicates of the embedded focus constructions in (26).

- (26)a. Ha faisin si nanâ-hu [kâo **guiya**
AGR ask UNM mother-AGR Q she
muna'gimin gui' gi paingi].
WH[SBJ].make.drink him LCL last.night
 'He asked my mother if it was she who had made him drink the
 previous night.' (EM 99)
- b. Bira hâo [sa' ni hâfa para **suettem-mu**].
turn you because not anything FUT WH[OBL].lucky-AGR
 'Turn around because you won't have any luck (lit. you'll be lucky
 at nothing).' (Cooreman 1983: 5)

Complementizer agreement is realized by an overt complementizer (in boldface) following the focused constituent in the embedded focus constructions in (27). (The focused constituent in (27b) is *ni ngai'an* 'never'.)

- (27)a. Mangunfotmi ham [na gi iskuelan-ñiha mismu
AGR.agree we.EXCL COMP LCL school-AGR same
 i famagu'un **na** para bai in bisita siha].
the PL.child COMP FUT AGR visit them
 'We (excl.) agreed that in the children's own schools is where we
 (excl.) would visit them.'

- b. Hu diseseha [na ni hita ni ngai'an **nai** ta
AGR wish.PROG COMP not we.INCL not anytime COMP AGR
 fanmaleffa].
AGR.forget
 'I hope that even us (incl.), never will we (incl.) forget it.' (*Ginen I*
Obispo March 20, 2011)

One difference between embedded focus and embedded constituent questions is clear from the examples just cited. Embedded focus is introduced by one of the complementizers or subordinating conjunctions that introduce finite embedded clauses more generally (see 20.2). The syntactically focused constituent is preceded by the complementizer *na* 'that' in the argument clauses in (24) and (27), by the complementizer *kão* 'whether' in the argument clause in (26a), and by a subordinating conjunction (*sa* 'because' or *kosa ki* 'so that') in the adverbial clauses in (25) and (26b). These complementizers and subordinating conjunctions are distinct from the complementizer that realizes complementizer agreement, which *follows* the focused constituent. The two can co-occur; see the complementizers surrounding the focused constituents in (27). On the other hand, embedded constituent questions that serve as argument clauses are not introduced by a complementizer (see 22.5.1), although they do show complementizer agreement. (Embedded constituent questions do not occur as adjuncts or adverbial clauses; see 20.4.1.)

The presence of complementizers preceding and following the focused constituent in (27) suggests that when the focus construction occurs in an argument clause, more than one level of embedding is involved. This suggestion could be pursued in several ways. Syntactic focus might be fundamentally a main clause (root) construction. Certain main clause constructions, such as verb second in German and related languages, cannot themselves serve as embedded clause arguments of a higher predicate. Instead, they must be further embedded *within* an argument clause in order to occur in this sort of structure at all. Embedded focus might require double embedding of this type. On the other hand, the focus construction might itself be a type of complex sentence in which the syntactically focused constituent serves as a higher predicate. This second possibility is discussed and evaluated later (in 23.6).

23.5.2 Long-distance focus

In a complex sentence, it is possible for a syntactically focused constituent from an embedded clause (either a finite embedded clause or an infinitive) to be displaced to the left edge of a higher clause. The result is long-distance

focus: the focused constituent ends up one or more clauses removed from the predicate it is associated with. Consider the focus constructions in (28).

- (28)a. **Dos** **puntu** malagu' yu' [para ta kunsidera put
two point AGR.want I FUT AGR.consider about
esti].
this
'Two points I want for us (incl.) to consider concerning this.'
(*Ginen I Obispo* August 26, 2001)
- b. **Ti** **todu** **kâtni** ya-hu [kumânnu'.
not all meat like-AGR INF.eat
'Not all meat I like to eat.' (CD, entry for *kâtni*)
- c. **I** **kunfesiunâriu** na propiu [para un sangâni
the confessional COMP AGR.proper FUT AGR.say.to
si Pâli' nu i isâo-mu siha].
UNM priest OBL the sin-AGR PL
'It's proper for you to tell the priest your sins in the confessional.'
(CD, entry for *kunfesiunâriu*)

In these sentences, the focused constituent at the left edge of the higher clause has been displaced from the embedded clause by wh-movement. In (28a), *dos puntu* 'two points' is the direct object of the embedded verb *kunsidera* 'consider'; in (28b), *ti todu kâtni* 'not all meat' is the direct object of the infinitive *kumânnu* 'to eat'; and in (28c), *i kunfesiunâriu* 'the confessional' is a locative adjunct that modifies the embedded verb phrase.

Information about the syntactically focused constituent in long-distance focus is registered by wh-agreement and complementizer agreement. Complementizer agreement registers information about the syntactic category and meaning of the focused constituent on the complementizer that immediately follows it. This special agreement is realized by the complementizer *na* in (28c) but by the null complementizer in (28a-b). Wh-agreement registers the grammatical relation of the focused constituent on the predicate associated with it. This special agreement is overtly realized on the embedded predicates in (29).

- (29)a. Ni hâyihi ha' mamahlâo-hu [para
not anyone.EMP EMP WH[OBL].ashamed-AGR FUT
asudda'-hu.
WH[OBL].RECP.find-AGR
'There's nobody who I'm ashamed to meet (lit. find each other)
with.'

- b. Tres dihas ha' matugi' gi lepblu
three days EMP AGR.PASS.write LCL book
[sumagã-ña].
WH[OBL].stay-AGR
 'Just three days it is written in the book that he stayed.' (from a conference presentation)

In addition, the *higher* predicates in a long-distance focus construction can also show wh-agreement. Wh-agreement on a higher predicate does not register the grammatical relation of the focused constituent, but rather the grammatical relation of the embedded clause from which the focused constituent has been displaced. In the sentences in (30), the focused constituent is a passive agent (in (30a)) or a subject (30b), but the higher verb shows object wh-agreement, because the embedded clause serves as its direct object.

- (30)a. Si Jose ha' **inikspektãk-ku** [para un chiniku].
UNM Jose EMP WH[OBJ].expect-AGR FUT AGR PASS.kiss
 'I expected only Jose to kiss you (lit. that you would be kissed by only Jose).'
- b. Esti i abusu gi nanan guma' yan famagu'un
this the abuse LCL mother.L house and PL.child
pine'lok-ku [na ti masusesedi
WH[OBJ].put-AGR COMP not AGR.PASS.experience.PROG
guini na islas siha].
LCL.this L island PL
 'This abuse of wives and children I had assumed was not happening in these islands.' (*Saipan Tribune* November 11, 1998)

In (31), the syntactically focused constituent is a subject, but the higher verb shows oblique wh-agreement, because the embedded clause serves as its oblique argument.

- (31) Esti **malagu'-ñiha** i tintãgu' [para u
this WH[OBL].want-AGR the servant FUT AGR
macho'gui guihi gi gualu' ...]
PASS.do LCL.that LCL farm
 'The servants wanted to do this (lit. that this would be done) on that farm...' (*Ginen I Obispo* July 21, 2002)

Wh-agreement on the higher predicates in long-distance focus is often optional; compare (28a) with (31) (see Chung 1994; 1998). Note finally that, as was seen earlier for constituent questions (in 22.4.2 and 22.5.2), overt forms of complementizer agreement and wh-agreement do not co-occur. An overt complementizer that realizes complementizer agreement cannot introduce a predicate that shows an overt form of wh-agreement. This is why complementizer agreement is not realized overtly in the long-distance focus construction below.

- (32) Gi sirimonias **linuhan-māmami** [na u
LCL ceremony WH[OBL].afraid-AGR.PROG COMP AGR
 fanmalagu’ [para u fangānta]].
AGR.want FUT AGR AGR.sing
 ‘We (excl.) are afraid that they might want to sing at the ceremony.’

23.6 Syntactic focus, constituent questions, and clefts

When the focus construction is embedded in an argument clause, the focused constituent is introduced by an overt complementizer and can be followed by a complementizer that realizes complementizer agreement (see 23.5.1). One way of handling this pattern would be to treat the focus construction itself as a type of complex sentence. Suppose that the focused constituent was not displaced by wh-movement, but was instead a higher predicate whose subject was an embedded clause—perhaps a relative clause with a null head. Then a focus construction like (33) would be a cleft sentence, similar to ‘It was me that led the novena’ or ‘The one who led the novena was me.’

- (33) Guāhu tumutucha i nubena.
I WH[SBJ].lead.prayer.PROG the novena
 ‘I led the novena prayer.’ (CD, entry for *tucha*)

This analysis could be extended to constituent questions in which the interrogative word or phrase is an argument or adjunct. Then a question like (34) would also be a cleft sentence, similar to ‘Who is it that is supporting this political party?’ or ‘Who is the one who is supporting this political party?’

- (34) Hāyi gumugu’ut esti na pattida?
who? WH[SBJ].support.PROG this L political.party
 ‘Who is supporting this political party?’ (CD, entry for *gu’ut*)

Analyses that treat syntactic focus and constituent questions as complex sentences—usually cleft sentences—have been motivated for Tagalog, Māori, and other Austronesian languages (see e.g. Bauer 1991 on Māori and Potsdam 2006 on Malagasy). In Chamorro, a complex sentence analysis is plausible for some instances of these constructions. The most likely analysis of the constituent question in (35), for instance, is that the interrogative phrase is the predicate and the noun phrase following it—which transparently contains a relative clause—is the subject.

- (35) Hāyi atyu siha i [manmakumbida ya ti
who? that PL the AGR.PASS.invite and.then not
 manmāttu]?
AGR.arrive
 ‘Who were those who were invited and didn’t show up?’ (*Ginen I*
Obispo October 13, 2002)

However, the complex sentence analysis does not generalize to all types of syntactic focus and constituent questions in Chamorro. The language has syntactically focused constituents, and interrogative words and phrases, that do not serve as (higher) predicates; these must have been displaced by wh-movement. Two types of such constituents are discussed below.

(i) Noun phrases in the local case do not serve as predicates.

- (36)a. *Gi lamasa esti na lāpis.
LCL table this L pencil
 (‘This pencil is on the table.’)
 b. *Giya Saipan yu’ pā’gu.
LCL Saipan I now
 (‘I’m in Saipan now.’)

Sentences like (36) are expressed instead with a verb of location, such as *gaigi* ‘be (at)’, which takes a noun phrase in the local case as one of its arguments.

- (37)a. Gaigi gi lamasa esti na lāpis.
AGR.be.at LCL table this L pencil
 ‘This pencil is on the table.’
 b. Gaigi yu’ giya Saipan pā’gu.
AGR.be.at I LCL Saipan now
 ‘I’m in Saipan now.’

Given that noun phrases in the local case do not serve as predicates, they cannot be (higher) predicates in focus constructions like (38a) or constituent questions like (38b). (Many similar examples were cited earlier in this chapter and in Chapter 22.)

- (38)a. Gi gima' Yu'us nai makundudukta i
LCL house.L God COMP AGR.PASS.conduct.PROG the
 duktrina.
religious.instruction
 'At the church is where religious instruction is conducted.' (CD, entry for *guma' Yu'us*)
- b. Gi mǎnu na lanchu ni para un na'fandokku'
LCL which? L farm COMP FUT AGR.make.AGR.sprout
 i mangga?
the mango
 'At which farm will you grow the mango trees?' (CD, entry for *dokku'*)

Instead, these noun phrases have been displaced to the left edge of the sentence by wh-movement.

(ii) When a noun phrase that serves as the predicate of the clause is followed by a subject noun phrase, that subject must be specific. In other words, it obeys the specificity restriction (see 16.4). Such a subject cannot have the null indefinite article as its determiner (but see 6.2.1.2.2.2 for a systematic exception).

- (39)a. *Kǎo mǎolik na tǎotǎo ma'estru?
Q good L person teacher
 ('Is a teacher a good person?')
- b. *Nipa átuf.
palm roof
 ('A roof is nipa palm.')

The subjects in the ungrammatical sentences in (39) are introduced by the null indefinite article. Compare the subjects in (40), which are introduced by the definite article *i*.

- (40)a. Kǎo mǎolik na tǎotǎo i ma'estru?
Q good L person the teacher
 'Is the teacher a good person?'

- b. Nipa i atuf.
palm the roof
 ‘The roof is nipa palm.’

Now consider what happens when a syntactically focused noun phrase or interrogative noun phrase appears at the left edge of the sentence. If these noun phrases were predicates, they should not be followed by a ‘subject’ noun phrase introduced by the null indefinite article, just as in (39). But constructions like the following are grammatical and quite common.

- (41)a. Ni hâyi guini gi halum esti na kuâttu doktu.
not anyone LCL.this LCL inside.L this L room doctor
 ‘No one in this room is a doctor.’
 b. Hâyi na Chamorro ma’estru?
who? L Chamorro teacher
 ‘Which Chamorro was a teacher?’ (MM 191)

The grammaticality of (41) reveals that the noun phrases *ni hâyi* ‘no one’ in (41a) and *hâyi na Chamorro* ‘which Chamorro?’ in (41b) do not serve as predicates in these constructions. Rather, the predicate is the noun phrase introduced by the null indefinite article—*doktu* ‘doctor’ in (41a) and *ma’estru* ‘teacher’ in (41b)—and its subject is the noun phrase that has been displaced to the left edge of the construction by wh-movement. Note that this conclusion cannot be evaded by maintaining that *doktu* and *ma’estru* in (41) are actually embedded predicates within relative clauses. If that were a plausible analysis, it ought to be equally available in (39)—but the sentences in (39) are ungrammatical.

These and other sorts of evidence make it clear that Chamorro does indeed have syntactically focused constituents—and interrogative phrases—that are displaced to the left edge of the sentence by wh-movement.

23.7 Further reading

See Chung (1998) for further discussion of syntactic focus in Chamorro, and Chung (2009) on the wh-movement analysis of the focus construction and constituent questions.

RELATIVE CLAUSES

Relative clauses are embedded clauses that modify a head noun. They contain a gap—a missing constituent that corresponds to the head noun. Information about the gap is registered by the special types of agreement associated with wh-movement.

24.1 Overview

Relative clauses are embedded clauses that modify a head noun. Like other modifiers within the noun phrase, they follow the determiner but can precede or follow the head noun (see 7.3). There is no relative pronoun or other constituent that has obviously been displaced to the left edge of the relative clause. Nonetheless, relative clauses contain a gap—a missing constituent that corresponds to the head noun. Wh-agreement and complementizer agreement are used to register information about the gap, and this suggests that some unpronounced constituent identified with the head noun, or perhaps the head noun itself, has been displaced within the relative clause by wh-movement.

24.2 describes the location of relative clauses within the noun phrase and their internal structure. 24.3 discusses wh-agreement and complementizer agreement in relative clauses. Complementizer agreement has a different set of realizations when the relative clause occurs in a noun phrase that is necessarily indefinite; 24.4 presents the details. 24.5 describes long-distance relative clauses. Finally, 24.6 looks briefly at some constructions that may involve relative clauses but can also be analyzed in other ways.

24.2 Basics

24.2.1 Location within the noun phrase

Relative clauses follow the determiner but can precede or follow the head noun (see 7.3.5). These options are illustrated below, with the head noun represented in boldface and the relative clause enclosed in brackets.

- (1) a. Kumãdu i **nengkanu'** [ni hu na'lãgu].
 AGR.scorched *the food* *COMP* *AGR cook*

- ‘The food that I cooked became scorched.’ (CD, entry for *kumådu*)
- b. Ti ya-hu i [nina’lagu-ña si nanå-hu] na
not like-AGR the WH[OBJ].cook-AGR UNM mother-AGR L
nengkanu’.
food
 ‘I didn’t like the food that my mother cooked.’ (CD, entry for
uttimamenti)

The relative clause follows the head noun in (1a), but precedes it in (1b).

A third, less frequent option is that the relative clause can *surround* the head noun (see Vincent 2017). In this unusual construction, illustrated in (2), the head noun is located inside the relative clause, following the embedded predicate (and possibly other material) but preceding other constituents (see 7.3.5).¹ As usual, the entire relative clause follows the determiner.

- (2) Ti klåru i [mapublika na **disiplina** ginin
not AGR.clear the AGR.PASS.publish L training from
i iskuela].
the school
 ‘The rule of conduct published by the school is not clear.’ (CD,
 edited entry for *disiplina*)

The head noun of a relative clause does not have to be overt. It is often deleted by noun phrase ellipsis, as in (3) (see 7.4).

- (3) I kusineru ha sabureha i [nina’lagu-ña].
the cook AGR taste the WH[OBJ].cook-AGR
 ‘The cook tasted the (food) he cooked.’ (CD, entry for *sabureha*)

When the relative clause precedes the head noun, the head noun is marked with *na*, the pre-head form of the linker; see (4a) below. Sometimes the linker does not appear when the predicate of the relative clause shows possessor agreement (= has an agreement suffix) and the head noun immediately follows it; this is shown in (4b). The same patterns occur when the relative clause surrounds the head noun, as can be seen from (4c) and (4d).

¹ This construction is attested in some early twentieth-century grammars of Chamorro. The example below is cited by Safford 1903: 311):

- (a) Hihina i [ha konni’ nigap na **guihan** si Manuel].
poisoner the AGR catch yesterday L fish UNM Manuel
 ‘The fish Manuel caught yesterday was poisonous’

- (4) a. Ti siña hu fāhan i [malago'-hu] na **kareta** ...
not can AGR buy the WH[OBL].want-AGR L car
 'I can't buy the car that I wanted...' (CD, entry for *chatda*)
- b. Mama'kaddu i [nina'lagu-hu] **batātas**.
AGR.ANTIP.turn.into.soup the WH[OBJ].cook-AGR potato
 'The potatoes I cooked became liquid.' (CD, entry for *mama*)
- c. Ti tufungun kuāntu mineggai-ña
not AGR.countable how.much? quantity-AGR
 [pineksai-ña na **mānnuk** si Antonio].
WH[OBJ].raise-AGR L chicken UNM Antonio
 'It's uncountable how many (lit. how large the quantity is of) chickens Antonio is raising.' (CD, entry for *tufungun*)
- d. Yan-ñiha i bisinu i [fina'tinās-ña] **pān**
like-AGR the neighbor the WH[OBJ].make-AGR bread
 si nanā-hu].
UNM mother-AGR
 'The neighbors loved my mom's bread.' (CD, entry for *pān*)

When the relative clause follows the head noun, the head noun is not marked with the post-head form of the linker. The absence of the linker is unexpected. It may be that in this environment, the linker is realized simultaneously with complementizer agreement (see 7.3.5 and 24.3.2).

Although all three of the word order options for relative clauses are well-attested, the default is for the relative clause to follow the head noun (see 7.3.5). This is the most frequent word order when the head noun is a common noun, and the only option when it is a pronoun or name, as in the example in (5).

- (5) Buen binidu todus **hamyu** [ni manggaigi guini].
welcome all you.PL COMP AGR.be.at here
 'Welcome to all of you (pl.) who are here.' (CD, entry for *buen binidu*)

When relative clauses are stacked on the same side of the head noun, they generally follow the head noun, as in (6).

- (6) Manasudda' yan un **Hudihus** [ni kakahna]
AGR.RECP.find with a Jew COMP magician
 [ni na'ān-ña si Bar-Jesus] [ni ha fa'
COMP name-AGR UNM Bar-Jesus COMP AGRpretend

profeta gui’].

prophet he

‘They met with a Jew who was a magician whose name was Bar-Jesus who pretended to be a prophet.’ (NT 236)

Moreover, noun phrases in which the relative clause follows the head noun can be introduced by the full range of determiners, including the definite article *i* (in (1a)), the null indefinite article, the indefinite article *un* (in (6)), a demonstrative (in (7a)), or a quantifier (in (7b-c)).

- (7) a. Nuebu ha’ esti na **mohon** [ni
AGR.new EMP this L boundary.marker COMP
 mapo’lu].
AGR.PASS.put
 ‘This boundary marker that was placed is just new.’ (CD, entry for *mohón*)
- b. Mamuga’ si Benigno meggai **hima** [ni
AGR.ANTIP.split UNM Benigno many.L giant.clam COMP
 ginin Palau].
from Palau
 ‘Benigno split open a lot of clams that were from Palau.’ (CD, entry for *mamuga*)
- c. Debi di un difina kada **palâbra** [ni manggaigi
should PRT AGR.define each word COMP AGR.be.at
 gi lista].
LCL list
 ‘You have to define each word on the list.’ (CD, entry for *difina*)

Noun phrases in which the relative clause precedes the head noun are introduced by a more limited set of determiners—usually, the definite article *i* or the null indefinite article, as in (8).

- (8) a. Estagui’ i risuttan i CCR ... put i [un gigimin]
here.is the result.L the CCR about the AGR.drink.PROG
 na **hânum**.
L water
 ‘Here are the results of the CCR about the water you drink.’
 (*Commonwealth Utility News*, July 2014: 8)
- b. Guâhu kumuentutusi hamyu kumu [manggai
I WH[SBJ].speak.to.PROG you.PL as AGR.have

kinimprendi] na **tãotãgui**.
understanding L people
 ‘I am speaking to you (pl.) as men who are wise.’ (NT 311-312)

Noun phrases in which the relative clause modifies an unpronounced head noun have a similarly limited set of determiners; see (9).

- (9) a. Tãya’ siña numa’adispatta i [ha
AGR.not.exist can WH[SBJ].make.RECP.separate the AGR
 na’danña’ si Yu’us].
make.joined UNM God
 ‘No one can separate what (lit. the ones that) God has joined together.’ (CD, entry for *na’adispatta*)
- b. Guaha [gumãguassan i lugât Flora esta].
AGR.exist WH[SBJ].trim.PROG the place.L Flora already
 ‘There is someone weeding Flora’s area already.’ (CD, entry for *guãssan*)

The reasons for this limitation are unclear. Still, the fact that any determiner at all can introduce the head noun in noun phrases like (7) is further evidence that the default is for relative clauses to follow the head noun.

24.2.2 Internal structure

Relative clauses have essentially the same internal structure whatever their word order within the noun phrase, and whether the head noun is overt or null. These embedded clauses are finite clauses that can have other clauses embedded more deeply within them. Each of the relative clauses in (10), for instance, is a complex sentence that contains an embedded adverbial clause (enclosed by the inner set of brackets). Note that the relative clause follows the head noun in (10a), precedes it in (10b), and surrounds it in (10c).

- (10)a. In li’i’ un **tãotão** [ni ha u’usa i na’ân-mu
AGR.see a person COMP AGR.use.PROG the name-AGR
 [para u fandulalak aniti]] ...
FUT AGR.ANTIP.chase devil
 ‘We (excl.) saw a person who was using your name to chase away demons.’ (NT 79)
- b. Si Vincent [bisiosu [yanggin kumuentus]] na **tãotão**.
UNM Vincent AGR.vicious if AGR.speak L person
 ‘Vincent is a vicious person when he talks.’ (CD, entry for *bisiosu*)

- c. I [finahan Jose na **pidâsun** **tânu'** [dispues di
the WH[OBJ].buy.L Jose L piece.L land after PRT
 umasagua yan si Maria]], humuyung propiedât
AGR.marry with UNM Maria AGR.go.out property.L
 komunidât.
community
 'The piece of land that Jose bought after he married Maria becomes
 community property.' (CD, entry for *propiedât komunidât*)

Each of the relative clauses in (11) is a complex sentence that contains an embedded infinitive clause. The head noun is overt in (11a), but not in (11b).

- (11)a. I **taotâo** [ni ti malagu' [ma'atbeti]] siempri
the person COMP not AGR.want AGR.INF.PASS.advise indeed
 ti maulik para humuyong-ña.
not AGR.good FUT WH[DJ].go.out-AGR
 'The person who does not want to be advised will eventually go
 wrong.' (CD, entry for *atbeti*)
- b. Guaha [ti manmalagu' [tumulaika na'an-ñiha]].
AGR.exist not AGR.want INF.change name-AGR
 'There were some who did not want to change their names.' (from a
 conference presentation)

Chamorro has no relative pronouns, so there is no relative pronoun or other overt constituent that has obviously been displaced to the left edge of the relative clause. Nonetheless, relative clauses contain a gap—a missing constituent that corresponds to the head noun. With one exception to be discussed below, the gap is a missing noun phrase. This missing noun phrase can serve as an argument of the predicate; specifically, as a subject, direct object, or oblique associated with a verb or adjective, or as the subject of a predicate that is a noun or preposition. It can also serve as an adjunct, but not as the predicate. The gap is a subject in the relative clauses in (7), (8b), and (9b)), a direct object in the relative clauses in (1) and (3), and an oblique in the relative clauses below.

- (12)a. I taotâo-ta lokkui' humuyung gi batku ya ha
the person-AGR also AGR.go.out LCL ship and.then AGR
 chuli' i [malagu'-ñiha]!
take the WH[OBL].want-AGR
 'Our (incl.) people too went out to the ship and took what they
 wanted!' (from a conference presentation)

- b. Ha chuli' i [nina'i nu atyu i haggan] **kāhun**.
AGR take the AGR.PASS.give OBL that the turtle box
 'He took the box that he had been given by that turtle.' (from a tape-recorded narrative)
- c. Siguru na tãya' **ni unu** [para u
AGR.certain COMP AGR.not.exist not one FUT AGR
kinentra esti.
PASS.challenge this
 'It is certain that there is no one who will challenge this (lit. by whom this will be challenged).' (*Ginen I Obispo* September 8, 2013)

Note that the gap cannot be the object of a preposition.

The gap can be a possessor in limited contexts; namely, when the possessed noun has the null indefinite article as its determiner and serves as the direct object or the subject of an intransitive (state) predicate. Then the possessed noun shows possessor agreement, as in (13).

- (13)a. Lão mapput para i [10 āñus idât-ña] na **pātgun**.
but AGR.hard for the ten years age-AGR L child
 'But it was hard for a ten year-old child.' (*Ginen I Obispo* April 29, 2013)
- b. Ti mǎolik i **katpinteru** ni [tãya'
not AGR.good the carpenter COMP AGR.not.exist
nibet-ña.
level-AGR
 'A carpenter without a level (lit. who there is no level of) is not right.' (CD, entry for *nibét*)

Gaps that serve as adjuncts can specify location in time or space, means, or manner. The gap in the relative clause in (14a) specifies location in time. There are two relative clauses in (14b): the gap in the outer relative clause specifies location in space, and the gap in the inner relative clause specifies means.

- (14)a. Lão pǎ'gu hǎgu un udu ... asta atyu na
but now you AGR.mute until that L
ha'āni [anai para u fanmakumpli esti siha].
day COMP FUT AGR.AGR.PASS.fulfill this PL
 'But now you shall be mute until that day that these things are accomplished.' (NT 99)

- b. ... kululo'ña i Unibetsidât Guam yan ottru **lugât**
especially the university.L Guam and other place
siha [ni ma'u'usa ennao i [para
PL COMP AGR.PASS.use.PROG that the FUT
 ma'istudia i finu' Chamorro]].
PASS.study the speech.L Chamorro
 '...especially the University of Guam and other places where that
 (material) for studying the Chamorro language is used.' (from a
 conference presentation)

The one exception to this pattern involves relative clauses that surround the head noun. Then the gap cannot be a missing noun phrase, because the head noun occurs inside the relative clause, so no noun phrase is missing, as can be seen from (15).

- (15) Manmantika i [kininne'-ña na **haiting** si
AGR.fatty the WH[OBJ].catch-AGR L bigeye.scad UNM
 Luis].
Luis
 'The bigeye scad that Luis caught are very fatty.' (CD, entry for
haiting)

However, Vincent (2017) observes that when the head noun occurs inside the relative clause, it cannot be preceded by an overt determiner, but—surprisingly—is marked with the pre-head form of the linker. He proposes that in such cases, the gap is a missing determiner associated with the head noun—a determiner whose presence is signaled by the pre-head form of the linker.

With this in place, it becomes clear that gaps in relative clauses have the same overall distribution as noun phrases, and parts of noun phrases, that can be displaced by wh-movement. For instance, interrogative noun phrases are displaced by wh-movement in constituent questions when they serve as arguments or adjuncts, but not when they serve as the predicate (see 22.3). The same is true of syntactically focused noun phrases that are displaced by wh-movement in the focus construction (see 23.2 and 23.3). The noun phrases that are displaced can be subjects, direct objects, or obliques, but not objects of prepositions.² They can be possessors as long as the possessed

² Prepositional phrases can be displaced by wh-movement in questions and in the focus construction, but the gap in relative clauses must be a noun phrase; it cannot be a prepositional phrase.

noun is introduced by the null indefinite article and serves as a direct object or the subject of an intransitive (state) predicate. They can also be adjuncts that specify location in time or space, means, or manner. Finally, interrogative determiners or focused determiners that form part of a noun phrase argument can be displaced on their own, leaving the rest of the noun phrase in place. In such cases, the head noun is marked with the pre-head form of the linker, just as in (15).

These parallels suggest that the gap in relative clauses is created when a constituent is displaced to the left edge of the relative clause by wh-movement. When the relative clause surrounds the head noun, the displaced constituent is an unpronounced determiner. Otherwise, it is either an unpronounced noun phrase identified with the head noun, or perhaps the head noun itself. The exact identity of the displaced noun (phrase) is not important here.³ What matters is the assumption that some constituent corresponding to the head noun is displaced by wh-movement within the relative clause.

24.3 Relative clauses and agreement

In relative clauses, information about the gap is registered on the embedded predicate and the embedded complementizer by two special types of agreement: wh-agreement and complementizer agreement. These types of agreement are associated with wh-movement elsewhere in Chamorro (see 22.4 and 23.4), so their presence in relative clauses strengthens the case that the gap is created by wh-movement.

Wh-agreement in relative clauses is described in 24.3.1, and complementizer agreement, in 24.3.2. Complementizer agreement has a different set of realizations when the relative clause occurs in a necessarily indefinite noun phrase; the details are postponed to 24.4.

³ Relative clauses have received two types of accounts in generative syntax. In external head accounts, the head noun originates outside the relative clause, and is identified with some constituent inside the relative clause that undergoes wh-movement. In head raising accounts, the head noun originates inside the relative clause, undergoes wh-movement, and then is adjoined to the relative clause, creating an external head (see e.g. Bianchi 1999, Bhatt 2002). Much evidence suggests that both types of accounts must be available. It remains to be seen whether both are utilized in Chamorro.

24.3.1 Wh-agreement

Wh-agreement in relative clauses registers the grammatical relation of the gap on the predicate associated with it. This special agreement signals whether the gap is a subject, object, oblique, or adjunct. Like subject-verb agreement, wh-agreement appears only on verbs or adjectives, and is sensitive to mood and transitivity. The overt forms of wh-agreement replace the normal forms of subject-verb agreement. Otherwise, if wh-agreement is not realized overtly, the verb or adjective is inflected for subject-verb agreement as usual.

Wh-agreement has the same overt forms in relative clauses as it does in constituent questions and the focus construction (see 22.4.1 and 23.4.1). However, some overt forms of agreement that are obligatory in questions and the focus construction are merely optional in relative clauses.

Wh-agreement with a subject gap is realized as *-um-*, but only optionally, when the predicate is a transitive verb in the realis mood; see (16a-b). (This overt realization of wh-agreement is obligatory in questions and the focus construction.) Otherwise, wh-agreement with a subject gap has no overt realization, as (16c) shows.

- (16)a. Manlibri yan ma li'i' i [hagas **pumoksai**
AGR.saved and AGR.see the long.ago WH[SBJ].nurture
 siha] na tãotão.
them L person
 'They were free and they saw those people who used to nurture them in the past.' (Cooreman 1983: 167)
- b. Ennão siha na fina'nã'gui kalang un chetnut [ni
that PL L teaching seems.like a disease that
 ha kãkannu' i sensin].
AGR.eat.PROG the flesh
 'Those teachings are like a disease that eats flesh.' (NT 395)
- c. Mungnga mannã'i ni [ti agradesidu].
don't AGR.ANTIP.give OBL not AGR.well-received
 'Don't give something that is not well-received.' (CD, entry for *agradesidu*)

Wh-agreement with an object gap is realized, optionally, as the combination of *-in-* plus nominalization when the gap is the direct object of an ordinary transitive verb (see (17a-b)). The realization is the same when the gap is the oblique object of an applicative or passive verb, except that *-in-* is omitted when the verb is passive (17c-d). (See 22.4.1.2 on the realization of wh-agreement with other types of objects.)

- (17)a. Ha konni' yuhi na haggan [i **siniddâ'-ña**]
AGR catch that L turtle COMP WH[OBJ].find-AGR
 [ni dikiki'].
COMP AGR.small
 'He caught that small turtle that he had found.' (Cooreman 1983: 102)
- b. Siempri si Yu'us ha na'funhâyan i [ha tutuhun]
indeed UNM God AGR make.finished the AGR begin
 na cho'chu'.
L work
 'Surely God will finish the work that he began.' (Ginen I Obispo September 8, 2013)
- c. Kalang mampus tåddung para i
seems.like so.much AGR.deep for the
[manmana'i-ta] na titanus.
WH[OBJ].AGR.PASS.give-AGR L brain
 'It seems too profound for the brains we (incl.) were given.' (Ginen I Obispo March 20, 2011)
- d. Aprubetcha i tiempu [ni manâ'i hão].
make.use.of the time COMP AGR.PASS.give you
 'Make use of the time that you are given.' (CD, entry for *aprubecha*)

Wh-agreement with an oblique gap is realized as nominalization when the gap is an argument of an adjective or intransitive verb, as in (18a). The realization is the same, but merely optional, when the gap is an instrument, as in (18b-c). (Overt wh-agreement with an instrument gap is obligatory in questions and the focus construction.)

- (18)a. Todu klâsin åtti [ni **malago'-mu**] siña ha
all sort.L design COMP WH[OBL].want-AGR can AGR
 botda i makina.
embroider the machine
 'The machine can embroider all kinds of designs that you want.'
 (CD, entry for *botda*)
- b. Nâ'i yu' ni hapbun [ni para **fa'gasem-mu** ni
give me OBL soap COMP FUT WH[OBL].wash-AGR OBL
 kareta].
car
 'Give me the soap that you're going to wash the car with.'

- c. Tâya' alâmlî [ni para u mafa'tinas i
 AGR.not.exist wire COMP FUT AGR PASS.make the
 gigão].
 fish.trap
 'There's no wire to make the fish trap with.' (CD, entry for *gigão*)

Finally, wh-agreement with an adjunct gap is realized, optionally, as nominalization when the gap specifies manner or means (see (19a)); it has no overt realization otherwise (19b).

- (19)a. Mâolik i Lai yanggin ma'usa gi [diputsi
 AGR.good the law if AGR.PASS.use LCL supposed.to
 para **ma'usâ-ñã**].
 FUT WH[DJ].PASS.use-AGR
 'The law is good, if it is used in the (way) it is supposed to be used.'
 (NT 386)
- b. Sumâga gi atyu na lugât [anai umasudda' i
 AGR.stay LCL that L place COMP AGR.RECP.find the
 dos yan i haggan].
 two with the turtle
 'He stayed in that place where he and the turtle had met.' (from a
 tape-recorded narrative)

The examples above illustrate the pattern of wh-agreement in relative clauses that precede or follow the head noun, or whose head noun is not overt. Wh-agreement also occurs in relative clauses that surround the head noun, when the gap is a missing determiner (see 24.2.2). Then the agreement registers the grammatical relation of the noun phrase associated with the missing determiner—the noun phrase whose head noun remains in place inside the relative clause. In (4c-d), for instance, the gap is the missing determiner of the direct object, so the verb of the relative clause shows (the overt form) of object wh-agreement. The pattern is the same when an interrogative determiner is displaced in constituent questions (see 22.3.2) and—presumably—when a syntactically focused determiner is displaced in the focus construction.

24.3.2 Complementizer agreement

Complementizer agreement uses the complementizer of the relative clause to register information about the head noun, including its function within the relative clause. This agreement is realized as a special form of the complementizer that is sometimes overt and other times null. Complementizer

agreement is realized differently in relative clauses than in constituent questions and the focus construction, and the conditioning factors are more complex. Three sorts of information are encoded: (i) the head noun's function within the relative clause—specifically, whether it names a location in time or space, (ii) whether the head noun precedes the relative clause, and (iii) whether the head noun is immediately preceded by a demonstrative.

The first sort of information is registered by complementizer agreement elsewhere in Chamorro (see 22.4.2 and 23.4.2). However, the second and third sorts of information are usually encoded by the morpheme known as the linker (see 7.3.1). Recall (from 24.2.1) that a head noun that precedes a relative clause is—unexpectedly—not marked with the linker. This suggests that complementizer agreement in relative clauses may have taken over some of the linker's functions.

The forms of complementizer agreement in relative clauses are listed below. Note that the null complementizer is abbreviated 'null COMP'.

- (20) COMPLEMENTIZER AGREEMENT IN RELATIVE CLAUSES
- | | |
|---|-----------------|
| <i>When the head noun names a location in time or space and:</i> | |
| Precedes the relative clause | anai / ni / nai |
| Otherwise | anai |
| <i>When the head noun has some other function and:</i> | |
| Precedes the relative clause and is preceded by a demonstrative plus the linker | i |
| Precedes the relative clause | ni / nai |
| Otherwise | [null COMP] |

Some details: One overt realization of complementizer agreement, *anai*, looks like the subordinating conjunction *anai* 'when (realis)'; the other overt realizations apparently do not occur as complementizers outside the context of complementizer agreement. There is some regional and individual variation in the use of *ni* and *nai* (see below). In slow speech, *ni* is occasionally pronounced *nu i* (in the Saipan dialect) or *ni' i* (in the Guam dialect). It is unclear how to view these variants. Most likely, they can be traced to the fact that *ni* is homophonous with the oblique case marker *ni*. The oblique case marker normally fuses with the definite article *i*, but the two can also be pronounced separately, as *nu i* or *ni' i* (see 5.1.1.1, 5.1.1.2, and Safford 1903: 311). The appearance of the same forms in complementizer agreement, as slow speech variants of *ni*, could well be a further extension of the homophony of the two *ni*'s. (Another possibility: these slow speech forms might indicate a deeper connection between case marking and complementizer agreement.)

When the head noun names a location in time or space within the relative clause, complementizer agreement is realized as *anai*. Some examples are cited in (21).⁴

- (21)a. Ti ya-ña si Nāna atyu na guma' [**anai**
not like-AGR UNM mother that L house COMP
sumāsaga].
AGR.stay.PROG
 'Mother doesn't like that house that she's staying in.' (CD, entry for *guma*)
- b. Māttu gi un lugāt [**anai** bula tinanum gi
AGR.arrive LCL a place COMP AGR.much plant LCL
halum hānum].
inside.L water
 '[The turtle] arrived at a place where there were many plants in the water.' (*Igu* 2)
- c. Gof yan-ñiha i sagamai gi [**anai** guaha
very like-AGR the gnat LCL COMP AGR.exist
lamas fruta pat gollai].
rotten.L fruit or vegetable
 'The gnats love to be at (places) where there are rotten fruits or vegetables.' (CD, entry for *sāgamai*)

When the head noun also precedes the relative clause, the realizations *ni* or *nai* can be used instead of *anai*. *Ni* is more common in Saipan, and *nai* in Rota, but many speakers choose freely among all three forms.

- (22)a. Ti mǎfattu i tiempu [**ni** para u
not AGR.arrive.PROG the time COMP FUT AGR
mapunu' i hetnu].
PASS.turn.off the oven
 'The time at which the incubator (lit. oven) would be turned off had not yet come.' (EM 93)
- b. Mannatata mampus i madduk [**nai** para u
AGR.shallow so.much the hole COMP FUT AGR

⁴ When the head noun is overt and names a location in time or space within the relative clause, the relative clause normally does not precede it. I have been unable to locate any relative clauses of this type in the naturally-occurring data. The situation with respect to relative clauses that surround the head noun is not known. This is an area that deserves further study.

matânum i sini].
PASS.plant the taro
 ‘The holes in which the taro is going to be planted are too shallow.’
 (CD, entry for *nátata*)

Complementizer agreement has a different set of realizations when the head noun has some other function inside the relative clause. It is realized as *i* when the head noun precedes the relative clause and is itself immediately preceded by a demonstrative plus the pre-head form of the linker, as in (23) (but see the discussion below).⁵

- (23)a. Esti na Ibangheliu [**i** ta hunguk mapruklâma
this L gospel COMP AGR hear AGR.PASS.proclaim
 pâ’gu] ha sangângani hit mās ki ...
now AGR say.to.PROG us.INCL more than
 ‘This gospel that we (incl.) hear proclaimed today tells us (incl.)
 more than...’ (*Ginen I Obispo* October 28, 2001)
- b. Ya-ña si Tang atyu na kesu [**i**
like-AGR UNM Dad that L cheese COMP
 kalan mutung pao-ña].
seems.like AGR.stinky smell-AGR
 ‘Dad likes that cheese that has sort of a funny smell.’ (CD, entry for
kesu)

Otherwise, when the head noun precedes the relative clause, complementizer agreement is realized as *nai* (in the Rota dialect) or *ni*; see (7) and (24). Sometimes these realizations are used even when a demonstrative immediately precedes the head noun, as (24c) shows.

- (24)a. In manohu todū i sakâti [**ni** para bai in
AGR tie.in.bundle all the grass COMP FUT AGR
 sengg].
burn
 ‘We (excl.) tied together all the grasses that we (excl.) are going to
 burn.’ (CD, entry for *manohu*)

⁵ The *i* represented in boldface in (23) is a realization of complementizer agreement, not the definite article, since it is replaced by a different form of complementizer agreement when the head noun names a location in time or space (see (21a)).

- b. ... ta ayuda esti siha i membru [nai ma
AGR help this PL the member COMP AGR
 putfifiha na para ma ripasa i diksiunariun
persist.PROG COMP FUT AGR revise the dictionary.L
 Chamorro].
Chamorro
 ‘[I ask that] we (incl.) help these members who are persevering in
 revising the Chamorro dictionary.’ (from a conference presentation)
- c. Ta li’i’ esti na gurupun palâbra siha [ni
AGR see this L group.L word PL COMP
 manhâlum gi finu’ Chamorro] ...
AGR.go.in LCL speech.L Chamorro
 ‘We (incl.) see these phrases (lit. groups of words) that have come
 into the Chamorro language...’ (EM 117)

In all other contexts—namely, when the head noun is not overt or the relative clause precedes it, or surrounds it—complementizer agreement is realized as the null complementizer. Some representative examples are cited in (25).

- (25)a. I espitât era atyu i [matungu’ kumu
the hospital actually that the AGR.PASS.know as
 espitât i Navy].
hospital.L the Navy
 ‘The hospital was actually what (lit. that which) was known as the
 Navy hospital.’ (EM 91)
- b. Nâ’i ham pâ’gu na ha’âni ni [in nisisita] na
give us.EXCL now L day OBL AGR need L
 nengkanu’.
food
 ‘Give us (excl.) today the food we (excl.) need.’ (NT 10)
- c. Guaha [na’ân-ña na tâotâo Magellan].
AGR.exist name-AGR L person Magellan
 ‘There was a person whose name was Magellan.’ (from a
 conference presentation)

This is considerably more elaborate than the pattern of complementizer agreement found in constituent questions and the focus construction.

24.4 In necessarily indefinite noun phrases

Chamorro has four constructions that involve a necessarily indefinite noun phrase. These constructions are summarized very briefly here:

(i) The existential verbs *guaha* ‘exist’ and *tâya* ‘not exist’ have two arguments: one argument that names what exists, and another argument that names the location in time or space where it exists (see 14.2.2). The argument that names what exists, known as the *pivot*, is a noun phrase that must be indefinite; more precisely, it must have a weak determiner (see 6.2.5). (The necessarily indefinite noun phrase is represented in boldface in the examples below.)

- (26)a. *Ântis guaha un dângkulu na kollat babui gi As*
before AGR.exist a big L pen.L pig LCL As
Abed.
Abed
 ‘Back then there was a large pig pen at As Abed.’ (CD, entry for *As Abed*)
- b. *Tâya sopbla gi salappe’-hu, hokkuk gi*
AGR.not.exist remains LCL money-AGR AGR.all.gone LCL
tenda.
store
 ‘There’s nothing left of my money, it ran out at the store.’ (CD, entry for *sopbla*)

(ii) Quantificational adjectives such as *bula* ‘much, many’ and *meggai* ‘many’ have just one argument. That argument must be an indefinite noun phrase, and is almost always introduced by the null indefinite article (see 14.2.3).

- (27) *Meggai tâotâo gi sirimonias i gubetnu.*
AGR.many person LCL ceremony.L the governor
 ‘There were many people at the governor’s ceremony.’ (CD, entry for *sirimonias*)

(iii) The verbs of possession *gai* ‘have’ and *tai* ‘not have’ have two arguments: one argument that names the possessor, and another argument that names what is possessed. The argument that names what is possessed is a noun phrase whose head noun is incorporated (see 14.3). This noun phrase, which has no determiner, has the meaning of an indefinite.

- (28) Poddung si Tona' gi trongku ya
 AGR.fall UNM Tona' LCL tree and.then
 tai chetnut.
 AGR.not.have injury
 'Tona' was not injured when she fell off the tree.' (CD, entry for *tai chetnut*)

(iv) General indefinites are indefinite forms that serve as noun phrases or determiners and are restricted to certain syntactic contexts (see Chapter 9). In free choice contexts, the general indefinite *hăyi* can be translated as 'whoever, any(one) at all', the general indefinite *hăfa* can be translated as 'whatever, any(thing) at all', and so on (see 9.2.2.4). General indefinites in free choice contexts are often preceded by *maseha* 'at all, (which)ever, no matter'.

- (29) Mama'udai yu' gi maseha hăfa na klâsin udai.
 rider I LCL at.all any L sort.L transportation
 'I'm a rider of any kind of rides.' (CD, entry for *mama'udai*)

Necessarily indefinite noun phrases can be modified by a relative clause. When the necessarily indefinite noun phrase is the argument of an existential verb or a quantificational adjective, this relative clause has all the word order options described earlier in 24.2.1: it can precede, follow, or surround the head noun, and the head noun can be overt or unpronounced.

- (30) a. Guaha un păharita [inakka' ni cha'ka gi
 AGR.exist a little.bird AGR.PASS.bite OBL rat LCL
 paingi].
 last.night
 'There was one small bird that was bitten by the rat last night.' (CD, entry for *păharita*)
- b. Meggai [fina'tinâs-ña i biha] pângket.
 AGR.many WH[OBJ].make-AGR the old.woman pancake
 'There were a lot of pancakes that the old lady made.' (CD, entry for *pângket*)
- c. Siempri guaha [ha risibi dângkulu na guinaha
 indeed AGR.exist AGR.receive large L wealth
 si Jack].
 UNM Jack
 'There will soon be a lot of wealth that Jack receives.' (CD, entry for *guinaha*)

- d. Tâya' [umagradesi ma'umiya gi
 AGR.not.exist WH[SBJ].appreciate AGR.INF.PASS.humiliate LCL
 me'nan tâotâo].
 front.L people
 'There's no one who appreciates being humiliated in front of
 people.' (CD, entry for *umiya*)

When the necessarily indefinite noun phrase has an incorporated head noun or is a general indefinite, the word order options are more limited: the head noun must be overt, and the relative clause must follow it.

- (31)a. Esta gai **mulidu siha** [âtilung] i peras.
 already AGR.have bruise PL AGR.black the pear
 'The pear has bruises of dark spots (lit. that are black).' (CD, entry
 for *mulidu*)
 b. Arekla **maseha hâfa** [mayamak].
 fix at.all anything AGR.PASS.break
 'Fix whatever is broken.' (CD, entry for *arekla*)

As might be expected, information about the gap is registered within the relative clause by wh-agreement and complementizer agreement. But though wh-agreement operates as usual, complementizer agreement does not. The default in these relative clauses is for complementizer agreement to have the same realizations as in constituent questions and the focus construction (see 22.4.2 and 23.4.2). These realizations are shown in (32).

- (32) COMPLEMENTIZER AGREEMENT IN RELATIVE CLAUSES
When the head noun is necessarily indefinite and:
 Names a location in time or space na / nai / ni
 Otherwise [null COMP]

To illustrate, consider the relative clauses below, which modify a necessarily indefinite noun phrase. In (33), complementizer agreement is realized as *na*, *nai*, or *ni*, because the head noun names a location in time or space within the relative clause.

- (33)a. Guaha [ni matâ'pang i tipu].
 AGR.exist COMP AGR.bland the sugar.cane
 'Sometimes (lit. there are (times) when) sugar cane is bland.' (CD,
 entry for *tupu*)

- b. Tâya' [nai hu chagi kumânnu' i haguhi].
 AGR.not.exist COMP AGR try INF.eat the sandcrab
 'I've never tried (lit. There isn't a (time) when I tried) eating
 sandcrabs.' (CD, entry for *haguhi*)
- c. Para u baila si Dora maseha ngai'an [na
 FUT AGR dance UNM Dora at.all anytime COMP
 malagu'].
 AGR.want
 'Dora will dance anytime she wants.' (CD, entry for *maseha*
 ngai'an)

In (34), complementizer agreement is realized as the null complementizer, because the head noun has some other function within the relative clause. (More examples of this type are cited in (30-31) and 9.2.2.4).

- (34)a. Kada puengi guaha [sumirinânata gi
 each night AGR.exist WH[SBJ].serenade.PROG LCL
 bisinu].
 neighbor
 'There's someone serenading at the neighbor every night.' (CD,
 entry for *sirinâta*)
- b. Bulan botas hu chagi, lão tâya' [omlat-tu].
 many.L boots AGR try but AGR.not.exist WH[OBL].fit-AGR
 'I tried many boots, but there were none that fit me.' (CD, entry for
 botas)
- c. Meggai [nirikohi-ña salâppi' i laraina].
 AGR.much WH[OBJ].collect-AGR money the queen
 'The queen raised a lot of money (lit. There was much money that
 the queen raised).' (CD, entry for *laraina*)

It is not clear why complementizer agreement in these relative clauses uses the realizations found in constituent questions and the focus construction (but see Chung 1987 for a proposal).

Very occasionally, a relative clause that modifies a necessarily indefinite noun phrase will deviate from this pattern, and use the realizations of complementizer agreement found in ordinary relative clauses instead (i.e. the forms shown in (20)). See (35).

- (35)a. Si nâna guaha atkiyâ-ña [ni ha fâhan
 UNM mother AGR.exist hairpin-AGR COMP AGR buy

Amerika].

America

‘Mother has a large hairpin that she bought in America.’ (CD, entry for *atkiya*)

- b. Ti gef bula finu’ Chamorro [ni
 not AGR.very much word.L Chamorro COMP
 tinituhun ni u].
 AGR.PASS.begin OBL u
 ‘There are not too many Chamorro words that begin with *u*.’ (CD, entry for *u*)
- c. I gitåla gai oktaba [ni bunitu sunidu-ña].
 the guitar AGR.have octave COMP AGR.nice sound-AGR
 ‘The guitar has octaves that have a good sound.’ (CD, entry for *oktåba*)

Finally, if a necessarily indefinite noun phrase is modified by several relative clauses, at most one of these relative clauses realizes complementizer agreement as shown in (32). The other relative clauses realize complementizer agreement in the same way as ordinary relative clauses (see Chung 1987).

- (36)a. Meggai [manmåtai] [ni mannina’yi ni atektuk].
 AGR.many AGR.die COMP AGR.PASS.infect OBL leprosy
 ‘There were many who died who were infected with Hansen’s disease.’ (CD, entry for *atektuk*)
- b. Meggai suni [ni manbå’ba’]
 AGR.many taro COMP AGR.defective
 [manpåsmu].
 AGR.incompletely.developed
 ‘Many taros that are defective are not fully grown.’ (CD, entry for *bå’ba’*)

This too deserves further study.

24.5 Long-distance relative clauses

When a relative clause is formed from a complex sentence, the gap can occur in an embedded clause of the complex sentence, separated by more than one clause from the head noun. The result can be called a long-distance relative clause. In the long-distance relative clauses in (37), the gap occurs in the most deeply embedded clause, enclosed by the innermost set of brackets.

(The relative clause precedes the head noun in (37a-b) and surrounds it in (37c); the head noun is not overt in (37d)).

- (37)a. Bota atyu na **kandidātu** [i un tungu' [na
vote.for that L candidate COMP AGR know COMP
 para u fachu'chu'i i intires i taotão gi
FUT AGR work.for the interest.L the person LCL
 leyislatura]].
legislature
 'Vote for the candidate who you think will work for the people's
 interest in the legislature.' (CD, entry for *leyislatura*)
- b. I **trongku** [ni mahonggi [na gaigi
the tree COMP AGR.PASS.believe COMP AGR.be.at
 [na mañāsaga]] na'ân-ña trongkun nunu.
COMP AGR.stay.PROG name-AGR tree.L banyan
 'The tree that it is believed that [the *tãotão mo'na*] are staying in is
 called the banyan tree.' (Cooreman 1982: 2)
- c. Tãya' [mamahlão-hu na **palão'an** [para
AGR.not.exist WH[OBL].ashamed-AGR L woman FUT
 asudda'-hu]].
WH[OBL].RECP.find-AGR
 'There was no woman who I was ashamed to meet with.'
- d. Mungnga machansa hảo para un cho'gui i [ti un
don't AGR.PASS.risk you FUT AGR do the not AGR
 tungu' [chumo'gui]].
know INF.do
 'Don't take the risk of doing what you don't know how to do.' (CD,
 entry for *chansa*)

The gap is the subject of *fachu'chu'i* 'work for' in (37a), the locative argument of *sãga* 'stay' in (37b), the oblique (comitative) argument of *asudda* 'meet with (lit. find each other)' in (37c), and the direct object of the infinitive *chumo'gui* 'to do' in (37d).

Information about the gap in long-distance relative clauses is registered by the special types of agreement associated with wh-movement. Complementizer agreement is generally realized by the forms in (20), but when the relative clause modifies a necessarily indefinite noun phrase, the default is for the forms in (32) to be used instead (see 24.3.2 and 24.4). For instance, both of the long-distance relative clauses in (38) follow the head noun and have a gap that is the direct object of *taitai* 'read'. Complementizer agreement is realized as *ni* in (38a) but as the null complementizer in (38b),

because the relative clause in (38b) modifies a necessarily indefinite noun phrase.

- (38)a. I lepblu [ni malagu' si Carmen [para u
the book COMP AGR.want UNM Carmen FUT AGR
 taitai]], taigui guini.
read AGR.not.be.at here
 'The book that Carmen wanted to read is not here.'
- b. Tâya' ni hâfafa na lepblu [malago'-hu
AGR.not.exist not any.EMP L book WH[OBL].want-AGR
 [para bai hu taitai]].
FUT AGR read
 'There aren't any books that I want to read.'

Wh-agreement registers the grammatical relation of the gap on the predicate associated with it (see 24.3.1). In addition, the *higher* predicates within the relative clause can optionally show wh-agreement. Wh-agreement on a higher predicate does not register the grammatical relation of the gap, but rather the grammatical relation of the embedded clause that contains the gap. In the pair of relative clauses in (38), for instance, the embedded verb *taimai* 'read' shows (the null form of) object wh-agreement, because the gap is its direct object. But in (38b), the higher verb *malagu'* 'want' shows oblique wh-agreement, because the embedded clause containing the gap serves as its oblique argument. (The higher verb in (38a) is not marked with wh-agreement, because wh-agreement on higher predicates is optional in long-distance relative clauses.)

The long-distance relative clauses in (39) provide another illustration of this pattern. Wh-agreement on the most deeply embedded verb registers the grammatical relation of the gap, which is a subject in (39a), a direct object in (39b), and a manner adjunct in (39c). But when the higher verb of the relative clause is marked with an overt form of wh-agreement, as it is in (39b) and (39c), it shows object wh-agreement, because it is a (concealed) applicative, and the embedded clause containing the gap serves as its oblique object.⁶

- (39)a. Kâo atyu na lâhi i [un sangâni yu' [bumisita
Q that L man the AGR.say.to me WH[SBJ].visit

⁶ The higher verbs in these relative clauses are the applicative *sangâni* 'tell' (from *sâgan* 'say') and the concealed applicative *tâgu* 'direct'.

si Maria]]?

UNM Maria

‘Is that the man who you told me visited Maria?’

- b. Yanggin munhâyan en che’gui todû i
if AGR.done AGR do all the
 [manmatâgu’-miyu [para en che’gui]] ...
WH[OBJ].AGR.PASS.direct-AGR FUT AGR do
 ‘When you (pl.) have done all that you (pl.) were told that you (pl.)
 should do...’ (NT 140)
- c. Mafa’tinas taiguihi i [tinago’-ña si
AGR.PASS.make like.that the WH[OBJ].direct-AGR UNM
 Yu’us as Moises [para mafa’tinâs-ña] ...
God OBL Moses FUT WH[DJ].PASS.make-AGR
 ‘It was made in the (way) that God commanded Moses that it
 should be made.’ (NT 225)

Finally, when a long-distance relative clause modifies a necessarily indefinite noun phrase, higher predicates within the relative clause generally must show wh-agreement, as in (38b).

24.6 Related constructions

Three constructions are briefly described here which may involve relative clauses but can also be analyzed in other ways. They are: embedded clause modifiers introduced by the complementizer *na* (discussed in 24.6.1), existential verbs used as determiners (in 24.6.2), and time adverbs formed from nouns marked with the pre-head form of the linker (in 24.6.3).

24.6.1 Embedded clause modifiers introduced by *na*

Very occasionally, an indefinite head noun seems to be modified by a finite embedded clause that does not have the characteristic morphology of relative clauses. These embedded clause modifiers do not show complementizer agreement or wh-agreement. They follow the head noun, and are introduced by the finite complementizer *na*. Some examples are cited in (40).

- (40)a. Guaha finu’ i manâmku’ [na sen
AGR.exist speech.L the PL.old COMP AGR.extremely
 magâhit].
true
 ‘There is a saying of the elders that is really true.’ (*Ginen I Obispo*
 July 9, 2000)

- b. Ha sodda' un kareta gi halum palâsyu [na bula
AGR.find a car LCL inside.L palace COMP AGR.many
 diamond yan oru].
diamond and gold
 'He found a carriage inside the palace loaded with diamonds and
 gold (lit. that there were many diamonds and gold).' (Cooreman
 1983: 110)
- c. Guaha nai ma lili'i' palâo'an [na
AGR.exist COMP AGR.see.PROG woman COMP
 â'a'paka' magagu-ña ya anâkku' pâpa'
AGR.white.PROG clothes-AGR and.then AGR.long down
 gaputilu-ña].
hair-AGR
 'There were (times) when they saw a woman who had whitish
 clothes and long hair.' (Cooreman 1983: 3)

Embedded clause modifiers of this type could be analyzed as relative clauses (cf. Safford 1903: 311). If they are, some explanation must be given for why they do not show complementizer agreement or *wh*-agreement. The alternative is that they might not be relative clauses at all. If so, they would not contain a gap, but instead would be complete embedded clauses that serve as modifiers, like certain embedded clauses in English introduced by *such that* (e.g. *This is the value of n such that $3n=7$*). This second alternative is not unreasonable, given that elsewhere in Chamorro, embedded clauses introduced by *na* can serve as modifiers (adverbial clauses; see 20.4.1).

24.6.2 Existential verbs as determiners

When a relative clause follows the head noun, the head noun is not marked with the post-head form of the linker (see 24.2.1). However, sentences occasionally occur that seem to be existential sentences in which a relative clause follows the head noun, but the head noun is marked with the *pre-head* form of the linker. These sentences begin with an existential verb, either *guaha* 'exist' or *tâya* 'not exist', followed by a head noun that seems to be the verb's necessarily indefinite argument. Two examples are cited in (41).

- (41)a. Guaha na âtgidun mampus â'paka', guaha
AGR.exist L cotton so.much AGR.white AGR.exist
 âhi'.
no
 'Some cottons are very white, some are not.' (CD, entry for
 âtgidun)

- b. Tâya' **na** Chamorro giya Guam tumungu'
 AGR.not.exist *L* *Chamorro* *LCL* *Guam* *WH[SBJ].know*
 fuminu' Ispañot.
 AGR.INF.speak *Spanish*
 'No Chamorros on Guam knew how to speak Spanish.' (from a
 conference presentation on Magellan's landing in the Mariana
 Islands)

The form of the linker in (41) suggests that these sentences might not involve a relative clause after all. Instead, they are focus constructions in which some modifier *precedes* the head noun, and the entire noun phrase has been displaced to the left edge of the sentence by wh-movement. The preceding modifier could, in principle, be a relative clause formed from the existential verb, but that is probably not the right analysis, given that (41b) means 'No Chamorros on Guam knew how to speak Spanish', not 'Chamorros who there were none of on Guam knew how to speak Spanish'.

A more likely hypothesis is that the existential verbs *guaha* and *tâya* in these constructions are serving, unusually, as quantificational determiners (i.e. *guaha* 'some', *tâya* 'no'). That would explain why the head noun is marked with the pre-head form of the linker. It would also strengthen the parallels between existential verbs and the quantificational adjectives *bula* 'much, many' and *meggai* 'many', which routinely serve as predicates or determiners (see 6.2.4.3).

Note, though, that *bula* and *meggai* can serve as determiners in noun phrases that bear a wide range of grammatical relations, including noun phrases that are in the local case or are objects of prepositions. But *guaha* and *tâya* only occasionally serve as determiners, and when they do, the noun phrase they introduce generally occurs at the left edge of the sentence, in topic or focus position.

Speakers vary considerably in their willingness to use *guaha* and *tâya* as determiners. This is an area that deserves further study.

24.6.3 Time adverbs marked with the linker

Nouns such as *biâhi* 'time', *mes* 'month', *puengi* 'night', *sâkkan* 'year', *simâna* 'week', and *tiempu* 'time' can be used as time adverbs when they are marked with the pre-head form of the linker. These adverbs describe times that overlap with the speech event (e.g. *na biâhi* 'this time', *na sâkkan* 'this year', and so on). They generally occur at the right edge of the clause, as shown in (42).

- (42)a. Gof makkat i lina'la' **na** tiempu.
 AGR.very hard the life L time
 'Life is very hard nowadays.' (CD, entry for *lina'la'*)
- b. Ti chãochão i tasi **na** simãna.
 not AGR.choppy the sea L week
 'The sea is not choppy this week.' (CD, entry for *chãochão*)
- c. Månggi i iha na ti manhahamyu **na**
 where.is? the daughter COMP not AGR.you.PL.PROG L
 biãhi?
 time
 'Where is the daughter (such) that you (pl.) are not together this
 time?' (CD, entry for *iha*)
- d. Ta fambota **na** sãkkan.
 AGR AGR.vote L year
 'We (incl.) will vote this year.' (CD, entry for *bota*)
- e. Måtai hão **na** biãhi.
 AGR.die you L time
 'You're gonna die this time.'

Given that the nouns at the right edge of the clause in (42) are marked with the pre-head form of the linker, one might wonder whether the 'rest of the clause' was, in fact, a relative clause. If so, the entire sentence would be a complex sentence whose predicate was a noun modified by a preceding relative clause, as in 'It is a time when life is very hard', 'It is a year when we will vote', and so on.

That could well be how time adverbs like *na biãhi*, *na sãkkan*, and so on originated historically, but it is probably not the best analysis for them in contemporary Chamorro. For one thing, it would require an unusual word order. In Chamorro today, when a noun modified by a relative clause names a location in time or space within the relative clause, the relative clause normally follows it rather than preceding it (see note 4). If the sentences in (42) contained relative clauses, the word order would be the opposite. This too is an area where further investigation is needed.

25

COMPARISON

Chamorro has degree morphemes, comparatives, and other ways of expressing comparison with adjectives and certain types of verbs.

25.1 Overview

Chamorro has degree morphemes, comparatives, and other ways of expressing comparison with adjectives and certain types of verbs. Degree morphemes such as *gof* ‘very’ and *sen* ‘extremely, most’ compare the extent to which some property holds to the extent to which it typically holds. When someone describes today as *gof maipi* ‘very hot’, they are saying that today’s heat exceeds the heat of a typical hot day. Comparatives compare the extents to which some property holds for different individuals or for different states of affairs. In the comparative sentence *Lokkã’ña hão ki si Carmen* ‘You’re taller than Carmen’, the comparative suffix *-ña* ‘more’ on *lokka* ‘tall’ indicates that the addressee’s tallness exceeds Carmen’s.

This chapter gives a survey of degree morphemes, comparatives, and other ways of expressing comparison. Degree morphemes are described first (in 25.2), and then comparatives (in 25.3). Superlatives and equatives are dealt with briefly in 25.4. Degree morphemes and comparative morphemes that are restricted to local nouns and directional nouns are discussed later, in Chapter 28.

25.2 Degree morphemes

25.2.1 Form

Chamorro has a small number of degree morphemes, including *gof* ‘very’, *sen* ‘extremely, most’, *mampus* ‘so (much), extremely, too’, *lá-* ‘slightly more, a little more’, and *chát-* ‘slightly less, hardly, barely’. (*Gof* has several variants, *gef*, *gos*, and *ges*, which are briefly discussed below.) Degree can also be indicated by reduplication.

Gof, *sen*, and *mampus* occur very frequently and are highly productive: they can combine with just about any adjective or verb with the right kind of meaning (see 25.2.2). *Lá-* and *chát-* occur less frequently and are probably

less productive. Reduplication to indicate degree is productive, and involves an element of language play.

Mampus is the only one of these degree morphemes that is an independent word. It is an adverb that can occur at the left edge of the clause, immediately after the predicate, or at the right edge of the clause, as can be seen in (1) (see 18.5). Note that when *mampus* occurs at the left edge of the clause, it can be immediately followed by a weak pronoun, as in (1b).

- (1) a. **Mampus** ma'lak i semnak na ogga'an.
so.much AGR.bright the sun L morning
 'The sun is so bright this morning.' (CD, entry for *somnak*)
- b. **Mampus** yu' ma'empun.
so.much I AGR.need.to.urinate
 'I need to urinate badly.' (CD, entry for *ma'empun*)
- c. Ma agradesi **mampus** i nengkanu'.
AGR.appreciate so.much the food
 'They really appreciated the food.' (CD, entry for *agradesi*)
- d. Ha padda' tenghu-hu si Nancy ya ha
AGR.slap neck-AGR UNM Nancy and.then AGR
 hongngan yu' **mampus**.
startle me so.much
 'Nancy slapped my neck and it startled me badly.' (CD, entry for *padda'*)

Lá- 'slightly more, a little more' and *chát-* 'slightly less, barely, hardly' are stressed prefixes that combine with an adjective or verb to form a derived word from the same part of speech (see 29.4.1 on stressed prefixes). For instance, *lá-* combines with the adjective *mâolik* 'good' to form the adjective *lâmâolik* 'a little better', *chát-* combines with the transitive verb *hassu* 'think (of)' to form the transitive verb *cháthassu* 'barely think (of)', and so on. These derived words behave like the verbs and adjectives from which they are formed. They can serve as the predicate of the clause, in which case they show agreement with the subject (see 2.2.2). The agreement affixes are in boldface in (2).

- (2) a. Bai hu sikat dididi' ya **u** lamâolik
AGR nap a.little and.then AGR.slightly.more.good
 sinientek-ku.
feeling-AGR
 'I'm going to take a short nap and then I'll feel better (lit. my feelings will be a little better).' (CD, entry for *sikat*)

- b. Bãsta **chumatkuentus**, sa' ti siña hu kumprendi hão.
stop AGR.barely.speak because not can AGRunderstand you
 'Stop speaking incoherently, because I can't understand you.' (CD, entry for *chátkuentus*)
- c. Kumu mohon **manlarektu** hit put
if UNREAL AGR.slightly.more.strict we.INCL about
imigrasion ...
immigration
 'If we (incl.) had been stricter about immigration...' (CD, entry for *kumu mohon*)

When the predicate is in the progressive aspect, reduplication for the progressive doubles the CV of the degree morpheme, which bears the primary stress of the derived word (see 2.2.1.1). This is shown in (3).

- (3) Kalang esta **lalamagung** i
seems.like already AGR.slightly.more.healed.PROG the
sinagu-mu.
cold-AGR
 'It seems like your cold is getting better.' (CD, entry for *lámagung*)

Finally, derived words formed with *lá-* or *chát-* can be used to create even more complex predicates, such as the causative verbs in (4) (see 12.2).

- (4) a. Kão siña un na'la'anâkku' i chininã-hu?
Q can AGRmake.slightly.more.long the dress-AGR
 'Can you make my dress a little longer?' (CD, entry for *anâkku'*)
- b. Esta nina'chachatkuentus ni minalagu-ña.
already AGR.PASS.make.barely.speak.PROG OBL NMLZ.sick-AGR
 'Her sickness is making her speak incoherently.' (CD, entry for *chátkuentus*)

Gof 'very' and *sen* 'extremely, most' are also stressed prefixes, despite the fact that they are written as separate words in the official orthographies. Like *lá-* and *chát-*, they combine with an adjective or verb to form a derived word from the same part of speech. For instance, *gof* combines with the transitive verb *nisisita* 'need' to form the transitive verb *gof nisisita* 'very much need', *sen* combines with the adjective *mânngi* 'delicious' to form the adjective *sen mânngi* 'most delicious', and so on. (These derived words are spelled here as two separate words, as is required by the official orthographies. More revealing representations would be *gôfnisisita* and *sénmânngi*.) These

derived words too behave like the verbs and adjectives from which they are formed. They can serve as the predicate of the clause, in which case they agree with the subject. The agreement affixes appear in the expected positions at the left edge of the derived word, as can be seen from (5).

- (5) a. **Ha** gof tungu' mama'tinas åmut
AGR.very know AGR.INF.ANTIP.make medicine.L
 måkpung si Donald.
frequent.urination UNM Donald
 'Donald really knows how to prepare medicine for frequent urination.' (CD, entry for *måkpung*)
- b. **Sumen** ma'lak i puti'un na puengi.
AGR.extremely bright the star L night
 'The star is extremely bright tonight.' (CD, entry for *puti'un*)
- c. Esta i siboyas **manggof** mekpi'.
already the onion AGR.very overgrown
 'The onions are very overgrown.' (CD, entry for *mekpi'*)

When the predicate is in the progressive aspect, reduplication for the progressive doubles the CV of *gof* or *sen*, which bears the primary stress of the derived word.

- (6) a. **Gogof** adahi i kosås-mu sa' todū i
very careful.PROG the thing-AGR because all the
 tiempu guaha chekli'.
time AGR.exist thief
 'Always be very careful of your things, because there's always a thief around.' (CD, entry for *chekli'*)
- b. Kumu dinanchi mapo'lon-ña gi laña, esti i
if AGR.right WH[DJ].PASS.put-AGR LCL oil this the
 buñelus okinaua' **sumesen** adamellung.
doughnut.L Okinawa AGR.extremely round.PROG
 'If the dough is placed in the oil properly, the *buñelus okinaua'* comes out perfectly round.' (CD, entry for *buñelus okinaua'*)

Finally, derived words formed with *gof* or *sen* can be used to create even more complex predicates, such as the causative verbs in (7).

- (7) a. Nina'gof pisadumbri si Maria anai mâtai
AGR.PASS.make.very grieve UNM Maria when AGR.die

si tatã-ña.

UNM *father-AGR*

‘Maria was in very deep grief when her father died.’ (CD, entry for *pisadumbri*)

- b. Un na'sen piniti yu' sa' un na'dekku yu'
AGR make.extremely hurt me because AGR cause.shame.to me
 ni churan bidâ-mu.

OBL ugly.L act-AGR

'You really hurt me because you caused me shame with your misdeeds.' (CD, entry for *na'dekku*)

In addition, reduplication can be used to indicate degree. When an adjective describes a property that holds to a greater extent than usual, this can be indicated by repeating the CV of the final unstressed syllable one or more times, as in *anākkuku* 'very long' (from *anāku* 'long'), *dāngkululu* 'very big' (from *dāngkulu* 'big'), *dāngkulululu* 'very, very big', and so on. The more times the CV is repeated, the more the extent of the property exceeds the typical. In (8), reduplication has applied three times to the adjective *pika* 'hot (spicy)' to derive the adjective *pikakakaka* 'very, very, very hot', which is used to form a causative verb.

- (8) Mafa'denni' i satdinas ya
AGR.PASS.make.w.hot.pepper the sardines and.then
 mana'pikakakaka.

AGR.PASS.make.very.very.very.hot

'The sardines were mixed with hot pepper and were made very, very, very hot.' (CD, entry for *satdinas*)

Some details:

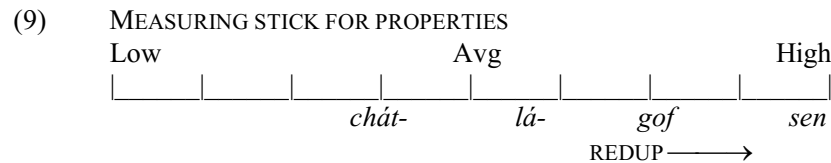
(i) *Gof* has several variants: *gef*, which is also quite frequent, and *gos* and *ges*, which are used occasionally in the Guam dialect. These forms are more or less interchangeable in Chamorro today (e.g. *gof atdit* or *gef atdit* ‘very severe’, *gof daddão* or *gos daddão* ‘very vicious’), but at an earlier stage of the language were probably conditioned by sound structure. The /e/ of *gef* and *ges* was most likely produced by umlaut when umlaut was a regular, more general phonological rule (see 30.2). The /s/ of *gos* and *ges* may have originally resulted from dissimilation, given that speakers who use these forms often produce them before labial consonants (e.g. /p/ and /m/).

(ii) The prefixes *góf* and *chát-* occur in a number of derived words whose meanings cannot be predicted from the meaning of the root. In some of these frozen forms, the prefix is unstressed. Some common words of these

types: *gófha'an* (or *géfha'an*) 'sunny, bright' and *cháta'an* 'rainy, dreary' (from *ha'ani* 'day'); *géfmeta* 'sharp-sighted, perceptive' and *chátmeta* 'having poor eyesight' (from *máta* 'eye, face'); *gófsaga* 'wealthy' and *chátsaga* 'difficult' (evidently from *sága* 'stay, live'); *géfpa'gu* 'pretty' and *chátpa'gu* 'ugly' (evidently from *pá'gu* 'now'); *gofli'i* 'like, befriend' and *chatli'i* 'hate' (from *li'i* 'see'); *chatguahu* 'not feel well (of the speaker)' (from *guáhu* 'I'); and *chatguiya* 'not feel well (of a third person)' (from *guiya* 's/he').

25.2.2 Meaning and use

Most degree morphemes compare the extent to which some property holds to the extent to which it typically holds. Consider the degree prefixes *gof* 'very', *sen* 'extremely, most', *lá-* 'slightly more, a little more', and *chát-* 'slightly less, hardly, barely', as well as reduplication for degree. One way of visualizing the meanings of these morphemes is to imagine them arranged on a measuring stick that is used to measure properties, as in (9).



The middle of the measuring stick represents the typical extent to which some property holds—its average amount for whatever type of individual or thing is being discussed. *Sen* 'extremely, most' is located at the top of the high end of the measuring stick; *lá-* 'slightly more, a little more' is located slightly above the middle of the measuring stick; *gof* 'very' is located somewhere between *sen* and *lá-* in the top half of the measuring stick. Reduplication for degree is located in the vicinity of *gof*, but the more times the CV is repeated, the more the meaning shifts toward the high end of the measuring stick. The only degree prefix between the middle and the low end of the measuring stick is *chát-* 'slightly less, hardly, barely'.

More concretely, suppose that big dogs are being discussed. Then *dangkulu* 'big' describes the size of a typical big dog. *Sen dangkulu* 'extremely big' describes the size of the very biggest dogs, *ládangkulu* 'a little bigger' describes the size of dogs that are slightly bigger than typical big dogs, and so on.

The degree prefixes that are clearly productive are *gof* and *sen*. These can combine with almost any adjective—unsurprisingly, given that the vast

majority of adjectives describe properties that can hold to different extents (i.e. are gradable). Some representative examples are given below.

- (10)a. **Sen** gasgas i satgi anai malampåsu.
AGR.extremely clean the floor when AGR.PASS.mop
 ‘The floor was so clean when it was mopped.’ (CD, entry for *såtgi*)
- b. Meggai na ababbang mansen bunitu kulot-ñiha.
many L butterfly AGR.extremely pretty color-AGR
 ‘Many butterflies have extremely beautiful colors.’ (CD, entry for *ababbang*)
- c. **Gof** manåchang na påtgun si Ana.
very bashful L child UNM Ana
 ‘Ana is a very bashful child.’ (CD, entry for *manåchang*)
- d. **Sen** ma’å’ñão si Juan ni dangkulun
AGR.extremely afraid UNM Juan OBL big.L
 pakpak gi paingi.
loud.noise LCL last.night
 ‘Juan was terrified by (lit. extremely afraid of) the loud noise last night.’ (CD, entry for *ma’å’ñão*)

In addition, *gof* and *sen* can combine with existential verbs and quantificational adjectives (see 14.2.2 and 14.2.3).

- (11)a. **Gof** meggai låstrun påtas babui gi inai.
AGR.very many trace.L foot.L pig LCL sand
 ‘There are very many pigs’ footprints in the sand.’ (CD, entry for *låstru*)
- b. **Sen** tâya’ nengkanu’ gi kusina.
AGR.extremely not.exist food LCL kitchen
 ‘There’s no food at all in the kitchen.’

And they can combine with verbs that describe psychological or cognitive states, including verbs of perception. (This use has no literal English translation, since English does not allow degree words to combine with verbs.)

- (12)a. **Gof** malagu’i kumairek-ku humugåndu bingo’.
AGR.very want the godmother-AGR AGR.INF.play bingo
 ‘My godmother really wants to play bingo.’ (CD, entry for *gof*)
- b. Hu **sen** agradesi hao.
AGR.extremely appreciate you
 ‘I really appreciate you.’

- c. I amigã-hu ha **sen** honggi i paktu.
the friend-AGR AGR extremely believe the magic.power
 ‘My girlfriend really believes in magic power.’ (CD, entry for *paktu*)
- d. Ha **gof** tungu’ si Juan chuminchulu
AGR very know UNM Juan AGR.INF.fish.w.long.net
 disti anai dikiki’.
since COMP AGR.small
 ‘John really knows how to net fish since he was a child.’ (CD, entry for *chuminchulu*)
- e. Ha **sen** ekkunguk si Judy i palãbra anai
AGR extremely listen.to UNM Judy the word when
 ha delikora i ma’estra.
AGR pronounce.by.syllable the teacher
 ‘Judy listened very carefully to the word when the teacher pronounced it syllable by syllable.’ (CD, entry for *delikora*)

Gof and *sen* generally do not combine other types of verbs.

The degree prefixes *lá-*, and especially *chát-*, seem to be less productive. Reduplication for degree is productive, but involves an element of language play. These morphemes can be attached to (at least some) adjectives. The full range of predicates they combine with remains to be investigated.

The degree adverb *mampus* ‘so (much), extremely, too’ presents a different picture. Unlike the other degree morphemes, *mampus* seems to indicate that the extent to which some property holds significantly exceeds the speaker’s expectations. In this respect, *mampus* has a meaning similar to one meaning of English ‘so’.

- (13)a. **Mampus** i asaguã-hu hamaleffa.
so.much the spouse-AGR AGR.often.forget
 ‘My husband is so forgetful.’ (CD, entry for *hamaleffa*)
- b. Ånglu’ **mampus** i pãn, esta ha ñuñukut yu’.
AGR.dry so.much the bread already AGR choke.PROG me
 ‘The bread is so dry it is choking me.’ (CD, entry for *ånglu*)
- c. Anai hu baba i satten hineksa’, å’asu
when AGR open the pot.L rice steam.PROG
mampus.
so.much
 ‘When I opened the rice cooker, it was so steamy.’ (CD, entry for *åsu*)

When the speaker views it as undesirable for his/her expectations to be exceeded, *mampus* can be translated as ‘too’.

- (14)a. **Mampus** a’gang i dandân-mu.
so.much AGR.loud the music-AGR
 ‘Your music is too loud.’ (CD, entry for *a’gang*)
- b. Mungnga chumotchu **mampus** bula na
don’t AGR.INF.ANTIP.eat so.much much L
 nengkanu’ sa’ un digula.
food because AGR.stuffed.from.eating
 ‘Don’t eat too much food because you’ll have a stomach ache.’
 (CD, entry for *digula*)

Mampus is similar to *gof* and *sen* in that it is used when the extent of some property (significantly) exceeds a standard. The difference is that for *gof* and *sen*, the standard is set by the property’s typical extent for whatever is being discussed, whereas for *mampus*, the standard is set by the speaker’s expectations about what the property’s extent should be. The fact that *mampus* contributes a different sort of meaning than *gof* or *sen* suggests that it could conceivably modify a derived adjective or verb formed with *gof* or *sen*. Very occasionally, this happens, as (15) shows.

- (15)a. Put **gof** baba **mampus** i ikunumiha, ha
because AGR.very bad so.much the economy AGR
 aguânta i para u huchum i tendân-ña.
resist the FUT AGR.close the store-AGR
 ‘Because the economy was extremely bad, he restrained himself from closing his store.’ (CD, entry for *aguânta*)
- b. Si Joshua ha **sen** guaiya i hagâ-ña
UNM Joshua AGR.extremely love the daughter-AGR
mampus.
so.much
 ‘Joshua loves his daughter dearly.’ (CD, entry for *guaiya*)

Unlike the other degree morphemes, which are prefixes, *mampus* can modify predicates of all types. In the examples below, *mampus* modifies adjectives (in (16a)), an intransitive verb (16b), a transitive verb (16c), a passive verb (16d), and a noun (phrase) (16e).

- (16)a. Bumula **mampus** ñâmu sa’ **mampus**
AGR.lots.of so.much mosquito because so.much

kåtma.

AGR.calm

‘There have been so many mosquitos because the wind is so still.’
(CD, entry for *kåtma*)

- b. Ennåo na katu **mampus** asupak mągi gi
that L cat so.much AGR.insert.self to.here LCL
gima’.

house

‘That cat keeps coming to the house too much.’ (CD, entry for *ásupak*)

- c. Debi di ta na’para umusa **mampus** i butsiyun
should PRT AGR make.stop INF.use so.much the bag.L
uli.

plastic

‘We (incl.) must stop using plastic bags so much.’ (CD, entry for *uli*)

- d. Mungnga **mampus** makuetdåsi i rilos, sa’ un
don’t so.much AGR.PASS.wind the clock because AGR
yulang.

break

‘Do not overwind the clock, because you might break it.’ (CD, entry for *kuetdåsi*)

- e. Si Juan **mampus** peknu’ gą’ga’.
UNM Juan so.much killer.L animal

‘Juan is such an animal killer.’ (CD, entry for *peknu*)

25.3 Comparatives

25.3.1 Comparative morphemes

Chamorro has three comparative morphemes: *-ña* ‘more’, *mås* ‘more’, and *menus* ‘less’. The morphemes *-ña* and *mås* are very frequent and productive; *menus* occurs less often.

The comparative suffix *-ña* ‘more’ combines with adjectives and certain types of verbs to produce their comparative form. This -CV suffix is one of the suffixes that are affected by the morphophonemic rule of gemination (see 29.3.2.1 and 30.3). Compare (17a) with (17b), in which gemination has occurred and the /ñ/ of *-ña* has been doubled to /nñ/.

- (17)a. Bunituñña i bås turis kini bås iskuela.
AGR.pretty.COMPAR the bus.L tourist than bus.L school
‘The tourist bus is nicer than the school bus.’ (CD, entry for *bås*)

- b. Guaha na apatcha' dăngkulon**ña** kini ottru.
AGR.exist L grasshopper AGR.big.COMPAR than other
 'Some grasshoppers are bigger than others.' (CD, entry for *apatcha*)
- c. Manma'a'ña**ña** ham ki hagu.
AGR.afraid.COMPAR we.EXCL than you
 'We (excl.) are more afraid than you.'
- d. Amigu-ta gui' ni ha tungo'**ña** hăyi hit
friend-AGR he COMP AGR.know.COMPAR who? we.INCL
ki hita mismu.
than we.INCL same
 'He is our (incl.) friend who knows better than we (incl.) ourselves
 who we (incl.) are.' (*Ginen I Obispo* December 1, 2002)

Comparatives formed with *-ña* are predicates that show the same agreement as the predicates from which they are derived. Thus, in the realis clauses in (17), the adjectives *bunitu* 'nice, pretty', *dăngkulu* 'big', and *ma'a'ña* 'afraid' agree with their subjects via affixes that register number alone, but the transitive verb *tungu* 'know' agrees with its subject via the person-and-number forms (see 2.2.2). Note that the comparative *-ña* cannot occur with certain suffixes that appear on nouns, such as the suffixes that realize possessor agreement and the posthead form of the linker (see 7.1.1). As a result, *-ña* cannot be attached to verbs that show agreement with the subject as if they were nouns (such as *ya-* 'like'; see 14.4).

The comparative *măs* 'more' can occur within the clause or within the noun phrase. Within the clause, *măs* serves as an adverb that modifies the predicate. It usually precedes the predicate but follows the person-and-number forms of agreement with the subject, as can be seen from the following.

- (18)a. I kulălîs tilintinis **măs** bunitu.
the beads.L bead.trinkets more AGR.pretty
 'The trinkets made of beads are most beautiful.' (CD, entry for *tilintinis*)
- b. Bula klăsin ubas, lăo i tai simiya
AGR.many sort.L grape but the AGR.not.have seed
măs ya-hu.
more like-AGR
 'There are many types of grapes, but the seedless is my favorite (lit. what I like more).' (CD, entry for *ubas*)
- c. I famagu'un mandikiki' **măs** manninana'yi
the PL.child.L AGR.small more AGR.PASS.infect.PROG

buchi.

mumps

‘Young children usually have mumps (lit. are infected more with mumps).’ (CD, entry for *buchi*)

- d. Ti debi esti i kansinsiyu na u **mås** anâkku’
not should this the undershorts COMP AGR more long
ki i katsunis.
than the pants
‘The undershorts should not be longer than the pants.’ (CD, entry for *kansinsiyu*)

Mås can also occur immediately after the predicate, as in (19a-b), or at the right edge of the clause, as in the main clause of (19c).

- (19)a. Bumunitu **mås** i litratu-mu anai mapega gi
AGR.pretty more the picture-AGR when AGR.PASS.put LCL
kuadru.
frame
‘Your picture looks better when it is put in the frame.’ (CD, entry for *kuâdru*)
- b. Guaha atyu i ya-ña **mås** i potu
AGR.exist that the like-AGR more the rice.cake
kini i bibingka.
than the rice.pancake
‘There are those who like the rice cake better than the rice pancake.’
(CD, entry for *bibingka*)
- c. Ma na’gâsgas i gualu’ **mås** [sa’ para uma
AGR make.clean the farmland more because FUT AGR
na’lameggai i tinanum-ñiha].
make.slightly.more.many the WH[OBJ].plant-AGR
‘They cleared the land further so that they could enlarge the space for planting.’ (CD, entry for *lumámeggai*)

Mås and the comparative suffix *-ña* have the same meaning, but *-ña* has a more limited distribution. Like the degree prefixes *gof* ‘very’ and *sen* ‘most, extremely’ (see 25.2.2), *-ña* can combine with adjectives, quantificational adjectives, and verbs that describe psychological or cognitive states, but generally not with other types of verbs. See (17) and the sentences cited below.

- (20)a. **Mannge'ña** i mangga yanggin
AGR.delicious.COMPAR the mango if
 mana'māsan manunuk.
AGR.PASS.make.ripe.L AGR.PASS.ripen.in.dark
 'Mangos taste better if they are ripened in a dark place.' (CD, entry for *nunuk*)
- b. **Maguaiyanña** ni taotão tempura' uhang kinu
AGR.PASS.love.COMPAR OBL person tempura.L shrimp than
 tempura' gollai.
tempura.L vegetable
 'People like shrimp tempura more than vegetable tempura.' (CD, entry for *tépura*)

Mās combines not only with adjectives and quantificational adjectives, but with verbs of all types. See (18), (19), and the following.

- (21)a. Nai ha hunguk i kanta ... **mās** umarima si
when AGR.hear the song more AGR.get.close UNM
 Kolasa guatu gi as Nano.
Kolasa to.there LCL Nano
 'When Kolasa heard the song...she moved closer to Nano.' (CD, entry for *arima*)
- b. Sigi ha' **mās** ma'āomenta i tiningo'-hu.
keep.on EMP more AGR.PASS.expand the knowledge-AGR
 'My knowledge keeps expanding (lit. being expanded) more.' (CD, entry for *āomenta*)
- c. I palābra *asaiti* esta ti gof ma'usa pā'gu;
the word oil already not AGR.very PASS.use now
mās ma'u'usa lāña ki *asaiti*.
more AGR.PASS.use.PROG oil than oil
 'The word *asaiti* is not very much used now; *lāña* is used more than *asaiti*.' (CD, entry for *asaiti*)

Within the noun phrase, *mās* can serve as a quantificational adjective that precedes the head noun, similar to *bula* 'much, many' or *meggai* 'many' (see 6.2.4.3).

- (22)a. Guaha **mās** tãotão gi misan tãtti.
AGR.exist more person LCL mass.L back
 'There are more people at the last mass of the day.' (CD, entry for *misan tãtti*)

- b. Kumu te'uk i timplâda, diliti **mâs** hânum.
if AGR.thick the mixture dilute more water
 'If the mixture is too thick, dilute it with water.' (CD, entry for *diliti*)

It can also serve as an adverb, in which case it can precede or follow the head noun. The head noun in (23b) is a local noun (see 5.3).

- (23)a. Debi di u guaha **mâs** mâolik na sitbisiu para i
should PRT AGR.exist more good L service for the
 ... henirât pupbliku.
general.L public
 'There should be better...services for the general public.' (CD, entry for *sosiât*)
- b. Pâpa' **mâs** ni gaigi i lanchu.
below more COMP AGR.be.at the farm
 'Farther down is where the farm is.' (CD, entry for *pâpa'*)

Finally, the comparative *menus* 'less' seems to be relatively infrequent. It can occur as an impersonal predicate, similar to the quantificational adjectives *bula* 'much, many' and *meggai* 'many' (see 6.2.4.3).

- (24)a. Disdi mumalângu si Tomas, **menus**
since AGR.sick UNM Tomas AGR.less
 tenhos-ña.
WH[DJ].impatient-AGR
 'Since Tomas became ill, his impatience has lessened.' (CD, entry for *tenhus*)
- b. Mâs **menus** kinanno'-hu nigap na ha'âni
more AGR.less WH[OBJ].eat-AGR yesterday L day
 ki pâ'gu na ogga'an.
than now L morning
 'I ate much less food (lit. what I ate was much less) yesterday than this morning.' (CD, entry for *menus*)

Menus can also serve as an adverb, similar to *mâs* 'more'. In (25), *menus* and *mâs* occur in parallel clauses, immediately after their respective predicates.

- (25) Siempri mâs manmâolik hit na tâotâgui' yanggin ta
indeed more AGR.good we.INCL L people if AGR

dimânda **menus** ginin ottru ya ta
demand less from other and.then AGR
 fanmannâ'i **mâs** para i ottru.
AGR.ANTIP.give more to the other
 'We (incl.) will be better people if we (incl.) demand less of others
 and give more to others.' (*Ginen I Obispo* October 14, 2001)

25.3.2 Comparative sentences

Comparative sentences compare the extents to which some property holds for different individuals, or different states of affairs. They are constructed from other sentences by inserting one of the comparative morphemes described in 25.3.1. Syntactic constituents called the *target* and the *standard* refer to the individuals or states of affairs involved in the comparison. The target, which is a constituent of the original sentence, can bear any grammatical relation at all. The standard is an added constituent that is realized as the object of the preposition *ki* 'than', or else implicit (syntactically unrealized; see 9.3.2). (*Ki* has the variants *kinu* and *kini*; see 5.2.) The comparative morphemes *-ña* 'more' and *mâs* 'more' indicate that the extent to which the property holds for the referent of the target exceeds the extent to which it holds for the referent of the standard. *Menus* 'less' indicates the reverse.

To illustrate: The sentences in (26) compare the extents to which different animals have the property of being big. In the comparative sentence in (26a), the target is *i gansu* 'the goose', which serves as the subject of the comparative adjective *dangkulonña* 'bigger'. The standard is *i nganga* 'the duck'. This sentence means that the goose's bigness exceeds the duck's bigness. In (26b), the target in the second clause is *i bayena* 'the whale', which refers to whales in general and serves as the subject of *dangkulonña*. Although the standard is implicit, the context reveals that it refers to dolphins in general, so this clause means that the bigness of whales (in general) exceeds the bigness of dolphins (in general).

- (26)a. *Dangkulonña i gansu ki i nganga*'.
AGR.big.COMPAR the goose than the duck
 'The goose is bigger than the duck.' (CD, entry for *gânsu*)
- b. *Dangkulu i tuninus na gâ'ga*', *lão dangkulonña i*
AGR.big the dolphin L animal but AGR.big.COMPAR the
bayena.
whale
 'Dolphins are big sea animals, but whales are bigger.' (CD, entry for *tuninus*)

See 25.3.1 for other examples of comparative sentences.

The target in a comparative sentence does not have to be the subject. Consider (27), which compares the extents to which fishermen (in general) and stores (in general) have the property of being good sources to buy fish from. The target, *i peskadot* ‘the fisherman’, which is the object of the preposition *ginin* ‘from’, is an argument of the verb *fãhan* ‘buy’ in the reduced clause (see 21.6.4).

- (27) **Mãolekña** mamãhan guihan ginin i
AGR.good.COMPAR AGR.ANTIP.buy fish from the
 peskadot **kini** i tenda.
fisherman than the store
 ‘It’s better to buy fish from a fisherman than (at) the store.’ (CD, entry for *peskadót*)

The target does not even have to be an argument of the predicate. In (28), the targets are adjuncts. (28a) compares the extents to which different time periods have the property of brown-spotted grasshoppers being numerous (*meggai* ‘many’). The target, *ântis* ‘before’, is an adjunct that specifies location in time. (28b) compares the extents to which different kinds of trees have the property of many birds sleeping in them. The target, *trongkun gãgu* ‘ironwood trees’, is an adjunct that specifies location in space.

- (28)a. **Mãs** meggai apatcha’ mâtai ântis **kini**
more AGR.many brown.spotted.grasshopper before than
 pâ’gu.
now
 ‘There were more brown-spotted grasshoppers in the past than now.’ (CD, entry for *apatcha’ mâtai*)
- b. **Bulãña** chungì’ manmamaigu’ gi trongkun
AGR.much.COMPAR bird.sp AGR.sleep.PROG LCL tree.L
 gãgu **kini** ottru trongku siha.
ironwood than other tree PL
 ‘There are more white-tailed tropic birds sleeping in ironwood trees than any other trees.’ (CD, entry for *chungì*)

Finally, (29) compares the extents to which Rosa and Juan have the property of having space in their rooms. Here the target, which refers to Rosa, is the null pronoun possessor of *kãmpu* ‘space’, the standard is *si Juan* ‘Juan’, and the comparative morpheme is the impersonal predicate *menus* ‘less’. Note

the meaning of the sentence: the extent to which Juan has space in his room exceeds the extent to which Rosa has space in her room.

- (29) Si Rosa **menus** kampon-ña gi halum kuatton-ña
UNM Rosa AGR.less space-AGR LCL inside.L room-AGR
ki si Juan.
than UNM Juan
 ‘Rosa has less space in her room (lit. There is less space of Rosa’s in her room) than Juan.’ (CD, entry for *menus*)

When the comparison involves different states of affairs, the target, the standard, or both can be realized as embedded clauses. In (30a), the target is a null pronoun and the standard is a finite embedded clause (*tâya* ‘there is none’). In (30b), both the target and the standard are reduced clauses.

- (30)a. Maseha loskuântus ha’ guaha, mǎolekña
even.though several EMP AGR.exist AGR.good.COMPAR
kini tâya’.
than AGR.not.exist
 ‘Even though there are only a few available, it’s better than there being none.’ (CD, entry for *loskuântus*)
- b. Mǎolekña mana’mamâhlão **kinu**
AGR.good.COMPAR AGR.PASS.make.ashamed than
 muna’mamâhlão.
AGR.ANTIP.make.ashamed
 ‘It is better to be humiliated than to humiliate.’ (CD, entry for *mamâhlão*)

Comparative sentences are complex in structure and meaning; they have not been investigated in much detail in Chamorro. This is an area that merits further study.

25.4 Other ways of expressing comparison

25.4.1 Superlatives

Superlatives indicate that some property holds for a certain individual to a greater extent than for any other individuals being discussed. Chamorro has a superlative morpheme, the adverb *itmâs* ‘most, best’ (from Sp. *el mas*), but it is not widely used. One example is cited in (31).

- (31) Guihan **itmâs** ya-hu na nengkanu'.
fish most like-AGR L food
 'Fish is the food I like the best.' (CD, entry for *itmâs*)

More often, the superlative is expressed by the combination of the definite article *i* and the comparative adverb *mâs* 'more' within the noun phrase. In such cases, *mâs* generally precedes the adjective or verb it modifies, as in (32).

- (32)a. Ladigão **i mâs** mala'it na yetbas âmut.
plant.sp the more bitter L plant.L medicine
 'Clerodendrum inerme is the most bitter medicinal plant.' (CD, entry for *ládigão*)
- b. Esta suttera **i mâs** pângun na hagâ-hu.
already single.woman the more child L daughter-AGR
 'My youngest daughter has already reached puberty.' (CD, entry for *suttera*)
- c. Chetdan tanduki **i mâs** ya-hu na chotda.
green.banana.L tanduki the more like-AGR L gr.banana
 'Tanduki banana is my favorite banana.' (CD, entry for *chotda*)
- d. **I mâs** matungu' na pilung giya Sa'ipan
the more AGR.PASS.know L chief LCL Saipan
 si Jose.
UNM Jose
 'Jose is the most influential person on Saipan.' (CD, entry for *pilung*)

When the comparative adverb *mâs* is used on its own, within the clause or within the noun phrase, a superlative meaning can be inferred. In the sentences below, *mâs* occurs without the definite article *i*, but is translated into English as 'the most'.

- (33)a. Hâyi **mâs** gofli'un gi famagu'on-mu?
who? more AGR.amicable LCL PL.child-AGR
 'Who is the most amicable among your children?' (CD, entry for *gofli'i'un*)
- b. Dia' na guiya **mâs** mâolik na istudiânti
see.here COMP she more good L student
 pângu na simâna.
now L week
 'Notice that she's the best student this week.' (CD, entry for *dia'*)

- c. Bula na táotão sumāsangan na i tuninus
many L person WH[SBJ].say.PROG COMP the dolphin
mās malāti' na gā'ga' tāsī.
more intelligent L animal.L ocean
 'Most people say that the dolphin is the most intelligent sea animal.' (CD, entry for *tuninus*)

25.4.2 Equatives

Equatives indicate that some property holds to the same extent for different individuals. Chamorro has an equative morpheme, the stressed prefix *achá-* 'equally, similarly', which combines with an intransitive predicate to produce a derived predicate from the same part of speech. In the sentences below, *achá-* has combined with an adjective (in (34a)), an intransitive verb (34b), a passive verb (34c), and a noun (34d).

- (34)a. **Achadangkulu** i rainun rain Ispaña yan i
AGR.equally.big the kingdom.L king.L Spain and the
 rain Inglatera.
king.L England
 'The king of Spain's kingdom is as big as the King of England's.'
 (CD, entry for *rainu*)
- b. Umase'si' i dos gāyu ya **achamatai**.
AGR.RECP.wound the two rooster and.then AGR.equally.die
 'The two roosters wounded each other and both died.' (CD, entry for *se'si'*)
- c. **Achamayamak** i dos tumobit anai
AGR.equally.PASS.wreck the two car when
 umasufa'.
AGR.RECP.charge.at
 'Both vehicles got wrecked when they collided.' (CD, entry for *tumobit*)
- d. **Achama'gas** i dos palão'an guini na lugât.
AGR.equally.boss the two woman LCL.this L place
 'Both women are equally ranked leaders in this place.' (CD, entry for *achá-*)

Derived predicates formed with *achá-* show agreement with the subject as expected. When the predicate is in the progressive aspect, reduplication for the progressive doubles the stressed CV of *achá-*, which bears the primary stress of the derived word. Both of these observations are illustrated in (35).

- (35)a. Pǎ'gu **achachamalangu** ha' ham na dos.
now AGR.equally.sick.PROG EMP we.EXCL L two
 'Now we (excl.) are both getting sick.'
- b. Ya-hu umegga' S.W.A.T. na mubi sa'
like-AGR AGR.INF.watch S.W.A.T. L movie because
manachachapotsu' i akta siha.
AGR.equally.good.at.shooting.PROG the actor PL
 'I like to watch S.W.A.T. movies because all the actors are sharp
 shooters (lit. the actors are equally good at shooting).' (CD, entry
 for *potsu*)

Equative sentences are intransitive clauses whose predicate is formed with *achá-*. The predicate names the property under discussion; the subject names the individuals for whom it holds to the same extent. In (34a), for instance, the subject is *i rainun rain Ispaña yan i rain Inglatera* 'the kingdoms of the king of Spain and the king of England'; in (34b), a null pronoun that refers to the two roosters; and in (35a), *ham na dos* 'we (excl.) two'.

TOPICS AND ANAPHORA

Chamorro has two types of topics. It also has general conditions that govern the relation between pronouns and their antecedents.

26.1 Overview

Anaphora and ellipsis are two general methods of signaling that the meaning of a constituent can be calculated from the meaning of some other constituent, called the *antecedent*. In anaphora, constituents whose reference can be calculated from the intended reference of the antecedent are realized as pronouns. In ellipsis, a constituent whose sense can be calculated from the sense of the antecedent is deleted.

Several types of anaphora and ellipsis are discussed in other chapters of this book. The relation between pronouns and their antecedents in reflexive clauses is a type of anaphora (see 13.2). So is the relation between the missing noun phrase and the controller in the control construction, if the missing noun phrase is assumed to be a null pronoun (see 21.2 and 21.4). Noun phrase ellipsis deletes the head noun and other parts of the noun phrase, leaving behind a determiner, adjective, or relative clause (see 7.4 and 9.3.1). Some other types of ellipsis delete most of the clause but leave behind negation, either alone or followed by a single constituent (see 17.6).

This chapter deals with some other aspects of anaphora. (Ellipsis is not discussed further; see the sections cited above.) 26.2 describes two types of topics: inner topics, which participate in a type of anaphora, and outer topics, which do not have this requirement. 26.3 briefly discusses two conditions that govern the relation between Chamorro pronouns and their antecedents.

26.2 Two types of topics

A topic is an optional noun phrase that precedes the predicate and refers to who or what is under discussion. Chamorro has two types of topics, which are referred to here as *inner* and *outer* topics. Inner topics occur at the left edge of a finite clause, preceding the predicate but following certain other left-edge constituents. An inner topic serves as the antecedent of a pronoun inside the clause. Outer topics occur at the very beginning of the sentence.

An outer topic is semantically connected to the rest of the sentence, but does not necessarily participate in any anaphora. Inner topics are discussed in 26.2.1, and outer topics in 26.2.2.

26.2.1 Inner topics

26.2.1.1 Form and function

Finite clauses in Chamorro can have an inner topic. This noun phrase occurs at the left edge of the clause, preceding the predicate, the tense-aspect-mood marker (if there is one; see 4.2), and the sentential negative *ti* ‘not’ (see Chapter 17). Some examples from connected discourse are cited below (with the inner topic in boldface).¹

- (1) a. **Si Chungi’** sigi ha dibina hâfa na
UNM Chungi’ AGR.keep.on AGR.guess what? COMP
 ti parehu kulot-ñiha i dos.
not AGR.same color-AGR the two
 ‘Chungi’ kept on guessing why the two [birds] were not the same color.’ (EM 81)
- b. **Guâhu** si Ana Songao Hocog.
I UNM Ana Songao Hocog
 ‘I am Ana Songao Hocog.’ (MM 57)
- c. Pues **i Chapanis** ti ma konsigi i planun i
then the Japanese not AGR.continue the plan.L the
 para mapunu’ i Chamorro.
FUT PASS.kill the Chamorro
 ‘So the Japanese did not follow the plan to kill the Chamorros.’
 (MM 38)

Inner topics are in the unmarked case. Because they refer to who or what is under discussion, they must have a specific referent. Names and independent pronouns can serve as inner topics, as (1a-b) shows. So can noun phrases constructed from a head noun, as long as the noun phrase begins with a strong determiner, such as the definite article *i* (as in (1c) and

¹ Inner topics occur both in connected discourse and in isolated sentences. Most of the examples of inner topics cited in this chapter are from connected discourse, such as stories (from *Istreyas Mariânas* (EM)), religious essays (from *Ginen I Obispo*), and recorded interviews (from *Memories & Music* (MM)). Examples from MM are in the Rota dialect and are cited in the Chamorro orthography used in that work.

(2a)), a demonstrative (2b), or strong quantifiers such as *kada* ‘each’ (2c) or *todu* ‘all’ (see 6.2.5).

- (2) a. **I mañainan-måmi** para u fättu ya u
the PL.parent-AGR FUT AGR arrive and.then AGR
 konni’ ham ...
take us.EXCL
 ‘Our (excl.) parents were going to come and take us (excl.)...’ (MM 51)
- b. **Esti na hotnu** ti hotnun pân, lão ma’â’agan ha’
this L oven not oven.L bread but AGR.PASS.call.PROG EMP
 hotnu sa’ ...
oven because
 ‘This incubator is not a bread oven, but it is called *hotnu* (‘oven’) because...’ (EM 91)
- c. **Kada unu giya hita pã’gu guini** guaha ta
each one LCL us.INCL now here AGR.exist AGR
 padedesí.
endure.PROG
 ‘Each one of us (incl.) here now has something we (incl.) are enduring.’ (*Ginen I Obispo* July 2, 2000)

Very occasionally, the inner topic is a noun phrase that begins with the indefinite singular article *un* in its strong use. In (3), from a homily about an old man who is going blind and a doctor, a third character—a child—is introduced by the inner topic *un pãtgun ni ha chulili’i na’-ña i amku’* ‘a child who was bringing the old man his food’.

- (3) Unus kuántus dihas maloffan, **un pãtgun ni ha**
several days past a child COMP AGR
chulili’i na’-ña i amku’ ha sangãni i doktu ...
bring.for.PROG food-AGR the old.one AGR say.to the doctor
 ‘Several days later, a child who was bringing the old man his food told the doctor...’ (*Ginen I Obispo* December 15, 2002)

An inner topic cannot begin with the null indefinite article. This is expected, given that inner topics must have a specific referent, but the null indefinite article is nonspecific (see 6.2.1.2.2).

Inner topics routinely occur at the left edge of finite embedded clauses. The complex sentence in (4a) has an inner topic at the left edge of the main clause, and a different inner topic at the left edge of the embedded clause. In

(4b), an inner topic occurs at the left edge of an adverbial clause. In (4c), there is an inner topic at the left edge of each conjunct of an embedded coordinate sentence.

- (4) a. **Si Chungi'** ha sangãni si Kanãriu [na **i ichan** ti parehu yan i hanum tâsi].
UNM Chungi' AGR say.to UNM Kanãriu COMP the rain not AGR.same with the water.L ocean
 'Chungi' told Kanãriu that rain was not the same as seawater.' (EM 83)
- b. Manggãsgas todû siha i papa' i trongku [sa' **si Tun Akin** ha ripãpasa nu i fusiñus].
AGR.clean all PL the under.L the trees because UNM Mr. Akin AGR weed.PROG OBL the hoe
 'All the [areas] under the trees were clean because Tun Akin would weed them with the hoe.' (EM 87)
- c. Sinangãni na u atuk [sa' **[i Chapanis manlalaoya]** ya **[i sindãlun Chapanis ma espipiha]** siha Chamorro ...]]
AGR.PASS.say.to COMP AGR hide because the Japanese AGR.patrol.PROG and.then the soldier.L Japanese AGR look.for.PROG PL Chamorro
 'He told him that he should hide because the Japanese were patrolling and the Japanese soldiers were looking for Chamorros...' (MM 52)

An inner topic at the left edge of an embedded clause follows the complementizer or subordinating conjunction (e.g. *na* in (4a), *sa'* 'because' in (4b)). An inner topic at the beginning of the right conjunct of a coordinate sentence follows the conjunction (e.g. *ya* 'and then' in (4c)).

Inner topics are also found in constituent questions and the focus construction, when an interrogative or syntactically focused constituent has been displaced to the left edge of the sentence by *wh*-movement (see 22.3 and 23.3). Then the inner topic follows the displaced constituent, as can be seen from the sentences below. The inner topics in the questions in (5a) and (5b) follow *hãfa* 'what?' and *sa' hãfa* 'why?'; the inner topic in the focus construction in (5c) follows the focused noun phrase *todû* 'everything'.

- (5) a. Hu kumprendi [hãfa **si nanã-hu** kumeke'ilek-ña
AGR understand what? UNM mother-AGR try.to.say-AGR.PROG

nu i ineppen-ña nu i che'lu-ña].
OBL the WH[OBJ].answer-AGR OBL the sibling-AGR
 'I understand what my mother was trying to say in what she
 answered to her brother.' (EM 97)

- b. Sa' hâfa **i alu** **na guihan** na ha
because what? the barracuda L fish COMP AGR
 dalalalaki i atulai?
follow.PROG the fish.sp
 'Why does the barracuda follow the *atulai*?' (Ginen I Obispo April
 6, 2003)
- c. Todu esta **i Chapanis** ma chuli'.
all already the Japanese AGR take
 'The Japanese had taken everything.' (MM 52)

In contrast to all this, inner topics can precede or follow adjuncts that occur at the left edge of the clause, whether they are adverbs, noun phrases, prepositional phrases, or adverbial clauses (see 3.4.2). This limited word order freedom is illustrated below. An inner topic can precede or follow the degree adverb *mampus* 'so (much), too, extremely', as (6) shows.

- (6) a. **I bisiok-ku** mampus ha dimânda i libittâo-hu.
the habit-AGR so.much AGR demand the leisure-AGR
 'My hobbies demand too much of my free time.' (CD, entry for
dimânda)
- b. Mampus **i nietu-hu** ha okukupa i
so.much the grandson-AGR AGR occupy.PROG the
 tiempok-ku.
time-AGR
 'My grandson takes up too much of my time.' (CD, entry for *okupa*)

An inner topic can also precede or follow the time phrase *kada diha* 'every day', as in (7).

- (7) a. **Si Manuel** kada diha ha âmti i chetnot-ña
UNM Manuel each day AGR treat the wound-AGR
 put para u mâsu.
so.that FUT AGR healed
 'Manuel treats his wound every day so that it will be healed.' (CD,
 entry for *mâsu*)
- b. Kada diha **i nana** ha sâddi i neni-ña.
each day the mother AGR hold.on.lap the baby-AGR

‘Every day the mother holds her baby on her lap.’ (CD, entry for *sāddi*)

An inner topic can even precede or follow an adverbial clause, as in (8).

- (8) a. **I lugat-māmi** [an ogga’an] mampus ā’asgun.
the place-AGR if morning so.much AGR.foggy.PROG
 ‘Our (excl.) place is always so foggy in the morning.’ (CD, entry for *āsgun*)
- b. [Gigun mananana’], **si Tun Akin** ha
as.soon.as AGR.be.daylight.PROG UNM Mr. Akin AGR
chuli’ i batden-ña ...
take the bucket-AGR
 ‘As soon as it was getting to be daylight, Tun Akin would take his bucket...’ (EM 89)

The fact that inner topics are freely ordered with respect to adjuncts suggests that they too are adjuncts that occur at the left edge of the clause.

Cooreman’s (1987) study of transitivity and discourse structure in Chamorro includes a detailed investigation of the discourse function of inner topics. She concludes that the use of clauses with an inner topic “reflects the organization of the narrative at the level of the thematic paragraph” (1987: 208). More specifically, clauses with an inner topic are “mostly used to indicate that the theme has either changed or is temporarily suspended in order to give background information or...additional comments not necessarily pertaining to the theme of the present paragraph” (1987: 208). Although Cooreman’s study is based on narratives recorded in the early 1980’s, it seems likely that the discourse function of inner topics remains essentially the same in the Chamorro language today.

26.2.1.2 Inner topics and anaphora

Cooreman (1987) assumes that inner topics are subjects, and clauses with an inner topic are clauses with the word order *Subject Verb Object*. However, there is ample evidence that the inner topic is not itself the subject of the clause.

First of all, if the inner topic were the subject, it should be realized as an overt pronoun only when the predicate does *not* agree with it in person (see 8.4.2). But an inner topic can be an overt pronoun even when the predicate shows this sort of agreement, as can be seen from the sentences in (9).

- (9) a. **Guåhu** hu nisisita i ayudu-mu, ya **hågu** un
I AGR need the help-AGR and.then you AGR
 nisisita i ayudu-hu.
need the help-AGR
 ‘I need your help, and you need my help.’ (*Ginen I Obispo*
 November 24, 2002)
- b. **Hita** ta tungu’ na na’maguf uttimon-ña esti na
we.INCL AGR know COMP AGR.pleasant end-AGR this L
 istoria.
story
 ‘We (incl.) know that the end of this story is joyful.’ (*Ginen I*
Obispo August 18, 2002)

Second, if the inner topic were the subject, the clause should have no other subject. But it is possible for a clause to have both an inner topic and an overt subject following the predicate—a subject that is a weak pronoun. In (10), for instance, the intransitive verb *hånão* ‘go’ is preceded by an inner topic that is a coordinate noun phrase, and followed by a subject that is a weak pronoun, namely, the 1 excl. du. pronoun *ham*. (This pronoun can be overt because it is not cross-referenced by agreement in person.)

- (10) **I primu-hu yan guåhu** humånao ham bai in
the cousin-AGR and I AGR.go we.EXCL AGR
 fama’ensalådan tumåtis
ANTIP.make.into.salad.L tomato
 ‘My cousin and I left to make tomato salad...’ (MM 52)

Third, if the inner topic were the subject, it should obey the Chamorro restrictions on information packaging, including the person-animacy restriction (see 16.2) and the third plural restriction (16.3). But these restrictions ignore the inner topic. In the transitive clause in (11a), the direct object is an animate pronoun and the inner topic is a nonpronoun. If the inner topic were the subject, this subject-object combination ought to violate the person-animacy restriction; instead, it is grammatical. In the transitive clause in (11b), the inner topic is third person plural, but not a pronoun. Subjects with this profile violate the third plural restriction, but (11b) is well-formed.

- (11)a. **I mairåstran Joey** ha gogof matrårta gui’.
the stepmother.L Joey AGR very mistreat.PROG him
 ‘Joey’s stepmother has been mistreating him.’ (CD, entry for
matrårta)

- b. **Siha yan i nanan Catlos Calvo** ma translada
they and the mother.L Carlos Calvo AGR translate
 i finu' Españot esta i Chamorro.
the speech.L Spanish until the Chamorro
 'They and the mother of Carlos Calvo translated Spanish into
 Chamorro.' (MM 53)

Finally, the inner topic is not a subject that has been displaced to the left edge of the clause by *wh*-movement. If it were, its grammatical relation should be registered on the predicate by the subject form of *wh*-agreement, which is overt when the predicate is a transitive verb in the realis mood (see 22.4.1 and 23.4.1). In fact, *wh*-agreement does not occur; see (9) and (11).

Although the inner topic is not itself the subject, it serves as the antecedent of a pronoun inside the clause—a pronoun that usually is the subject. In (10), the inner topic (*i primu-hu yan guǎhu* 'my cousin and I') is the antecedent of the 1 excl. du. weak pronoun *ham*. In (9) and (11), the inner topics are the antecedents of subject pronouns that are null because the verb agrees with them in person. Note that these subjects are necessarily pronouns. The subjects in (9) are first or second person. The subjects in (11), which are third person, must be pronouns as well, because otherwise the person-animacy restriction or the third plural restriction would be violated.

It seems to be a firm requirement that the inner topic must be the antecedent of a pronoun inside the clause. Usually, this pronoun is the subject, but in certain contexts it can have a wider range of grammatical relations. In intransitive clauses, an inner topic can be the antecedent of a pronoun possessor of the subject, as in (12).

- (12)a. **Klâru [na si Jesukristu metgut**
AGR.clear COMP UNM Jesus.Christ AGR.strong
 inangokkon-ña gi ottru tâotão].
trust-AGR LCL other person
 'It is clear that Jesus Christ's trust in others was strong.' (*Ginen I*
Obispo November 4, 2001)
- b. **Si Jose mampus mutung i metyâs-ña yanggin**
UNM Jose so.much AGR.stinky the socks-AGR if
 fotgun.
AGR.wet
 'Jose's socks get so stinky when they are wet.' (CD, entry for
metyas)

In impersonal clauses formed from an existential verb or quantificational adjective (see 14.2.2 and 14.2.3), an inner topic can be the antecedent of a pronoun possessor of the pivot, as in (13a-b), or a pronoun possessor of the locative argument, as in (13c).

- (13)a. **Todus hit** guaha nisisidât-ta.
all us.INCL AGR.exist need-AGR
 ‘All of us (incl.) have needs (lit. there are needs of ours).’ (*Ginen I Obispo* November 24, 2002)
- b. Lão **Tun Achu’** mắ bula trongkun manggân-ña.
but Mr. Achu’ more AGR.many tree.L mango-AGR
 ‘But Tun Achu’ had more mango trees (lit. there were many more of his mango trees).’ (EM 88)
- c. Ha li’i’ [na **i taotáo** bula hắga’ gi chininắ-ña].
AGRsee COMP the person AGR.much blood LCL shirt-AGR
 ‘She saw that the man had a lot of blood (lit. there was much blood) on his shirt.’ (EM 98)

Intuitively, in all these cases the pronoun is syntactically prominent. This suggests that an inner topic at the left edge of a clause must be the antecedent of a pronoun that is, in some sense, the most prominent noun phrase in the clause. Exactly how to flesh out this intuition remains a topic for future research.

26.2.1.3 Topic versus focus

Readers might wonder how to distinguish an inner topic from a syntactically focused noun phrase that is placed at the left edge of the sentence by wh-movement (see 23.3). Here are the main differences between the two:

- (i) Inner topics and syntactically focused constituents have different discourse functions. An inner topic refers to who or what is under discussion. A syntactically focused constituent has a referent that is contrastive (singled out from a set of alternatives) or contrary to expectations.
- (ii) Inner topics are adjuncts at the left edge of the clause; they serve as antecedents of a syntactically prominent pronoun inside the clause. Syntactically focused constituents originate within the clause, and are displaced to the left edge of the sentence by wh-movement.
- (iii) An inner topic must be a pronoun, a name, or a noun phrase introduced by a strong determiner. A syntactically focused constituent can be any type of noun phrase or prepositional phrase.
- (iv) Syntactically focused constituents have their grammatical relation registered on the predicate by wh-agreement. Inner topics do not.

(v) When a clause has both a syntactically focused constituent and an inner topic at its left edge, the syntactically focused constituent precedes the inner topic.

26.2.2 Outer topics

Occasionally, a Chamorro sentence has what can be called an outer topic. This noun phrase occurs at the very beginning of the sentence, preceding the predicate and all left-edge constituents, and separated from them by a noticeable intonation break or pause. (The intonation break or pause is often indicated by a comma in the orthography.) Like inner topics, outer topics are in the unmarked case and must have a specific referent. They differ from inner topics in the following ways:

Outer topics are associated with sentences, not with clauses. They apparently do not occur inside embedded clauses.

Outer topics are found in connected discourse, but not typically in isolated sentences, such as the sentences in the CD database or sentences produced in elicitation contexts in fieldwork. Outer topics are also relatively infrequent. In contrast, inner topics are quite common; they occur routinely in isolated sentences as well as connected discourse.

An outer topic precedes all left-edge constituents, including constituents that have been displaced to the left edge of the sentence by *wh*-movement. In (14), for instance, the outer topic *si Matâ'pang* precedes the syntactically focused noun phrase *guiya esti na tâotâo* 'this person'.²

- (14) **Si Matâ'pang,** *guiya* *esti na tâotâo* *i pumunu'*
 UNM Matâ'pang he this L person the WH[SB.J].kill
 si Pâli' Sanvitores.
 UNM priest.L Sanvitores
 'About Matâ'pang, he is (lit. it's this person who is) the one who
 killed Fr. Sanvitores.' (CD, entry for *Matâ'pang*)

Although an outer topic is semantically connected to the rest of the sentence, it is not required to be the antecedent of a pronoun inside the sentence. The outer topics in (15) are not antecedents of pronouns; instead, their content is repeated by indefinite noun phrases that occur later in the sentence. (This repetition is not a type of anaphora.)

² The focused noun phrase begins with a focused form of the demonstrative (see 8.2).

- (15)a. **I antis yan pa'gu,** difirensiao antis yan ti
the before and now AGR.different before and not
 parehu antis yan pa'gu.
AGR.same before and now
 '[Life] before and now, [life] before was different and [life] before was not the same as now.' (MM 30)
- b. **Pues i hanum,** humãhano yu' mañuli'
then the water AGR.go.PROG I AGR.INF.ANTIP.take
 lisensia para un fanlupuk hãnum ...
permission FUT AGR.ANTIP.fetch.from.well water
 'Then about the water, I would go and get a license for you to get water...' (MM 26)

In (16), the outer topic *i natibu* 'the local people' refers to the Chamorros on Rota, a group that happens to include the speaker. Although the null pronoun possessor of *atmas-mãmi* 'our (excl.) weapons' also refers to this group, the outer topic is not its antecedent, because the outer topic is third person but the null pronoun is first person.

- (16) **I natibu** tâya' atmas-mãmi macheti ha'
the indigenous AGR.not.exist weapon-AGR machete EMP
 yan kama' yan âchu'.
and sickle and rock
 'As for the local people, we (excl.) had no weapons, only machetes and sickles and rocks.' (MM 82)

In (17), the outer topic *i simintetyu* 'the burial ground' describes the function of the places referred to by the noun phrase *dos lugât* 'two places'. Once again, this semantic relation does not involve anaphora.

- (17) **I simintetyu** guaha dos na lugât, gi
the burial.ground AGR.exist two L place LCL
 tiningo'-hu.
WH[OBJ].know-AGR
 'As for the [ancient] burial ground, there are two places, as far as I know.' (Cooreman 1983: 8)

It is hard to say more about outer topics, given that they are relatively infrequent and found mostly in connected discourse. This is an area where further research is needed.

26.3 Conditions on anaphora

Like other languages, Chamorro has various types of anaphora, some of which impose specific conditions on the relation between antecedent and pronoun. For instance, a pronoun in its reflexive use must have an antecedent that is a more prominent noun phrase in the same clause (see 13.2.1.1). The missing noun phrase in the control construction, which can be assumed to be a null pronoun, must have an antecedent in the higher clause with a particular semantic role dictated by the higher predicate (see 21.4). An inner topic at the left edge of a clause must be the antecedent of a pronoun which is, in some sense, the most prominent noun phrase inside the clause (see 26.2.1.2). And so on.

Over and above this, Chamorro has general conditions on anaphora that every relation between a pronoun and its antecedent must satisfy. Two such conditions are discussed here.

26.3.1 The basic condition

Not all pronouns have a linguistic antecedent. In (18), from the beginning of an interview, the null possessor pronoun does not have a linguistic antecedent in the sentence or the discourse. Instead, the nonlinguistic context reveals who the pronoun refers to.

- (18) Hăyi na'an-mu?
who? name-AGR
'What is your name?' (MM 218)

But when a Chamorro pronoun has a linguistic antecedent, the relation between the two must satisfy a basic condition: the antecedent must (i) be more prominent than the pronoun or (ii) precede the pronoun in the discourse (or both). Pronouns with a more prominent antecedent are said to be *bound* by their antecedent.

In generative syntax, the prominence relation involved in anaphora is called *c-command* and defined in terms of hierarchical constituent structure (see Reinhart 1976 and much literature since). For current purposes, it will work almost as well to give an informal characterization of prominence in terms of grammatical relations and constituency.³ This simplified characterization is presented below.

³ The simplified characterization in the text glosses over numerous details, including the following: An inner topic is more prominent than the subject. The question of whether the subject is more prominent than other left-edge

Recall that the subject is the most prominent constituent of the clause—more prominent than the other constituents following the predicate (see 3.2.1). This means that if X and Y are constituents of the same clause and X is the subject but Y is not, then X is more prominent than Y. In (19), for instance, the noun phrase *i taotão* ‘the person’ is more prominent than the pronoun *gui* ‘him’: the two are constituents of the same clause and *i taotão* is the subject, but *gui* is not. Because *i taotão* is also the antecedent of *gui*, which here is used as a reflexive, *gui* is bound by *i taotão*. (In the examples below, null pronouns are represented by empty sets of brackets; the relation between a pronoun and its antecedent is represented by underlining their English counterparts in the free translation.)

- (19) Ha gosa gui' i taotão [ântis di u asagua []].
 AGR enjoy him the person before PRT AGR marry
 ‘The person enjoyed himself before he got married.’ (CD, entry for *gosa*)

The direct object is the most prominent argument of the clause after the subject. Therefore, if X and Y are nonsubject arguments of the same clause and X is the direct object but Y is not, then X is more prominent than Y. In (20), the noun phrase *si Miguel* is more prominent than the pronoun *guiya* ‘him’: both are nonsubject arguments of *prutehi* ‘protect’, but *si Miguel* is the direct object whereas *guiya* is not. Because *si Miguel* is also the antecedent of *guiya*, *guiya* is bound by *si Miguel*.

- (20) Ti siña in prutehi si Miguel kontra guiya.
 not can AGR protect UNM Miguel against him
 ‘We (excl.) can’t protect Miguel from himself.’

In addition, if X is more prominent than Y, then X is more prominent than any constituent contained in Y. Some specific examples: if Y is a noun phrase that contains the possessor Z, then X is more prominent than Z; if Y contains an embedded clause and Z is a constituent of that embedded clause, then X is more prominent than Z; and so on. When Z is also a pronoun that has X as its antecedent, the result is that Z is bound by X. Thus, the null pronoun possessor of the locative noun phrase in (21a) is bound by the subject, *i katpinteru* ‘the carpenter’. The null pronoun possessor of the pas-

constituents is complicated by the issue of whether these other constituents have been displaced by wh-movement. Direct objects are more prominent than some, but not all, types of adjuncts.

sive agent in (21b) is bound by the subject, *si Aaron*. And the null pronoun subject of the adverbial clause in (19) is bound by the subject of the main clause, *i taotão* ‘the person’.

- (21)a. Ha chedduk i katpinteru i lapis gi
AGR.insert.for.carrying the carpenter the pencil LCL
 [talanga-ña []].
ear-AGR
 ‘The carpenter put the pencil behind his ear.’ (CD, entry for *chedduk*)
- b. Inatâki si Aaron ni [guhâ-ña [] ta’lu.
AGR.PASS.attack UNM Aaron OBL asthma-AGR again
 ‘Aaron was attacked by his asthma again.’ (CD, entry for *atâki*)

When a pronoun is bound by its antecedent, the relation between the two satisfies the basic condition on anaphora, so the antecedent is not required to precede the pronoun, although it may do so. The pairs of sentences below illustrate this for various types of anaphora. In the reflexive clauses in (22), the pronoun *guiya* ‘her’ is bound by its antecedent *si Dolores*, so *si Dolores* may precede or follow it.

- (22)a. Mamâhlão si Dolores ni guiya.
AGR.ashamed UNM Dolores OBL her
 ‘Dolores is ashamed of herself.’
- b. Mamâhlão ni guiya si Dolores.
AGR.ashamed OBL her UNM Dolores
 ‘Dolores is ashamed of herself.’

In the reflexive clauses in (23), the null pronoun possessor of the direct object is bound by its antecedent, which is *i katu* ‘the cat’ in (23a) and *i gayu* ‘the rooster’ in (23b). Once again, the antecedent may precede the pronoun (see (23a)) but is not required to do so (23b). In other words, the antecedent may precede or follow the possessive noun phrase containing the pronoun.

- (23)a. Ha patmâda i katu [i dadalâk-ña []].
AGR slap the cat the tail-AGR
 ‘The cat slapped its tail.’ (CD, entry for *patmâda*)
- b. Ha palappa [i pappan-ña [] i gayu, pues umo’o’.
AGR flap the wing-AGR the rooster then AGR.crow
 ‘The rooster flapped its wings, then crowed.’ (CD, entry for *palappa*)

In the control sentences in (24), the null pronoun that is the missing noun phrase of the infinitive clause is bound by the controller, which is the subject of *hãnão* ‘go’. Because the controller is more prominent than the pronoun, it may precede or follow the pronoun and the infinitive clause containing it.

- (24)a. Manhãno i manhobin [maniskuela [] giya
 AGR.go the PL.youth AGR.INF.go.to.school LCL
 Amerika].
America
 ‘The young people left to go to school in America.’ (CD, entry for *manhobin*)
- b. Kada diha humãno [pumeska []] si
 each day AGR.go AGR.INF.catch.fish UNM
 Orasima’.
Orasima
 ‘Every day Orasima’ went to fish.’ (from a tape-recorded narrative)

Finally, in the complex sentences in (25), the pronoun *gui* ‘he’ inside the embedded question is bound by an antecedent in the main clause. In (25a), the antecedent *si Alu* precedes *gui*; in (25b), the antecedent *si Jose* follows *gui*. (Each of these examples also contains a null pronoun that is bound by the same antecedent as *gui*’.)

- (25)a. Ha faisin si Alu [[hãyi gui’] yan [hãfa
 AGR.ask UNM Alu who? he and what?
 malago’-ña []].
 WH[OBL].want-AGR
 ‘She asked Alu who he was and what he wanted.’ (Cooreman 1982: 32)
- b. Gi sigundu biãhi ha na’matungu’ [hãyi gui’]
 LCL second time AGR.make.PASS.know who? he
 si Jose ni [mañe’lu-ña []].
 UNM Jose OBL PL.sibling-AGR
 ‘The second time, Joseph let his brothers know who he was.’ (NT 223)

When a pronoun is not bound by its antecedent, the antecedent must precede it in the discourse in order for the basic condition to be satisfied. This happens, for instance, when the antecedent and the pronoun are in completely different sentences, so there is no prominence relation between the two. See (26).

- (26) Gotpi humålum gi kuåttu esti na påtgun.
suddenly AGR.go.in LCL classroom this L child
 Malak guatu [] gi lamasa ...
AGR.go.to to.there LCL table
 ‘Suddenly this child came into the classroom. He went up to the desk...’ (Ginen I Obispo October 21, 2001)

Similarly, when the antecedent and the pronoun are in different conjuncts of a coordinate structure, neither is more prominent than the other, so the antecedent must precede the pronoun. See (27).

- (27) [Hu kuentutusi si Rudy], lão [ti ha atetendi
AGR.speak.to.PROG UNM Rudy but not AGR.heed.PROG
 yu’ []].
me
 ‘I was talking to Rudy, but he was not paying attention to me.’ (CD, entry for *atendi*)

When the antecedent is too deeply embedded inside a complex sentence to be more prominent than the pronoun, it must precede the pronoun. In the complex sentences in (28), the antecedent is inside an adverbial clause at the left edge of the main clause, and the pronoun is the subject of the main clause—too high in the structure to be bound by the antecedent.

- (28)a. Pues [anai maloffan esti i patgun], ha hunguk []
then when AGR.pass.by this the child AGR.hear
 na guaha tâotão gogonggung ...
COMP AGR.exist person AGR.grumble.PROG
 ‘Then when this child passed by, he heard that there was a person grumbling...’ (from a tape-recorded narrative)
- b. [Yanggin tâya’ [kaddon-ña i niyuk]], pues
if AGR.not.exist juice-AGR the coconut then
 buenti mama’fâha’ [].
maybe AGR.ANTIP.make.into.sprouting.stage
 ‘If the coconut doesn’t have juice in it (lit. there is no juice of the coconut), then it is already at the sprouting stage.’ (CD, entry for *fâha*)

Note that certain types of anaphora require the pronoun to be bound by its antecedent. These include anaphora in reflexive clauses, in the control

construction, and in sentences in which the antecedent is a quantified noun phrase (see the references cited in 26.5).

26.3.2 The subject condition

In addition to the basic condition, Chamorro has another condition on anaphora that targets the subject and its possessor. This condition prevents a pronoun subject or a pronoun possessor of the subject from having an antecedent in the same clause.

The effects of the subject condition are most obvious in clauses like (29) and (30), in which a (null) pronoun possessor of the subject is preceded by another noun phrase in the clause that could, in principle, be its antecedent. Despite the fact that the basic condition is satisfied, this antecedent-pronoun relation is not allowed. Instead, the pronoun possessor must have a different referent from the other noun phrase, as in the passive clauses in (29).

- (29)a. Inispiha as Ramon [i neni-ña []].
AGR.PASS.look.for OBL Ramon the baby-AGR
 ‘His_i (i.e. someone else’s) baby was looked for by Ramon_j.’ (Not: Ramon looked for his baby.)
- b. Manmasaolak ni famalão’an [i famagu’un-ñiha []].
AGR.PASS.spank OBL PL.woman the PL.child-AGR
 ‘Their_i (i.e. other people’s) children were spanked by the women_j.’
 (Not: The women spanked their children.)

Or else the noun phrase containing the pronoun possessor must be taken to be the direct object rather than the subject, as in the transitive clause in (30).

- (30) Ha bisita si Juan [si nanã-ña []].
AGR.visit UNM Juan UNM mother-AGR
 ‘John visited his mother.’ (Not: His mother visited Juan.)

The pattern is similar in clauses that contain a (null) pronoun subject, such as (31).⁴

- (31) Linalatdi (gui’) as [nanan Juan []].
AGR.PASS.scold he OBL mother.L Juan
 ‘He_i (i.e. someone else) was scolded by Juan_j’s mother.’ (Not: Juan’s mother scolded him.)

⁴ In generative syntax, the fact that the subject pronoun in (31) cannot have *Juan* as its antecedent is attributed to Principle C of the Binding Theory.

The subject condition is insensitive to antecedent-pronoun relations when the antecedent and the pronoun are not in the same clause. Consider the complex sentences below. In (32a), the quantified noun phrase that serves as the subject of the main clause is the antecedent of the (null) pronoun subject of the embedded clause. In (32b), the passive agent in the main clause is the antecedent of a (null) pronoun contained inside the subject, which happens to be an embedded clause. And in (32c), the passive agent in the main clause is the antecedent of a pronoun inside the relative clause that modifies the subject. All these relations are legal, because the antecedent and the pronoun are in different clauses.

- (32)a. Kada pátgun sumángan [na para u fanggánná []].
each child WH[SBJ].say COMP FUT AGR ANTIP.win
 ‘Each child said that he would win.’
- b. Matungu’ ni lalâhi [na manatrasão []].
AGR.PASS.know OBL PL.man COMP AGR.late
 ‘That they are late is known by the men.’
- c. Pinatmada gi as Dolores [i lahi [ni
AGR.PASS.slap OBL Dolores the boy COMP
muna’mamâhlão gui’]].
WH[SBJ].make.ashamed her
 ‘The boy who made her ashamed was slapped by Dolores.’

The subject condition is also insensitive to inner topics. Even though the inner topic serves as the antecedent of a pronoun that is usually the subject, or the possessor of the subject, the subject condition ignores that relation (see 26.2.1.2). This suggests that the inner topic, which has the word order of a left-edge adjunct, is technically outside the clause.

26.4 Further reading

Inner topics in Chamorro are described by Cooreman (1987) and Chung (1998), who refer to them simply as topics. See Chung (1989; 1998) for discussion of the Chamorro conditions on antecedent-pronoun relations, and Chung (2013) on the ellipsis process known as sluicing.

PARTS OF SPEECH

Chamorro has nouns, verbs, and adjectives. It also has word formation processes, called *conversion*, which turn certain nouns into verbs, and certain other nouns into adjectives, without affixes or other morphology.

27.1 Overview

In this book, Chamorro words are classified according to the traditional parts of speech: noun, verb, adjective, article, preposition, conjunction, demonstrative, and so on. The assumption that Chamorro has these parts of speech can be found in many earlier descriptions of the language (e.g. Safford 1903, von Preissig 1918, Costenoble 1940, Gibson 1980, Cooreman 1987; see also Winkler 2016). Nonetheless, it is controversial. In their grammar, Topping and Dungca (1973: 76-82) maintain that the Chamorro language has a unique system of word classification that does not involve nouns, verbs, or adjectives. Their system is employed, with minor modifications, in the entries in Topping, Ogo, and Dungca's (1975) dictionary.

This chapter compares these two views of Chamorro parts of speech. 27.2 presents Topping and Dungca's (1973) approach and their reasons for adopting it. 27.3 surveys a wider range of evidence that reveals that the language does, in fact, have nouns, verbs, and adjectives. 27.4 discusses several Chamorro word formation processes that turn certain nouns into verbs, and certain other nouns into adjectives, without affixes or other morphology. These processes of *conversion* may be partly responsible for Topping and Dungca's (1973: 101) observation that "a single word can often function as a verb, noun, or modifier" in Chamorro.

27.2 Topping and Dungca's approach

Although Topping and Dungca's (1973) system of word classification covers all words of the language, their discussion mainly concerns what they call the *major word class*—the class corresponding to what are called lexical categories (i.e. noun, verb, adjective) in generative syntax. The major word class consists of content words and is an open (potentially unlimited) class. Topping and Dungca also recognize a *minor word class*, which is divided

into closed (limited) subclasses such as pronoun, preposition, article, and the like. Their treatment of the minor word class is brief and not that different from more traditional treatments, so it is not discussed here.

Topping and Dungca maintain that the major word class is further divided into Chamorro-specific subclasses that are not the same as the traditional noun, verb, or adjective. They flesh out their position in two ways. First, they observe that in Chamorro, “we often find the same word functioning as a noun, a verb, and an adjective” (1973: 77). Specifically, they say, *dangkulu* ‘big’ serves in (1a) below “as the predicate...where we would normally expect to find a verb”, but apparently as the direct object in (1b), “where we would normally expect to find a noun”, and as “a modifier of the word *taotao*” in (1c), and therefore “ordinarily call[ed]...an adjective” (1973: 77).

- (1) a. *Dangkulu si Juan.*
 AGR.big UNM Juan
 ‘Juan is big.’ (Topping & Dungca 1973: 77)
- b. *Hu li’i i dangkulu.*
 AGRsee the big
 ‘I saw the big one.’ (Topping & Dungca 1973: 77)
- c. *Hu li’i i dangkulu na taotao.*
 AGRsee the big L person
 ‘I saw the big person.’ (Topping & Dungca 1973: 77)

Second, they identify three distributional properties in Chamorro which they use to divide the major word class into three subclasses, called Class I, Class II, and Class III (Topping and Dungca 1973: 78-80). These properties are: (i) the ability to combine with the passive prefix *ma-*, (ii) the ability to combine with the goal focus infix *-in-* (see below), and (iii) the ability to serve as the predicate when the subject is the 1 sg. pronoun *yu* ‘or a pronoun of the same class’ (Topping and Dungca 1973: 82). Words that exhibit properties (i) and (ii) are in Class I; some representative examples are cited in (2).

- (2) WORDS IN TOPPING AND DUNGCA’S (1973) CLASS I
- | | |
|-----------------|---------|
| <i>fa’tinas</i> | ‘make’ |
| <i>li’i</i> | ‘see’ |
| <i>patcha</i> | ‘touch’ |
| <i>sangan</i> | ‘say’ |
| <i>tungu</i> | ‘know’ |

Words that exhibit property (iii) are in Class II; some representative examples are cited in (3).¹

(3) WORDS IN TOPPING AND DUNGCA'S (1973) CLASS II

amigu	'friend'
dangkulu	'big'
gupu	'fly'
hãnao	'go, leave'
mattu	'arrive'
lãhi	'man, male'
lokka'	'tall'
malãti'	'intelligent'
tãnu'	'land'
tãotão	'person'

Finally, words in Class III are members of closed subclasses which exceptionally "do not take the full set of verb affixation" or "must occur with a particular type of subject pronoun" (Topping and Dungca 1973: 80). Some representative examples are cited in (4).

(4) WORDS IN TOPPING AND DUNGCA'S (1973) CLASS III

gai	'have'
gaigi	'be at (a location)'
guaha	'exist'
ilek-	'say'
malak	'go to'
mungnga	'don't'
ya-	'like'

What Topping and Dungca call the goal focus infix *-in-* is analyzed as a passive infix in Chapter 10 of this book. This means that, from the perspective taken here, their properties (i) and (ii) are equivalent to the property of having a passive form—a property characteristic of almost all transitive verbs in Chamorro. The words in their Class 1 are just the transitive verbs, in other words. (See Topping and Dungca 1973: 78 for explicit recognition of this.) Moreover, the 1 sg. pronoun *yu'* is a weak pronoun: an unstressed pronoun that leans on phonological material to its left. It was shown in Chapter

¹ Topping and Dungca (1973: 106-107) assume that overt pronouns in Chamorro can generally refer to animates or inanimates. Although this assumption is incorrect (see Chapter 8), it is adopted here for convenience.

8 that weak pronouns can serve as subjects, but not as the subjects of transitive verbs. The reason is that transitive verbs show person-and-number agreement with their subjects, and pronouns that are cross-referenced by agreement in person must be null (see 8.4.2). Consequently, from the perspective of this book, Topping and Dungca's property (iii) is equivalent to the property of being a content word that is intransitive. (See Topping, Ogo, and Dungca 1975: xx, where this is made explicit.)

The defining characteristic of the words in Class III is their exceptionality. They include the existential verbs (see 14.2.2), the verbs of possession (14.3), verbs that show agreement as if they were nouns (14.4), the predicates used in negative imperatives (15.2.2); and a phonologically dependent predicate (*malak* 'go to'; 2.2.1.1.2). Every approach to Chamorro grammar must treat these predicates specially. There is, however, no positive distributional evidence that they form a unified class. This suggests that they should be set aside for the purposes of this discussion.

Two questions now arise about the words in the 'regular' Classes I and II. Does Chamorro have distributional patterns that divide the words in Class II (i.e. the intransitive content words) into different subclasses? And does the language have distributional patterns that group the words in Class I (that is, the transitive verbs) together with some intransitive content words, but not others? These questions are addressed next.

27.3 Further evidence

The Chamorro language offers ample evidence for a more fine-grained classification of content words than what Topping and Dungca propose. Consider (5), which rearranges the representative words from (2) and (3) into four groups that are temporarily labeled A, B, C, and D.

- (5) a. A WORDS
- | | |
|----------|---------|
| fa'tinas | 'make' |
| li'i' | 'see' |
| patcha | 'touch' |
| sangan | 'say' |
| tungu' | 'know' |
- b. B WORDS
- | | |
|--------|-------------|
| amigu | 'friend' |
| lâhi | 'man, male' |
| tânu' | 'land' |
| tâotâo | 'person' |

- c. C WORDS
 dangkulu ‘big’
 lokka’ ‘tall’
 malâti’ ‘intelligent’
- d. D WORDS
 gupu ‘fly’
 hãnáo ‘go’
 máttu ‘arrive’

According to Topping and Dungca’s classification, the A words would be in Class I, and the B, C, and D words, in Class II. In the system of parts of speech adopted in this book, the A words are transitive verbs, while the B words are nouns, the C words are adjectives, and the D words are intransitive verbs.

The rest of this section presents some of the evidence that the Chamorro language distinguishes among all four of these subclasses of content words.

27.3.1 Nouns versus other content words

A number of distributional patterns in Chamorro differentiate the B words from the A, C, and D words. From the perspective adopted in this book, these patterns differentiate nouns from other content words. Here are three such patterns:

(i) When a B word serves as the predicate of a clause in the irrealis mood, it does not show person-and-number agreement with the subject (see 4.3.1). This is illustrated in (6) for *amigu* ‘friend’ and *lâhi* ‘man, male’.

- (6) a. Malagu’ [para **amigu**-ña si Kanâriu].
 AGR.want FUT friend-AGR UNM Kanâriu
 ‘He wanted to be (lit. that he would be) Kanâriu’s friend.’ (EM 81)
- b. Para **lâhi** i patgon-ña.
 FUT male the child-AGR
 ‘His child is going to be a boy.’ (from an e-mail message)

But when an A, C, or D word serves as the predicate of a clause in the irrealis mood, it shows person-and-number agreement with the subject (see 2.2.2.1 and 2.2.2.2.2). This is shown in (7), where the predicates are *li’i* ‘see’ (an A word), *lokka’* ‘tall’ (a C word), and *hãnáo* ‘go’ (a D word).

- (7) a. Ti mǎfattu ha’ i infitmera [para
 not AGR.arrive.PROG EMP the nurse FUT

u **li'i** i hetnu].

AGR see the oven

'The nurse still hadn't come to (lit. so that she would) see the incubator.' (EM 93)

- b. Malagu' si Maria [na para u **lokka'** i
AGR want UNM Maria COMP FUT AGR tall the
patgon-ña].

child-AGR

'Maria wants her child to be tall.'

- c. Esti kumeke'ilek-ña [na para u **hânão** si
this meaning-AGR COMP FUT AGR go UNM
Fulânu ...]

So.and.so

'The meaning of this is that So-and-so is going to leave...' (EM 129)

(ii) The predicates *gai* 'have' and *tai* 'not have' must participate in incorporation; they combine with their complement to form a phonological word (see 14.3). Their complement must be a B word; it cannot be an A, C, or D word. Compare the grammatical combinations in (8a) with the ungrammatical combinations in (8b).

- (8) a. *gai* amigu 'have a friend / friends'
gai lahi 'have a son'
gai tanu' 'have land'
gai taotão 'have a person, be possessed by a spirit'
- b. **gai* li'i' ('have see')
**gai* tungu' ('have know')
**gai* lokka' ('have tall')
**gai* malati' ('have smart')
**gai* hanão ('have go')

(iii) The stressed prefix *mi-* 'having lots of, full of' attaches to a content word to form a derived word (see 28.4.6). This prefix can be freely attached to B words (see (9a)), but it cannot be attached to A, C, or D words (9b).

- (9) a. *mi*'amigu 'having lots of friends'
*mi*alahi 'having lots of sons'
*mi*tanu' 'having lots of land'
*mi*taotão 'having lots of people, populated'
- b. **mili*'i' ('having lots of see')
**misangan* ('having lots of say')

- *midangkulu ('having lots of big')
 *mihanão ('having lots of go')

27.3.2 Verbs versus other content words

A few distributional patterns in Chamorro separate the A and D words, on the one hand, from the B and C words, on the other. From the perspective taken here, these patterns differentiate verbs from other content words.

Consider, for instance, what types of content words can serve as the predicate of the clause when the subject begins with the null indefinite article, which is nonspecific. (The discussion here is concerned only with the use of the null indefinite article to pick out an individual or individuals, not with its generic use; see 6.2.1.2.2.)

An A word cannot serve as the predicate in this context. Compare the ungrammatical clauses in (10) with their grammatical counterparts in (11), in which the subject begins with the definite article *i*.

- (10)a. *Ha li'i' yommuk na pãtgun i aksidenti.
 AGR see fat L child the accident
 ('A fat child saw the accident.')
- b. *Ha tungu' hit ma'estra.
 AGR know us.INCL teacher
 ('A teacher knows us (incl.).')
- c. *Ha li'i' yu' che'lun Antonio gi nigap.
 AGR see me sibling.L Antonio LCL yesterday
 ('A brother of Antonio saw me yesterday.')
- (11)a. Ha tungu' hit i ma'estra.
 AGR know us.INCL the teacher
 'The teacher knows us (incl.).'
- b. Ha li'i' yu' i che'lun Antonio gi nigap.
 AGR see me the sibling.L Antonio LCL yesterday
 'The brother of Antonio saw me yesterday.'

D words generally exhibit the same pattern: a D word cannot serve as the predicate when the subject begins with the null indefinite article. Compare (12) with the grammatical clauses in (13), in which the subject begins with the definite article or the indefinite singular article *un* (see 6.2.1.2.3).²

² Note that (12c) is ungrammatical because the subject begins with the null indefinite article, not because *asagua* 'spouse' is presupposed to be unique (see Chung 2018).

- (12)a. ***Humânão** kâtta para si Carmen.
AGR.go letter to UNM Carmen
 ('A letter went to Carmen.')
- b. ***Mâttu** tâotão gi petta.
AGR.arrive person LCL door
 ('A person came to the door.')
- c. ***Kumekuentus** asaguã-ña si Carmen.
AGR.speak.PROG spouse-AGR UNM Carmen
 ('Carmen's husband is speaking.')
- (13)a. **Humânão** i kâtta para si Carmen.
AGR.go the letter to UNM Carmen
 'The letter went to Carmen.'
- b. **Mâttu** un tâotão gi petta.
AGR.arrive a person LCL door
 'A person came to the door.'
- c. **Kumekuentus** i asaguã-ña si Carmen.
AGR.speak.PROG the spouse-AGR UNM Carmen
 'Carmen's husband is speaking.'

A few D words are exceptions to this generalization. Then the clause seems to have a presentational function, as can be seen from (14).

- (14)a. Anai ma baba, **humuyung** pâtgun.
when AGR.open AGR.go.out child
 'When they opened it, a child came out.' (Cooreman 1983: 107)
- b. Un diha, anai pumepeska ... **kumahulu'** dângkulu na
one day when AGR.fish.PROG AGR.get.up big L
 haggan, ya kuinentusi gui'.
turtle and.then AGR.PASS.speak.to he
 'One day, when he was fishing...a big turtle rose up, and spoke to him.' (from a tape-recorded narrative)

It is hard to pinpoint exactly what allows the D words *huyung* '(go) out' and *kahulu* '(get) up' to serve as predicates in (14). Although both are verbs of directed motion, other verbs of directed motion are ungrammatical in this context, as can be seen from (12a) and (12b).

B and C words display a different pattern (see Chung 2008). These words can routinely serve as the predicate when the subject begins with the

null indefinite article. However, they can do so only when the subject is a possessive noun phrase—that is, when it has a possessor, as in (15).³

- (15)a. Si Carmen **lalâhi** ha' chi'lu-ña.
UNM Carmen PL.man EMP sibling-AGR
 'Carmen has only brothers (lit. her siblings are only men).'
- b. Pues ekkungkuk sa' hâfa na para **Ifit**
then listen because what? COMP FUT tree.sp
 na'ân-hu.
name-AGR
 'So listen to why my name is going to be Ifit [i.e. scrub mahogany].' (from a conference presentation)
- c. I heavy equipment na klâsin trâk **mandângkulu**
the heavy equipment L sort.L truck AGR.big
 ruedan-ñiha.
wheel-AGR
 'The heavy equipment kind of trucks have big wheels on them (lit. their wheels are big).' (CD, entry for *rueda*)
- d. Kâo **manlokka'** famagu'on-ña si Maria?
Q AGR.tall PL.child-AGR UNM Maria
 'Are Maria's children tall?'
- e. **Malâti'** chi'lu-ña.
AGR.intelligent sibling-AGR
 'She has a smart sibling (lit. A sibling of hers is smart).'

When the subject begins with the null indefinite article but has no possessor, B and C words are ungrammatical, as (16) shows.

- (16)a. ***Lâhi** pânggun.
man child
 ('A child is a boy.')
- b. ***Mandângkulu** rueda siha.
AGR.big tire PL
 ('Tires are big.')
- c. ***Agaga'** kareta.
AGR.red car
 ('A car is red.')

³ The clauses in (15a) and (15c) have an inner topic at their left edge (see 26.2.1).

The key point is that the ability of B and C words to serve as the predicate in this context is systematic but limited: it depends on whether the subject has a possessor. Significantly, the distribution of A and D words is different. Whether these words are ungrammatical—as in (10) and (12)—or exceptionally grammatical—as in (14)—the presence or absence of a possessor has no bearing on their status. See (10c) and (12c) for illustrations.

27.3.3 Summary

The evidence just discussed is summarized in the chart below. The rows in (17) correspond to the four subclasses of words. The columns report on how each subclass behaves with respect to the distributional patterns described earlier. In the columns, the label ‘Passive form?’ refers to Topping and Dungca’s properties (i-ii), and the label ‘Weak pronoun subject?’ refers to their property (iii). The labels ‘Irrealis agreement?’ and ‘Occurs with *gai* and *mí*-?’ refer to the patterns described in 27.3.1. The label ‘Nonspecific subject requires possessor?’ refers to the pattern described in 27.3.2.

(17)

	PASSIVE FORM?	WEAK PN SUBJ?	IRREALIS AGR?	OCCURS W <i>GAI</i> & <i>MÍ</i> -?	NONSPEC SUBJ REQUIRES POSSR?
A	yes	no	yes	no	no
B	no	yes	no	yes	yes
C	no	yes	yes	no	yes
D	no	yes	yes	no	no

A comparison of the rows in the chart reveals that each subclass differs from the other three. (Each row has a different combination of ‘yes’ and ‘no’ cells.) This finding argues against Topping and Dungca’s Chamorro-specific system of parts of speech. In particular, it contradicts their claim that the words in their Class II (i.e. B, C, and D words) form a single undifferentiated class. But it is compatible with the approach to parts of speech taken in this book, according to which Chamorro content words are classified as nouns, verbs, or adjectives and further cross-classified for transitivity. (18) shows how this more traditional approach treats the four subclasses of words investigated earlier in this section.

(18) CLASSIFICATION OF CHAMORRO CONTENT WORDS

<i>Lexical Category</i>	<i>Transitivity</i>	
noun	intransitive	B Words
adjective	intransitive	C Words
verb	intransitive	D Words
verb	transitive	A Words

See Chung (2012a; 2012b) for further discussion.

It is important that this approach to Chamorro parts of speech can account for all the distributional evidence discussed so far, including Topping and Dungca's properties (i-iii). The difficulty with their system of word classification is not that it makes the wrong cut, but rather that it does not draw enough distinctions. That is why it cannot handle the evidence presented in 27.3.1 and 27.3.2. The traditional system of parts of speech, which is more articulated, does not have this issue.

27.4 Conversion

Let us now return to Topping and Dungca's (1973: 77) observation that in Chamorro "we often find the same word functioning as a noun, a verb, and an adjective". Although *dangkulu* 'big' in (1) may not be the best illustration of this,⁴ the overall point is correct. What could account for it?

One possibility is that Chamorro content words might have all-purpose 'predicative' meanings that would enable them to be used in multiple functions. (Similar claims have been made for languages that are thought to group content words into a single undifferentiated class; see e.g. Evans and Levinson 2009: 434.) But if the vagueness of word meanings were responsible for Topping and Dungca's observation, it should be a systematic property of all content words in the language. This is not the case. Individual Chamorro words differ arbitrarily from one another in their ability to occur in more than one part of speech. Consider, for instance, *go'naf* 'scale', *se'si* 'knife', *chetnut* 'wound', and *hăyu* 'stick'. All four words can occur as nouns, in which case they have the distributional profile of nouns (see 27.3.1). *Go'naf* 'scale' and *se'si* 'knife' can also occur as transitive verbs, in which case they show person-and-number agreement with their subject, as illustrated in (19) (see 2.2.2.1 and 2.2.2.3). But *chetnut* 'wound' and *guma* 'house' cannot occur as transitive verbs, as can be seen from (20).

- (19)a. Hu **go'naf** i kahăo.
 AGRscale the fish.sp
 'I scaled the soapy.' (CD, entry for *kăhăo*)

⁴ In the approach taken in this book, *dangkulu* 'big' is an adjective in all of the examples in (1). It serves as the predicate of the clause in (1a) and as a modifier within the noun phrase in (1b) and (1c). The head noun in (1b) has undergone noun phrase ellipsis (see 7.4).

- b. Ma **se'si'** i babui para u mapunu'.
AGR knife the pig FUT AGR PASS.kill
 'They stabbed the pig so that it would die.' (CD, entry for *se'si'*)
- (20)a. ***Ha chetnut yu'**.
AGR wound me
 ('He wounded me.')
- b. ***Ha hăyu yu' si Juan.**
AGR stick me UNM Juan
 ('Juan hit me with a stick.')

Another illustration: the Chamorro words *mantika* and *potbus*, which are borrowed from Spanish, can occur as nouns or adjectives. In their noun use, *mantika* means 'fat, grease' and *potbus* means 'dust'. In their adjective use, illustrated in (21), *mantika* means 'fatty, greasy' and *potbus* means 'dusty'. In contrast, the words *asiga* 'salt' (an Austronesian word) and *asukat* 'sugar' (borrowed from Spanish) occur as nouns, but not as adjectives. This is why (22a) means 'Our (excl.) food was salt', not 'Our food was salty'.

- (21)a. Mansen **mantika** i abunin i imang.
AGR.extremely fatty the food.sac.L the hermit.crab
 'The food sacs of hermit crabs are very fatty.' (CD, entry for *ábuni*)
- b. **Potbus** i simientu.
AGR.dusty the cement
 'The cement is dusty.' (CD, entry for *simientu*)
- (22)a. **Asiga** na'-mămi.
salt food-AGR
 'Our (excl.) food was salt.' (Not: Our food was salty.)
- b. **Asukat** na'-mămi.
sugar food-AGR
 'Our (excl.) food was sugar.' (Not: Our food was sugary/sweet.)

The lexical arbitrariness illustrated in (19-22) strongly suggests that no general property of word meanings in Chamorro lies behind Topping and Dungca's observation.

Another possibility is that Chamorro has word formation processes that allow a content word from one part of speech to be converted to another part of speech without affixes or other morphology. This type of word formation process, which is robustly attested in English, is called *conversion* (see e.g. Bauer and Huddleston 2002: 1640).

Conversion is productively employed in English to turn nouns into derived verbs, as can be seen from the verbs in verb phrases such as *bottle*

the wine, pocket the cash, butter the bread, mop the floor, and skewer the meat (see e.g. Clark and Clark 1979, Hale and Keyser 1993, Levin 1993, Kiparsky 1997). Conversion is also employed to turn verbs into derived nouns, as can be seen from the nouns in noun phrases such as *our moves, your sleep, their wants, and my asks*. Although conversion differs from other word formation processes in not involving overt morphology, it resembles these other processes in the following ways: (i) the form and meaning of the words that undergo the process can be specified, and (ii) so can the form and meaning of the derived words that are produced; (iii) the process itself can be productive or unproductive, but (iv) even when it is productive, there may be words that arbitrarily fail to undergo it.

The rest of this section discusses two productive types of conversion in Chamorro. One type turns certain nouns into derived transitive verbs; the other type turns certain other nouns into derived adjectives.

27.4.1 Noun-to-verb

Chamorro uses conversion productively to turn certain types of nouns into transitive verbs. This process, which is strikingly similar to some types of conversion in English (see e.g. Clark and Clark 1979, Kiparsky 1979) can be characterized as follows (see Levin 2008: 2):

(i) A noun that names a container or location can be converted to a transitive verb whose meaning is ‘put (something) in that container or location’. Some representative nouns that can undergo this process are listed in (23), along with their meanings and the meanings of the corresponding derived verbs.

(23)	WORD	AS NOUN	AS DERIVED VERB
	â’fi	‘sling’	‘put in a sling’
	apâga	‘shoulder’	‘carry on shoulder’
	balutan	‘wrapper’	‘wrap’
	botsa	‘pocket’	‘put in pocket’
	châhan	‘underground pit’	‘cook in an underground pit’
	letchin niyuk	‘coconut milk’	‘cook in coconut milk’
	presu	‘prison’	‘put in prison’

A few of the derived verbs in (23) are illustrated in (24).

- (24)a. Binalutan i boti ni dangkulun nâpu.
 AGR.PASS.wrap the boat OBL big.L wave
 ‘The boat was covered in big waves.’ (CD, entry for *binalutan*)

- b. Machåhan i babui para i giput.
AGR.PASS.cook.in.pit the pig for the party
 ‘The pig was roasted underground for the party.’ (CD, entry for *chåhan*)
- c. Ha letchin niyuk si nãna i ayuyu.
AGR cook.in.coconut.milk UNM mother the coconut.crab
 ‘Mother cooked the coconut crab in coconut milk.’ (CD, entry for *letchin niyuk*)

(ii) A noun that names a thing or stuff can be converted to a transitive verb that means ‘put that thing or stuff at (some location).’ Some representative nouns that undergo this process are listed in (25), and a few of the derived verbs are illustrated in (26).

(25)	WORD	AS NOUN	AS DERIVED VERB
	achai	‘chin’	‘lean the chin on’
	åtbidun	‘starch’	‘add starch to’
	åtuf	‘roof’	‘put a roof on’
	chå’lak	‘small cut’	‘make a small cut in’
	håfyi	‘protecting cover’	‘put a protecting cover on’
	kollat	‘fence’	‘fence’
	sådi’	‘diaper’	‘put a diaper on’
	tåmpi	‘cover’	‘cover’

- (26)a. Manma’åtbidun siha i magågun mamåli’
AGR.PASS.add.starch.to PL the clothes.L PL.priest
 gi as Ana.
OBL Ana
 ‘The priests’ clothes were starched by Ana.’ (CD, entry for *åtbidun*)
- b. Hu chå’lak i laggua.
AGR make.small.cut.in the parrot.fish
 ‘I made a small cut in the parrot fish.’ (CD, entry for *chå’lak*)
- c. Tinampi todû i lamasa ni tesna.
AGR.PASS.cover all the table OBL charcoal.dust
 ‘The table was all covered with charcoal dust.’ (CD, entry for *tesna*)

(iii) Finally, a noun that names an instrument can be converted to a transitive verb that means ‘use that instrument in its intended function on (something)’. Some representative nouns that undergo this process are listed in (27), and a few derived verbs are illustrated in (28).

(27)	WORD	AS NOUN	AS DERIVED VERB
	bâlas	‘whip’	‘hit with a whip’
	barohu	‘drill’	‘drill’
	châchak	‘saw’	‘cut with a saw, slice’
	dekka’	‘pole, stick’	‘poke, pick (w. pole or stick)’
	lampâsu	‘mop’	‘mop’
	paini	‘comb’	‘arrange (hair) with a comb’
	se’si’	‘knife’	‘cut with a knife’
	tupak	‘fishing line’	‘catch with a fishing line’
- (28)a. Chinachak si Donald ni se’si’ tuberu sa’
AGR.PASS.slice UNM Donald OBL knife.L winemaker because
 ha chatusa.
AGR barely.use
 ‘Donald was cut by the winemaker’s knife because he used it improperly.’ (CD, entry for *se’si’ tuberu*)
- b. Malampâsu i satgi as Monica gi egga’an.
AGR.PASS.mop the floor OBL Monica LCL morning
 ‘Monica mopped the floor this morning.’ (CD, entry for *ma-*)
- c. Ngaha’ tâtti i ilu-mu ya bai hu paini i
tilt back the head-AGR and.then AGR comb the
 gaputulu-mu.
hair-AGR
 ‘Tilt your head back and I’ll comb your hair.’ (CD, entry for *ngaha’*)

All three subtypes of conversion are productive in Chamorro (see Chung 2012a further examples and discussion). Nonetheless, not all nouns with the relevant type of meaning can be converted to transitive verbs. Even though the nouns *guma* ‘house’ and *baina* ‘sheath’ arguably name locations, and the noun *hâyû* ‘stick’ arguably names an instrument, these nouns cannot be converted to transitive verbs meaning ‘put (someone or something) in a house’, ‘put (something) in a sheath’, or ‘poke (someone) with a stick’; see e.g. (20b). This is the sort of arbitrariness that word formation processes often exhibit.

27.4.2 Noun-to-adjective

Chamorro also uses conversion productively to turn certain types of nouns into adjectives. To see the effects of this process, consider the nouns *châtku* ‘stain’, *mantika* ‘fat, grease’, and *mulidu* ‘bruise’. These words have the distributional profile of nouns, as can be seen from (29).

- (29)a. Gai chatku i kueyun esti na chinina.
AGR.have stain the collar.L this L blouse
 ‘The collar of this blouse has a stain.’ (CD, entry for *kueyun chinina*)
- b. Mânngi’ i guihan bakalão sa’
AGR.delicious the fish.L cod because
mimantika.
AGR.having.lots.of.fat
 ‘Cod fish is delicious because it has lots of fat.’ (CD, entry for *bakalão*)
- c. Esta gai mulidu siha âtilung i peras.
already AGR.have bruise PL black the pear
 ‘The pear has bruises of dark spots.’ (CD, entry for *mulidu*)

Conversion turns these nouns into the derived adjectives *châtku* ‘stained’, *mantika* ‘fatty, greasy’, and *mulidu* ‘bruised’. Then they have the distributional profile of adjectives, as (30) shows.

- (30)a. Adahi na u châtku i magagu-mu ginin i
careful COMP AGR.stained the clothes-AGR from the
manha.
green.coconut
 ‘Be careful that your clothes aren’t stained from the green coconut’s husk.’ (CD, entry for *châtku*)
- b. Ti debi di u mantika i impanâda.
not should PRT AGR.greasy the empanada
 ‘The empanada should not be greasy.’
- c. Mungnga mafâhan i mansâna ni mulidu
don’t AGR.PASS.buy the apple COMP AGR.bruised
esta lassâs-ña.
already skin-AGR
 ‘Don’t buy the apples that have bruised skins.’ (CD, entry for *mulidu*)

Noun-adjective conversion has no English analogue. But, like noun-verb conversion, it is productive in Chamorro. Here are the details:

- (i) A noun that names a distinctive feature of the body can be converted to an adjective that means ‘characterized by that feature of the body’. Some representative nouns that undergo this process are listed in (31), and a few derived adjectives are illustrated in (32).

(31)	WORD	AS NOUN	AS DERIVED ADJECTIVE
	busu'	'lump'	'lumpy, swelling'
	dâdu'	'malformed nose, cleft palate'	'malformed (of nose), cleft (of palate)'
	dondun	'freckle'	'spotted'
	haduk	'dimple'	'dimpled'
	matan âmku'	'old face'	'old-looking'
	mulidu	'bruise'	'bruised'
	paladang	'scar'	'scarred'

- (32)a. Bumusu' tiyan-ña si Karina anai malângu.
AGR.lumpy stomach-AGR UNM Karina when AGR.sick
 'Karina's stomach swells when she is sick.' (CD, entry for *busu'*)
- b. Paladang i kalulot-ña anai chinachak ni se'si'.
AGR.scarred the finger-AGR when AGR.PASS.cut OBL knife
 'He got a scar on his finger when he got cut with the knife.' (CD, entry for *paladang*)

(ii) A noun that names a disease or medical condition can be converted to an adjective that means 'infected by that disease' or 'characterized by that medical condition'. Some representative nouns that undergo this process are listed in (33), and a few derived adjectives are illustrated in (34).

(33)	WORD	AS NOUN	AS DERIVED ADJECTIVE
	daibitis	'diabetes'	'diabetic'
	kalentura	'fever'	'feverish'
	kânsit	'cancer'	'having cancer'
	mañum	'cold, flu'	'having a cold, having flu'
	sâtna	'rash, sores'	'having rash, having sores'

- (34)a. Mapput mângung i chetnot-ña sa' daibitis
AGR.hard AGR.healed the wound-AGR because AGR.diabetic
gui'.
he
 'It is hard for his sore to heal because he is diabetic.' (CD, entry for *chetnut*)
- b. Bula na famalão'an mankâkansit.
many L PL.woman AGR.have.cancer.PROG
 'Many women have cancer.' (CD, entry for *kânsit*)

- c. Manmañum ham toduguini mągi.
AGR.have.cold we.EXCL all here to.here
 ‘We (excl.) all have colds here.’ (CD, entry for *mañum*)

(iii) Finally, various other concrete and abstract nouns can be converted to adjectives that mean ‘characterized by [whatever the noun names]’. These nouns include *chåtku* ‘stain’ and *mantika* ‘fat, grease’, which were discussed earlier. Some other nouns of this type are listed in (35) and illustrated in (36).

(35)	WORD	AS NOUN	AS DERIVED ADJECTIVE
	bo’an	‘foam’	‘foamy’
	fachi’	‘mud’	‘muddy’
	getmun	‘crunchy sound’	‘crunchy-sounding’
	odda’	‘dirt’	‘dirty’
	oksu’	‘hill’	‘hilly’
	potbus	‘dust’	‘dusty’
- (36)a. Annuk ha’ na hinina i patgun ni
AGR.appear EMP COMP AGR.PASS.poison the child OBL
 na’-ña sa’ bobo’an i pachot-ña.
food-AGR because AGR.foamy.PROG the mouth-AGR
 ‘You can tell that the child was poisoned by his food because his mouth is foamy.’ (CD, entry for *bo’an*)
- b. Si Jenielle ha gatcha’ i edda’ ya umodda’
UNM Jenielle AGR.step.on the dirt and.then AGR.dirty
 addeng-ña.
foot-AGR
 ‘Jenielle stepped on the ground and his feet got dirty.’ (CD, entry for *odda’*)

See Chung (2012a) for further examples and discussion. As might be expected by now, not all nouns undergo noun-adjective conversion, even though this process is productive. The nouns *asiga* ‘salt’ and *asukat* ‘sugar’, for instance, cannot be turned into derived adjectives meaning ‘salty’ and ‘sugary’, even though they might seem to be eligible for the conversion described just above; see (22).

27.4.3 Summary

Word formation processes are partly responsible for the fact that many Chamorro words seem initially to have multiple functions. Like English,

Chamorro has conversion, a word formation process that turns a content word from one part of speech into a word from another part of speech without affixes or other morphology. This means that Topping and Dungca's (1973) observation about multiple functions is compatible with the idea that Chamorro has nouns, verbs, and adjectives. In fact, the discussion of conversion presented earlier in this section relies on the assumption that the language has these parts of speech.

English has a rich array of types of conversion besides the noun-to-verb conversion mentioned earlier in this section (see Clark and Clark 1979). Chamorro too has other types of conversion. Conversion is no doubt responsible for turning the nouns in (37), which name types of prepared food, into derived transitive verbs meaning 'make (something) into that type of food'.

(37)	WORD	AS NOUN	AS DERIVED VERB
	balensiãna	'red rice'	'make into red rice'
	kãddu	'soup'	'boil into soup'
	kelaguin	'meat or fish half-cooked with lemon juice'	'make into <i>kelaguin</i> '
	lantiyas	'pudding'	'make into pudding'
	saibuk	'boiled starchy food'	'boil (starchy food)'

Conversion is probably responsible for the relation between the intransitive verbs in (38), which describe an activity, and the homonymous nouns, which name an instance of that activity, or the result of that activity. (Conceivably, some of these pairs of words involve noun-verb conversion and others, verb-noun conversion.)

(38)	WORD	AS VERB	AS NOUN
	atalak	'stare'	'stare'
	baila	'dance'	'dance'
	bakasion	'be on vacation'	'vacation'
	guput	'have a party'	'party'
	kãnta	'sing'	'song'
	mumu	'fight'	'fight'
	uchan	'rain'	'rain'

Conversion can also be seen at work in the process that turns professional nouns such as *ma'estra* 'teacher (f.)' and *pãli* 'priest' into intransitive verbs that mean 'serve as a member of that profession' (see 4.3.1). Two other

types of conversion are described in 28.4.9. Overall, this is clearly a topic that deserves further investigation.

27.5 Further reading

Topping and Dungca's approach to parts of speech in Chamorro is presented in Topping and Dungca (1973) and in the introduction to Topping, Ogo and Dungca (1975). See Chung (2012a; 2012b) for commentary and discussion.

WORD FORMATION

Chamorro has ways of creating derived nouns, verbs, or adjectives from other words. It also has event nominalizations formed from verbs and adjectives. Finally, it has strategies for creating nicknames from given names.

28.1 Overview

The Chamorro language has various ways of creating derived nouns, verbs, or adjectives from other words. Some of these word formation processes involve prefixes, infixes, suffixes, or reduplication; others, known as conversion, involve no affixes or other morphology (see 27.4). Word formation processes differ from one another in the extent to which they are productive—the extent to which they can be used to create derived words that are entirely new.

Safford (1903; 1904; 1905) and Topping and Dungca (1973) give detailed descriptions of the affixes and reduplication used in word formation in Chamorro. The survey presented here builds on their work, but also includes conversion. 28.2 is devoted to ways of creating derived nouns; 28.3, to ways of creating derived aspectual predicates; and 28.4, to other ways of creating derived verbs and adjectives. 28.5 describes some word formation processes that apply to local and directional nouns. Most of the illustrative examples in these sections are taken from the CD database. Word formation in Chamorro is complicated by individual variation and dialect differences, as well as language loss and issues connected with language revival. Partly because of this, much of the discussion is tentative and incomplete.¹ 28.6 describes nominalized predicates and the event nominalizations that can be formed

¹ For instance, two affixes described by Safford (1903: 515) and Topping and Dungca (1973: 178, 180) are not discussed here at all: the stressed prefix *ká-* in e.g. *káhaga* ‘bloody’ (from *hâga* ‘blood’) and *kálaña* ‘oily’ (from *lâña* ‘oil’), and the suffix *-an* in e.g. *pâguan* ‘smelly’ (from *pâo* ‘smell’) and *yini’usan* ‘godlike’ (from *yu’us* ‘god’ plus the infix *-in-*). Both affixes turn nouns into derived adjectives. Both affixes also appear to be quite unproductive today.

from them. Finally, 28.7 briefly discusses some of the strategies used to create nicknames from given names.

28.2 Derived nouns

28.2.1 Agentive nouns

Chamorro has two ways of creating agentive nouns—derived nouns that name who or what performs the action described by the verb.

28.2.1.1 Reduplication plus umlaut

The combination of reduplication plus umlaut (i.e. vowel fronting) turns a verb into an agentive noun (see Bibbs 2018). Reduplication copies the initial vowel of the word and the preceding consonant, if there is one, and places the copied (C)V at the beginning of the word, where it bears primary stress. Umlaut causes the copied vowel to be realized as a front vowel (see 30.2). More specifically:

If the verb begins with a vowel, reduplication copies that vowel and places it at the beginning of the word, where it bears primary stress. (This vowel is separated from the original vowel by glottal stop.) Umlaut causes the copied vowel to be realized as a front vowel. For instance, if the original vowel was low, the copied vowel is realized as /a/, as in (1).

(1)	VERB		DERIVED NOUN	
	âddak	‘knock’	á’addak	‘knocker’
	âmti	‘cure’	á’amti	‘doctor, healer’
	akunseha	‘advise’	á’akunseha	‘adviser’
	ayuda	‘help’	á’ayuda	‘helper, assistant’

If the verb begins with a consonant followed by a vowel, reduplication copies that CV and places it at the beginning of the word, where it bears primary stress. Once again, umlaut causes the copied vowel to be realized as a front vowel. The copied vowel is realized as /a/ if the vowel of the original word was low, and as /i/ if the vowel of the original word was high. See (2).

(2)	VERB		DERIVED NOUN	
a.	bállì	‘sweep’	báballì	‘sweeper’
	danña’	‘be together’	dádanña’	‘joiner, team worker’
	falâgu	‘run (irrealis)’	fâfalagu	‘runner’
	tâtsi	‘poison’	tâtatsi	‘poisoner’
b.	dibina	‘guess’	dídibina	‘fortune teller’
	hina	‘poison’	híhina	‘poisoner’

tugi'	'write'	títugi'	'writer'
tumu	'dye'	títumu	'something that stains'

If the vowel of the original verb is mid, the copied vowel is sometimes realized as /i/, and other times as /e/. The historically older option is /i/ (see Safford 1903: 306). It is unclear to what extent both options are available and productive today.

(3)	VERB		DERIVED NOUN
a.	cheffla	'whistle'	chícheffla 'whistler'
	kuentus	'speak'	kuíkuentus 'orator'
	penta	'paint'	pípenta 'painter'
	peska	'fish'	pípeska 'fisherman'
	tokcha'	'spear'	títokcha' 'bee stinger'
b.	de'un	'pinch'	déde'un 'pincher'
	penta	'paint'	pépenta 'painter'
	peska	'fish'	pépeska 'fisherman'

This word formation process appears to be productive. It applies freely to verbs whether they are indigenous or borrowed. It also applies to derived verbs created by conversion and to certain antipassive verbs, as (4) shows.

(4)	VERB		DERIVED NOUN
	gualu'	'till soil' (from <i>gualu</i> 'farm')	guágualu' '(good) farmer'
	tufuk	'weave'	títufuk 'weaver'
	mãmufuk	'weave (realis antipassive)'	mámamfuk 'weaver'
	fãmufuk	'weave (irrealis antipassive)'	fáfamfuk 'weaver'

Occasionally, it derives agentive nouns from adjectives, as in (5).

(5)	ADJECTIVE		DERIVED NOUN
	isão	'sin; guilty'	í'isão 'sinner'
	binenu	'poisonous'	bíbinenu 'poisoner'

28.2.1.2 -dót

A number of agentive nouns borrowed from Spanish consist a verb followed by the agentive suffix *-dót* (or its feminine form *-dora*). In most cases, both

the agentive noun and the verb from which it is derived were borrowed from Spanish into Chamorro. The examples below are representative.

(6)	VERB		DERIVED NOUN	
	akusa	‘accuse’	akusadót	‘accuser’
	baila	‘dance’	bailadót,	‘dancer (m.),
			bailadora	dancer (f.)’
	bota	‘vote’	botadót	‘voter’
	gãнна	‘win’	gannadót	‘winner, champion’
	peska	‘fish’	peskadót	‘fisherman’
	sâtba	‘save’	satbadót	‘savior’

The systematic character of the verb-noun relation in (6) suggests that the word formation process that creates these agentive nouns was also borrowed into Chamorro. That is, *-dót* is now a Chamorro suffix that turns verbs from the nonindigenous vocabulary into agentive nouns. And indeed, there are Chamorro agentive nouns of this type that have no direct analogue in Spanish, despite the fact that they are derived by attaching *-dót* to a verb that was borrowed from Spanish. Some nouns of this type appear in (7).²

(7)	VERB		DERIVED NOUN	
	keha	‘complain’	kehadót	‘accuser’
	kuenta	‘include’	kuentadót	‘accountant’
	pasehu	‘travel’	pasiadót	‘traveler’
	suspetcha	‘suspect’	suspetchadót	‘suspicious person’

The use of *-dót* to derive agentive nouns from nonindigenous verbs may be productive, especially in the elevated rhetorical style often used in speeches to large audiences. This process is typically limited to verbs borrowed from Spanish, but there are occasional exceptions; e.g. *fattadót* ‘boaster’ (from *fatta* ‘boast about, show off (something)’) and *ispikadót* ‘speaker’ (from the English noun *speaker*).

² Spanish has no agentive nouns derived from *quejarse* ‘to complain’ or *sospechar* ‘to suspect’. (Many thanks to Victoria González Pagani for this information.) In Spanish, the agentive noun derived from *contar* ‘to count’ (3sg. prs. *cuenta*) is *contador* ‘accountant’, not *cuentador*. The Spanish agentive noun *paseador*, from *pasear* ‘walk, stroll’, apparently means ‘walker’ or ‘minder’, not ‘traveler’.

28.2.2 Nouns of location

The combination of the prefix *fan-* plus the suffix *-an* (sometimes referred to as the circumfix *fan-...-an*) turns a noun or verb into a noun of location—a derived noun that names a location characterized by whatever the original word describes. The derived word typically exhibits the alternation known as nasal substitution (see 30.4). Note that the suffix *-an* is realized as *-yan* after a vowel.

The CD database includes a large number of nouns of location. Nouns of this type are very frequently derived from verbs, as in (8).

(8)	VERB		DERIVED NOUN	
	apu'	'lean against'	fanapu'an	'footstool'
	diskansa	'rest, relax'	fandiskansayan	'rest space'
	fa'gasi	'wash'	fama'gasiyan	'wash basin'
	fã'pus	'depart (irrealis)'	fanfa'pusan	'passageway'
	huyung	'go out'	fanhuyungan	'exit'
	hãfut	'bury'	fanhafutan	'cemetery'
	punu'	'kill'	famunu'an	'slaughterhouse'
	tãla'	'hang to dry'	fanalã'an	'drying place'

They can also be derived from nouns, as in (9).

(9)	NOUN		DERIVED NOUN	
	atchu'	'rock, stone'	fanatchu'an	'quarry'
	binãdu	'deer'	fambinaduyan	'deer hunting region'
	fã'i	'rice plant'	fanfa'iyan	'rice field'
	kamuti	'sweet potato'	fangamutiyan	'potato field'
	somnak	'sunshine'	fañomnãgan	'dry season'

28.2.3 *án-*

The stressed prefix *án-* turns a noun or verb into a derived noun that includes the meaning 'leftover, residue'. Some derived nouns of this type are cited in (10). It is unclear whether this process is productive.

(10)	WORD		DERIVED NOUN	
a.	basihu	'empty container'	ánbasihu	'empty container'
	nã'yan	'dish, food'	ánna'yan	'leftover food; used dishes'
	sopbla	'leftovers'	ánsopbla	'leftovers'

	supiyu	‘carpenter’s plane’	ánsupiyu	‘wood shaving’
b.	kánnu’	‘eat’	ánkannu’	‘leftover food’
	lasgui	‘whittle’	ánlasgui	‘wood shaving’
	tupa	‘tear off’	ántupa	‘rubbish, debris’
	usa	‘use’	ánusa	‘something used’

28.3 Derived aspectual predicates

The predicate of every Chamorro clause is marked for neutral versus progressive aspect (see 2.2.1). Over and above this, the language has two ways of creating derived verbs or adjectives that incorporate more aspectual information.

28.3.1 *ké’-*

The stressed prefix *ké’-* (or its variant *ké-*) turns a verb or adjective into a prospective verb—a derived verb that includes the meaning ‘try to’ or ‘be about to’. Prospective verbs are transitive when they are derived from transitive verbs, and intransitive otherwise. The process that creates these verbs is productive.

Some examples of prospective verbs created from transitive verbs are cited in (11).

(11)	TRANSITIVE VERB		DERIVED VERB	
	chagi	‘try’	ké’chagi	‘try’
	danchi	‘hit (a target)’	ké’danchi	‘try to hit (a target)’
	fāhan	‘buy’	ké’fahan	‘try to buy’
	konni’	‘catch’	ké’konni’	‘try to catch’
	latchai	‘finish off’	ké’latchai	‘try to finish off’
	sāngan	‘say’	ké’sangan	‘try to say’
	tungu’	‘know’	ké’tungu’	‘find out, learn’

These prospective verbs are transitive, as can be seen from their forms of agreement with the subject in (12).

- (12)a. I famagu’un ma keke’konni’ i apatcha’.
the PL.child AGR try.catch.PROG the grasshopper
‘The children are trying to catch grasshoppers.’ (CD, entry for *apatcha*)
- b. Si Rosita ha ke’latchai i fina’denni’ aliling.
UNM Rosita AGR try.finish.off the pickle.L conch

‘Rosita tried to eat all of the conch pickling.’ (CD, entry for *ké’latchai*)

Some examples of prospective verbs created from intransitive verbs or adjectives are cited in (13).

(13) INTRANSITIVE			
VERB / ADJECTIVE		DERIVED VERB	
cháta’an	‘rainy’	ké’chata’an	‘about to be rainy’
maigu’	‘sleep’	ké’magu’	‘try to sleep’
mañokñuk	‘sink’	ké’mañokñuk	‘about to sink’
mătai	‘die’	ké’matai	‘about to die’
păsmu	‘have pneumonia’	ké’pasmu	‘about to have pneumonia’
poddung	‘fall’	ké’poddung	‘about to fall’
riku	‘rich’	ké’riku	‘about to be rich’

These prospective verbs are intransitive, as can be seen from their forms of agreement with the subject in (14).

- (14)a. Kumeke’riku yu’ sa’ hu keke’bendi i
AGR.try.rich.PROG I because AGR try.sell.PROG the
 tano’-hu gi miyon pesos.
land-AGR LCL million dollars
 ‘It seems I’m getting rich because I’m trying to sell my land for a million dollars.’ (CD, entry for *riku*)
- b. Kăo kume’pasmu si Lolita?
Q AGR.try.have.pneumonia UNM Lolita
 ‘Does Lolita have pneumonia?’ (CD, entry for *păsmu*)

Prospective verbs are verbs that describe events—events of preparing-to-happen—even when they are derived from adjectives or from verbs that describe states. Thus, they occur in the progressive aspect when the event of preparing-to-happen is ongoing with respect to the speech event or some other event, as in (12a) and (14a). Moreover, when an intransitive prospective verb is in the realis mood, it uses the infix *-um-*, rather than no special marking, to show agreement with a singular or dual subject; see (14).

28.3.2 *-ñaihun*

The suffix *-ñaihun* (which is realized as *-nñaihun* after a vowel) has two uses. In one use, it turns transitive verbs into applicative verbs (see 11.3.1).

In the other use, which is described here, it attaches to verbs or adjectives but does not change their structure or function. Instead, it merely contributes meaning that can be characterized as durative or moderative. When *-ñaihun* in this use is attached to a verb, it means ‘for awhile’.

(15)	VERB		DERIVED VERB	
	atan	‘watch’	atanñaihun	‘watch for awhile’
	falågu	‘run (irrealis)’	falagunñaihun	‘run for awhile (irrealis)’
	malingu	‘disappear (realis)’	malingunñaihun	‘disappear for awhile (realis)’
	po’lu	‘put’	po’lunñaihun	‘put aside for awhile’
	såga	‘stay, live’	saganñaihun	‘stay for awhile’

When it is attached to an adjective, it can mean ‘slightly’, as in (16).

(16)	ADJECTIVE		DERIVED ADJECTIVE	
	fotgun	‘wet’	fotgunñaihun	‘damp, slightly wet’
	matuhuk	‘sleepy’	matuhukñaihun	‘half asleep, sleepy for awhile’

28.4 Other derived verbs and adjectives

28.4.1 *é’-* and *ó’-*

The stressed prefixes *é’-* and *ó’-* (or their variants *é-* and *ó-*) are combined with nouns to create derived intransitive verbs that mean ‘search for [whatever the noun names]’. These prefixes are often used to create derived verbs that describe types of hunting or fishing, as in (17).

(17)	NOUN		DERIVED VERB	
	ayuyu	‘coconut crab’	é’ayuyu	‘go coconut crab hunting’
	binådu	‘deer’	é’binadu	‘go deer hunting’
	guihan	‘fish’	é’guihan, ó’guihan	‘go fishing’
	paluma	‘bird’	é’paluma	‘hunt for birds’
	pånglåo	‘crab’	é’pånglåo, ó’pånglåo	‘hunt for crabs’

The prefix *é'*- is used much more frequently than *ó'*-. Some additional examples of verbs derived by attaching *é'*- to a noun are cited in (18).

(18)	NOUN		DERIVED VERB	
	aliling	'cateye shell'	é'aliling	'search for shells'
	baratura	'sale'	é'baratura	'search for sales'
	gâ'ga'	'animal'	éga'ga'	'hunt for animals; get busy'
	hulu'	'top'	ékkulu'	'climb up, get on top of'

Occasionally, *é'*- combines with a noun that names the method of search, rather than what is searched for; see (19).

(19)	NOUN		DERIVED VERB	
	tokcha'	'spear'	é'tokcha'	'spearfish, skindive'
	tupak	'fishing line'	é'tupak	'fish by line'

Note that *é'*- and *ó'*- could be analyzed as verbs that incorporate their object, as long as it is understood that their incorporated object is syntactically inert. Unlike the incorporated objects of verbs of possession (see 14.3), the original noun cannot be modified by an adjective or relative clause, and cannot be doubled by an extra object.

28.4.2 *fa'*-

The prefix *fa'*- turns a noun into a derived transitive verb that means 'change into [whatever the noun names]' or 'treat as [whatever the noun names]'. Some examples are cited in (20).

(20)	NOUN		DERIVED VERB	
	abuk	'friend, pal'	fa'abuk	'make friends with'
	bateha	'washing board'	fa'bateha	'use as a washing board'
	hâfa	'anything'	fa'hâfa	'make into anything'
	insalâda	'salad'	fa'insalâda	'make into salad'
	muntón	'cluster'	fa'muntón	'accumulate, pile up'
	ottru	'other'	fa'ottru	'exclude, disguise'

The prefix *fa'*- occasionally activates umlaut (see 30.2). When the initial syllable of the original noun bears primary stress, the vowel of that syllable is realized as a front vowel, as in (21).

(21)	NOUN		DERIVED VERB	
	châda'	'egg'	fa'chada'	'flatter'
	donni'	'hot pepper'	fa'denni'	'prepare with hot sauce'
	gâ'ga'	'animal'	fa'ga'ga'	'treat dishonestly, play a trick on, make fun of'
	hânum	'water'	fa'hanum	'cause to melt'
	huyung	'outside'	fa'hiyung	'exclude'
	yu'us	'god'	fa'yi'us	'deify'

Verbs derived with *fa'* have antipassive forms whose meaning can be paraphrased 'make [whatever the noun names]'. See the examples in (22).

(22)	NOUN		DERIVED VERB (ANTIPASSIVE REALIS)	
	anibat	'honey'	mama'anibat	'make honey'
	difirensia	'difference'	mama'difirensia	'make a difference'
	goha	'fan'	mama'goha	'make a fan'
	potu	'rice cake'	mama'potu	'make rice cake'
	tali	'rope'	mama'tali	'make rope'

In addition to these uses of *fa'*, which occur frequently and may be productive, Chamorro has two other morphemes pronounced /fa?/. (See Safford 1904: 111-112 for an early discussion.) First, a few transitive verbs appear to consist of *fa'* plus an adjective; see (23). Historically, these verbs may have once been derived by an earlier version of the word formation process illustrated above, but they are probably unanalyzable today.

(23)	ADJECTIVE		TRANSITIVE VERB	
	bâba	'bad'	fa'baba	'deceive'
	la'mun	'responsible'	fa'la'mun	'take for oneself'
	mâolik	'good'	fa'mâolik	'fix, repair'
	sahngi	'strange'	fa'sahngi	'segregate, detach'

Second, Chamorro has a transitive verb *fa'* 'pretend' that is phonologically dependent. This verb has two arguments: a noun phrase argument that names the pretender and an embedded clause argument that names what is pretended. Because *fa'* is unstressed, it must lean to its right, on material in the embedded clause, to form a phonological word (see Chung 2017). The embedded clause is enclosed in brackets in the sentences in (24).

- (24)a. Ha fa' [gof mǎolik gui' na tǎotǎo].
AGRpretend very good he L person
 'He pretended to be (lit. that he was) a very good person.' (CD, entry for *fa'*)
- b. In fa' [in tingu' i ti un tungu'].
AGRpretend AGRknow the not AGRknow
 'We (excl.) pretend we (excl.) know what you don't know.' (from a conference presentation)

Unsurprisingly, *fa'* 'pretend' has an antipassive form, illustrated in (25).

- (25) Adahi na un fama' [i dikiki' na pǎtgun gi
careful COMP AGRANTIP.pretend the small L child LCL
iskuela].
school
 'Don't act childlike (lit. careful lest you pretend to be the small child) at school.' (CD, entry for *fama'*)

The transitive verb *fa'* 'pretend' and the prefix *fa'-* co-occur in the sentence in (26).

- (26) Fama' [tǎotǎo] ya un mafa'tǎotǎo.
AGR.ANTIP.pretend person and.then AGRPASS.treat.as.person
 'Act like a man and you'll be treated like one.' (CD, entry for *fama'*)

Obviously, the verb *fa'* 'pretend' and the prefix *fa'-* 'change into' have different meanings. Another difference: the verb *fa'* can be immediately followed by agreement (as in (24b)) or the definite article (as in (25)), but the prefix *fa'-* must be attached to a noun or adjective.

28.4.3 *há-*

The stressed prefix *há-* combines with an adjective or intransitive verb that describes a state to produce a derived adjective that includes the meaning 'usually, typically, easily'. Some examples are cited in (27).

(27)	ADJECTIVE / VERB	DERIVED ADJECTIVE
a.	abak 'lost'	há'abak 'usually lost'
	bubu 'angry'	hábubu 'easily angered'
	guha 'having asthma'	háguha 'asthmatic'

	malångu	‘sick’	håmalangu	‘sickly’
b.	falågu	‘run (irrealis)’	håfalagu	‘tending to run away’
	guinafi	‘angered (passive)’	håguinafi	‘excitable, easily angered’
	maleffa	‘forget’	håmaleffa	‘forgetful’
	mañienti	‘feel (antipassive)’	håmanienti	‘sensitive, touchy’

It is unclear to what extent this process is productive.

28.4.4 *-in-*

The Chamorro infix *-in-* has several different uses. It is used to form passive verbs (see 10.2.1); in addition, it can appear in certain types of nominalized verbs or adjectives (see 22.4.1 and 28.6). In all its uses, *-in-* activates umlaut: the vowel of the immediately following syllable is realized as front (see 30.2).

In the use described here, *-in-* turns a noun that names a type of clothing or jewelry into an intransitive verb that means ‘wear [that type of clothing or jewelry]’. Some examples of intransitive verbs derived by attaching *-in-* to a noun are cited in (28).

(28)	NOUN		DERIVED VERB	
	alitus	‘earring’	inalitus	‘wear earrings’
	katsunis	‘pants’	kinatsunis	‘wear pants’
	magågu	‘clothes’	minagågu	‘wear clothes’
	mestisa	‘formal blouse’	minestisa	‘wear formal blouse’
	såku	‘suit’	sinaku	‘wear a suit’
	sapåtus	‘shoes’	sinapåtus	‘wear shoes’
	tuhung	‘hat’	tinihung	‘wear a hat’

This process may be productive. Occasionally it applies to a noun followed by an adjective modifier, as in (29).

(29)	NOUN		DERIVED VERB	
	magågun	‘red clothes’	minagågun	‘wear red clothes’
	agaga’		agaga’	
	sapåtus	‘high heels’	sinapåtus lokka’	‘wear high heels’
	lokka’			

In a related use, *-in-* can turn a noun that names a means of transportation into an intransitive verb that means ‘use [that means of transportation]’.

(30)	NOUN		DERIVED VERB
	bisikleta	‘bicycle’	binisikleta ‘ride a bicycle’
	botosaikut	‘motorcycle’	binotosaikut ‘ride a motorcycle’

28.4.5 *man-/fan-*

The prefix *man-* and its irrealis form *fan-* have several different uses. They are among the affixes used by intransitive verbs and adjectives to show agreement with the subject (see 2.2.2.2). Separately from this, they can be used to form antipassive verbs (see 10.3.1). In all their uses, the derived words formed from them exhibit some version of the alternation known as nasal substitution (see 30.4).

In the use described here, *man-/fan-* turns a noun into an intransitive verb that means ‘evolve, undergo development of [whatever the noun names]’. The derived verb is an *m/f* predicate (see 2.2.3.1) that selects one argument, which is typically nonagentive. Some examples are cited in (31).

(31)	NOUN		DERIVED VERB (REALIS)
	châda’	‘egg’	mañâda’ ‘lay eggs’
	chetnut	‘wound, sore’	mañetnut ‘become infected’
	chugu’	‘sap, semen’	mañugu’ ‘ooze, ejaculate’
	floris	‘flower’	mamfloris ‘bloom’
	hâli’	‘root’	manhâli’ ‘sprout roots’

The word formation process illustrated in (31) seems to be unproductive. See 30.4.2 on nasal substitution in these derived verbs and how it interacts with reduplication for the progressive aspect.

28.4.6 *mí-*

The stressed prefix *mí-* turns a noun into a derived adjective that means ‘having lots of, full of [whatever the noun names]’. This prefix optionally activates umlaut (see 30.2): when the initial syllable of the original noun bears primary stress, the vowel of that syllable can be realized as a front vowel. The use of *mí-* to form derived adjectives is productive. See (32) for some examples.

(32)	NOUN		DERIVED ADJECTIVE
	âtchu’	‘rock’	mí’atchu’ ‘rocky’
	guinaha	‘wealth’	míguinaha ‘wealthy’

hutu	‘louse’	míhitu	‘infested with lice’
kulót	‘color’	míkulot	‘colorful’
pulu	‘feather, hair’	mípilu	‘hairy’
títanus	‘brain’	mítitanus	‘full-brained, wise’

28.4.7 *mina’-*

The prefix *mina’-* is used to create ordinal numerals from cardinal numerals such as *dos* ‘two’ and higher numerals. (The ordinal numeral corresponding to *unu* ‘one’ is *finéne’na* ‘first’.)

(33)	CARDINAL NUMERAL	ORDINAL NUMERAL
	<i>dos</i> ‘two’	<i>mina’dos</i> ‘second’
	<i>tressi</i> ‘thirteen’	<i>mina’tressi</i> ‘thirteenth’
	<i>benti sais</i> ‘twenty-six’	<i>mina’benti sais</i> ‘twenty-sixth’
	<i>kuarenta</i> ‘forty’	<i>mina’kuarenta</i> ‘fortieth’

28.4.8 *-un*

The suffix *-un* (realized as *-yun* after a vowel) turns transitive verbs into derived adjectives that include the meaning ‘capable of being, able to be’. This process, which may be productive, is illustrated in (34).

(34)	VERB	DERIVED ADJECTIVE
	<i>ãmti</i> ‘cure’	<i>amtiyun</i> ‘curable’
	<i>honggi</i> ‘believe’	<i>honggiyun</i> ‘believable’
	<i>kadidak</i> ‘tickle’	<i>kadidakun</i> ‘ticklish’
	<i>li’i</i> ‘see’	<i>li’e’un</i> ‘visible’
	<i>rispeta</i> ‘respect’	<i>rispetâyun</i> ‘respectable’
	<i>tuna</i> ‘praise’	<i>tunâyun</i> ‘praiseworthy’
	<i>tungu</i> ‘know’	<i>tungu’un</i> ‘comprehensible’

28.4.9 Conversion

Chamorro has various types of conversion—word formation processes that turn a word from one part of speech into another part of speech without affixes or other morphology. Some productive types of conversion were discussed in 27.4. Two further types of conversion are mentioned here.

First, conversion can turn a noun that names a thing or location into a derived intransitive verb that describes the activity typically associated with that thing or location. See (35).

(35)	WORD	AS NOUN	AS DERIVED VERB
	bola	'ball'	'play ball'
	chupa	'tobacco, cigarette'	'smoke a cigarette'
	dåma	'checkers'	'play checkers'
	guålu'	'farm'	'farm, till soil'
	halumtånu'	'woods, jungle'	'go into the jungle, hunt'
	tres sietti	'Chamorro card game'	'play <i>tres sietti</i> '

This type of conversion may be productive.

Second, conversion turns certain local nouns (see 5.3) into derived intransitive verbs. Some of these derived verbs are motion verbs (see (36a)); others are location verbs (36b). Apparently, not all local nouns can undergo this process.

(36)	WORD	AS LOCAL NOUN	AS DERIVED VERB
a.	éntalu'	'between'	'meddle, interfere'
	hålum	'inside'	'go in, enter'
	huyung	'outside'	'go out, emerge'
b.	mo'na	'front, ahead'	'be in front'
	tåtti	'back, behind'	'be in back'

Note that the verb *mo'na* 'be in front' is an *m/f* predicate (see 2.2.3.1).

28.5 Word formation for local and directional nouns

Chamorro has affixes that are attached only to local and/or directional nouns (see 5.3 and 5.4). These affixes are the prefix *san-*, the stressed prefixes *gé'-*, *hát-*, and *ták-*, and the combination of the prefix *ya-* plus reduplication to indicate degree.

The prefix *san-* is attached to a local or directional noun to create a derived noun that has essentially the same meaning as the original noun, but does not require a possessor. (Local nouns generally require a possessor; see 5.3.) This prefix activates umlaut. The word formation process illustrated in (37) is completely regular, and the derived nouns are used very frequently.

(37)	NOUN		DERIVED NOUN	
	huyung	'outside'	sanhiyung	'outside'
	luchan	'south (CNMI), west (Guam)'	sanlichan	'south (CNMI), west (Guam)'

mo'na	'front'	sanme'na	'front'
påpa'	'bottom'	sanpapa'	'bottom'

Topping and Dungca (1973: 184) refer to *san-* and the other affixes listed just above as directional prefixes. Safford (1905: 306) suggests that derived words formed with *san-* are adverbs; however, these words have the form and distribution of nouns.

The other affixes have meanings that involve comparison in one way or another. Specifically:

The stressed prefixes *gé'-* or *hát-* can turn a local or directional noun into a derived intransitive verb that means 'go further [in that direction]'. These prefixes activate umlaut. Note that when *hát-* is immediately followed by /h/ or /l/, these consonants assimilate to /t/.

(38)	NOUN		DERIVED VERB	
	hålum	‘inside’	håttalum	‘go in further’
	hulu’	‘top’	gé’hilu’	‘move higher’
	mo’na	‘front’	hátfe’na	‘move forward’
	lågu	‘west (CNMI), north (Guam)’	háttagu	‘move further west (CNMI) or north (Guam)’

The stressed prefix *ták-* can be attached to a local or directional noun to create a derived adjective whose meaning can involve degree. This prefix activates umlaut. Most likely, the word formation process involved here is no longer active.

(39)	NOUN		DERIVED ADJECTIVE	
	hålum	‘inside’	tåkkalum	‘deep inside’
	hulu’	‘top’	tåkkilu’	‘high, eminent’
	huyung	‘outside’	tåkkiyung	‘slightly outside’
	påpa’	‘bottom’	tåkpapa’	‘low, lacking’

The combination of the prefix *ya-* plus reduplication to indicate degree (see 25.2) can turn a local noun, a directional noun, or the directional adverb *guatu* 'to there (away from speaker and addressee)' into a noun that names the location that is the farthest in that direction.

(40)	NOUN / ADVERB		DERIVED NOUN	
	guatu	‘to there’	yaguátutu	‘the farthest away’
	hålum	‘inside’	yahålulum	‘the farthest inside’

huyung	‘outside’	yahúyuyung	‘the farthest outside’
kåttan	‘north (CNMI), east (Guam)’	yakåttatan	‘the farthest north (CNMI) or east (Guam)’

28.6 Event nominalizations

Chamorro has nominalized forms of predicates—derived nouns that have essentially the same meaning as the original verb or adjective from which they were created. These derived nouns have various uses. In one use, they serve to realize *wh*-agreement with a displaced constituent that is not the subject (see 22.4.1, 23.4.1, and 24.3.1). In another use, discussed here, they serve as the head noun of a type of noun phrase that can be called an *event nominalization*. 28.6.1 deals with the form of nominalized predicates, and 28.6.2, with the structure and function of event nominalizations.

28.6.1 Form

The nominalized form of a predicate has essentially the same meaning as the original verb or adjective from which it was created. These derived nouns exhibit the infix *-in-* in some contexts (see below), but are associated with no special morphology in other contexts. Perhaps a more telling characteristic is that the subject of the original verb or adjective is realized as the possessor of the nominalized predicate. Consequently, the nominalized predicate either shows possessor agreement or else is marked with the post-head form of the linker (see 7.1). If the nominalized predicate was created from a transitive verb, its direct object appears in the oblique case (see 5.1.2.2).

The process that creates nominalized predicates is general and regular. Transitive verbs, including causatives and most types of applicatives, have nominalized forms; so do passive verbs, antipassive verbs, other intransitive verbs, and adjectives. Nominalized passive verbs use the passive prefix *ma-* (see 10.2.1). Nominalized antipassive verbs realize the antipassive prefix as *man-* (see 10.3.1). Other nominalized *m/f* predicates generally have /f/ as their initial consonant (see 2.2.3.1). A few types of verbs evidently have no nominalized form; e.g. verbs of possession (14.3), transitive verbs with the marking of nouns (14.4), and most applicative verbs created from intransitive verbs or adjectives (11.2.1).

The infix *-in-* that is attached to some nominalized predicates has a slightly different distribution in event nominalizations than in *wh*-agreement.

The differences are minor; it is unclear what is responsible for them.³ The details of *-in-*'s appearance in wh-agreement are described in 22.4.1. The situation with respect to event nominalizations is as follows:

The infix *-in-* is attached to nominalized predicates derived from transitive verbs. In this and all its other uses, *-in-* activates umlaut: the vowel of the immediately following syllable is realized as a front vowel (see 30.2). See (41) for some examples of event nominalizations formed from transitive verbs.

- (41)a. i hiningok-ña nu guãhu
 the NMLZ.hear-AGR OBL me
 ‘his hearing me’
 b. i tinituhun i tiempun para manãnum
 the NMLZ.begin.L the time.L for AGR.ANTIP.plant
 ‘the beginning of planting season’ (CD, entry for *tiempu*)

In addition, *-in-* is generally attached to nominalized predicates derived from intransitive motion verbs (as in (42a-b)), and often, but not always, attached to nominalized adjectives (42c-e). Lexical idiosyncrasy may play a role in the presence vs. absence of *-in-* in these contexts.

- (42)a. i finatton-ña mągi Luta
 the NMLZ.arrive-AGR to.here Luta
 ‘his trip here to Luta’ (CD, entry for *na’chilung*)
 b. i hinanão-mu guatu Hapon
 the NMLZ.go-AGR to.there Japan
 ‘your trip to Japan’ (CD, entry for *chilung*)
 c. i linihân-ña si Pedro
 the NMLZ.afraid-AGR UNM Pedro
 ‘Pedro’s fear’ (CD, entry for *gencha*)
 d. put mahalâng-ña gi as tatã-ña
 because NMLZ.lonely.for-AGR LCL father-AGR
 ‘because of her feeling lonely for her father’ (CD, entry for *apurão*)

³ For instance, *-in-* is not attached to nominalized transitive verbs that realize wh-agreement with a displaced oblique (see 2.2.4.1). Apparently, no corresponding form is used in event nominalizations. When a nominalized intransitive verb or adjective of type (42) realizes wh-agreement with a displaced oblique, *-in-* is optional, although here too, some lexical idiosyncrasy is involved.

- e. ni minahalâng-ña i asaguã-ña as Pedro
OBL NMLZ.lonely.for-AGR the spouse-AGR OBL Pedro
 ‘by his [i.e. Juan’s] wife’s feeling lonely for Pedro’

Other types of nominalized verbs show no special morphology; see (43).

- (43)a. i kuentos-ña
the NMLZ.speak-AGR
 ‘his speaking’ (CD, entry for *tái uttimu*)
 b. maigo’-hu
NMLZ.sleep-AGR
 ‘my sleep’ (CD, entry for *paspas*)
 c. chalík-ñiha i taotão siha
NMLZ.laugh-AGR the person PL
 ‘people’s laughter’ (CD, entry for *chálík*)
 d. i ma’arimãtan i kampãna
the NMLZ.PASS.ring.L the bell
 ‘the ringing (lit. being rung) of the (last church) bell’ (CD, entry for *ma’arimãta*)

Note finally that some speakers allow the infix *-um-* to appear in certain nominalized intransitive verbs instead of *-in-* or no special marking.

- (44)a. i humuyong-ña si Pedro gi gima’
the NMLZ.go.out-AGR UNM Pedro LCL house
 ‘Pedro’s going out of the house’ (CD, entry for *kåtãtan*)
 b. chumeflålãmu
NMLZ.whistle-AGR.PROG
 ‘your whistling’
 c. i dumanña’-ñiha i dos tãotão
the NMLZ.be.together-AGR the two people
 ‘the couple’s living together’ (CD, entry for *ginitus finihu*)

This pattern is mysterious. One might think initially that *-um-* in (44) could be the infix that realizes realis agreement with a singular or dual subject. And indeed, *-um-* seems to appear only when the possessor of the nominalized predicate is singular (as in (44a-b)) or dual (44c). On the other hand, nominalized intransitive verbs do not show the plural agreement prefix *man-* or *fan-* in event nominalizations, even when their possessor is plural (see (43c)). This suggests that *-um-* in (44) is not a realization of agreement, but instead has some other function.

28.6.2 Structure and distribution

Event nominalizations are noun phrases that describe the event (or state) named by the nominalized predicate, which serves as their head noun. These nominalizations clearly are noun phrases, as can be seen from the following.

(i) Like other noun phrases, an event nominalization often begins with an article: usually the definite article *i*, but occasionally the indefinite singular article *un* or the null indefinite article. This can be seen from the event nominalizations below, which are enclosed in brackets.

- (45)a. *Guiya esti na istoria i istorian [i hinanão-hu para*
it this L story the story.L the NMLZ.go-AGR to
Hapon].
Japan
 ‘This story is the story of my trip to Japan.’ (from a tape-recorded narrative)
- b. *Gi [un humuyong-ña huyung], ha hunguk*
LCL a NMLZ.go.out-AGR outside AGR hear
umu’ugung tãotão.
AGR.moan.PROG person
 ‘In one of her venturings outside, she heard a man moaning.’ (EM 98)

(ii) Like other noun phrases, an event nominalization can be marked for case. The event nominalizations in (45) are in the unmarked case (45a) and the local case (45b); the event nominalization in (46) is in the oblique case.

- (46) *Hinengngang ni [macho’men-ña ni hanum].*
AGR.PASS.startle OBL NMLZ.PASS.splash-AGR OBL water
 ‘He was startled by being splashed by the water.’ (Cooreman 1983: 170)

(iii) Like other noun phrases, an event nominalization can be the object of a preposition. An event nominalization serves as the object of *put* ‘because, so that’ in (42d), and as the object of *ginin* ‘from’ in (47).

- (47) *Ginin [i luklolok-ña] na åppan i hanum.*
from the NMLZ.boil-AGR.PROG COMP AGR.dry.up the water
 ‘It’s from its boiling that the water evaporated.’

(iv) Like other noun phrases, an event nominalization can appear at the left edge of the clause. The sentence in (48) begins with an event nominalization that is used to specify a location in time.

- (48) [I minanghang-ña si Susan] esta poddung gi
the NMLZ.startled-AGR UNM Susan already AGR.fall LCL
 gua'ut.
stairs
 'In her sudden fright, Susan fell off the stairs.' (CD, entry for *manghang*)

Event nominalizations have much of the structure of clauses. They include the nominalized predicate as well as its arguments and adjuncts, as is evident from the examples cited earlier. The nominalized predicate has many characteristics of the predicate of a clause: it can occur in the progressive aspect (see (47) and (49a)), and it can be passive (as in (46)) or antipassive (as in the second nominalization in (49b)).

- (49)a. Ginin [inalulan-māmami], esta umalachi yori'-māmi.
from NMLZ.hurry-AGR.PROG already AGR.mix.up zori-AGR
 'In our (excl.) hurry, we (excl.) even mixed up each other's zoris.'
 (CD, entry for *alachi*)
- b. Ta silelebra esti na guput put [i
AGR.celebrate.PROG this L party because the
 hinemlo'-hu] yan [i manggannāk-ku gi gera].
NMLZ.healed-AGR and the NMLZ.ANTIP.win-AGR LCL war
 'We (incl.) are celebrating this party because of my being cured and my winning the war.' (Cooreman 1983: 71)

Nonetheless, event nominalizations do not have the full structure of clauses. A search of the CD database suggests that the nominalized predicate cannot be preceded by a TAM or sentential negation. That in turn suggests that event nominalizations might include the equivalent of a verb phrase or other predicate phrase, but no higher clausal structure. If so, they would be similar to, say, gerunds in English. This is an area where further research is needed.

28.7 Nicknames

Nicknames are a distinctive feature of the Chamorro language—one that is documented in Topping, Ogo, and Dungca's (1975) dictionary and in the CD

database. Chamorro has a number of strategies for creating nicknames from given names. Although it is not predictable which strategies are applied to which given names, more can be said about the form of the typical nickname produced.

Almost all nicknames are monosyllabic or disyllabic (i.e. they consist of just one or two syllables). The final syllable of the nickname is usually closed by a consonant—often by glottal stop (/ʔ/) or the velar nasal (/ŋ/). These tendencies are in force even when the nickname and the corresponding given name are not phonologically related, as in (50).

(50)	NAME	NICKNAME
	Jesus	Umbai', Bai'
	Juan	Iku
	Rosa	Chai'

More often, the nickname is phonologically related to the given name. For instance, a monosyllabic nickname can be the same as, or similar to, to the stressed syllable of the given name, as (51) shows.

(51)	NAME	NICKNAME
	Joaquin	Kin
	Antonio	Ton, Tong
	Isabel	Bek
	Rita	Rit
	Ramon	Bo

A monosyllabic nickname can begin with a consonant that is the same as, or similar to, to a consonant of the given name—typically, a consonant in the onset of the last syllable of the given name, as in (52).

(52)	NAME	NICKNAME
	Leonardo	Ding
	Dolores	Ling
	Pedro	Dung
	Francisca	Kai'
	Josepha	Pai'

A disyllabic nickname can be the same as, or similar to, to the last two syllables of the given name. In such cases, the given name typically has primary stress on the penultimate (next-to-last) syllable, as in (53).

(53)	NAME	NICKNAME
	Andersina	Sina
	Bernadita	Dita
	Estefania	Nia'
	Antonia	Tona'
	Cornelio	Ellu'
	Ignacia	Acha'
	Ignacio	Achu'
	Susana	Chana'
	Rosario	Châru'
	Faustino	Tinung
	Cecilia	Chilang
	Lucia	Chian, Chiang

A disyllabic nickname can also consist of a stressed syllable that is the same as, or similar to, the stressed syllable of the given name, followed by an apparently unrelated syllable, as in (54).

(54)	NAME	NICKNAME
	Joaquin	Kindu'
	Carmen	Ammi'
	Barbara	Baran

A disyllabic nickname can be the same as, or similar to, the first two syllables of the given name. It can also consist of an initial syllable similar to the first syllable of the given name, followed by an apparently unrelated syllable. Both possibilities are illustrated in (55).

(55)	NAME	NICKNAME
	Escolastica	Esko
	Bernadita	Benit
	Anicia	Anning
	Antonio	Antung
	Manuel	Manning

Finally, some disyllabic nicknames may involve reduplication of a consonant that is the same as, or similar to, a consonant of the given name—typically, a consonant in the onset of the given name's last syllable.

(56)	NAME	NICKNAME
	Pedro	Dudung
	Francisca	Kika'
	Francisco	Kiku'
	Jacinto	Titu
	Oliva	Biban, Bibang
	Teresa	Checha'

Generally speaking, nicknames created via these strategies are derived from given names borrowed from Spanish. A few nicknames are also associated with given names borrowed from English, as in (57). It is unclear whether the relation between the nickname and the given name in such cases is direct or indirect, since *Bek*, *Kai'* and *Anning* are also nicknames for (respectively) *Isabel* (see (51)), *Francisca* (52), and *Anicia* (55).

(57)	NAME	NICKNAME
	Elizabeth	Bek
	Frances	Kai'
	Agnes	Anning

This brief overview does not do justice to the intricacies of Chamorro nicknames. Here too, further research is needed.

SOUNDS AND SPELLING

This chapter describes the distinctive sounds of Chamorro, their organization into syllables, and stress. It also describes the two official spelling systems of the Mariana Islands: the CNMI’s ‘one sound, one symbol’ orthography and Guam’s ‘one word, one spelling’ orthography.

29.1 Distinctive sounds

The Chamorro language has twenty-six distinctive sounds (phonemes): six vowels and twenty consonants. These sounds are described below.

A word on notation: Sounds are represented using symbols from the International Phonetic Alphabet (IPA). Distinctive sounds are represented inside slashes (/ /); their pronunciation (phonetic realization) is represented inside square brackets ([]). When syllable structure or stress is relevant, syllables are separated from one another with a period, and primary stress is marked with ' immediately before the stressed syllable. The question of how sounds are spelled in the official orthographies is taken up in 29.2 and 29.6.

29.1.1 Vowels

The six vowels of Chamorro contrast in height and backness. There are two high vowels, two mid vowels, and two low vowels. The back vowels are round; the front vowels are not round. These sounds are represented by IPA symbols and arranged by height and backness in (1) below.¹

(1)	CHAMORRO VOWELS		
		Front	Back
	High	/i/	/u/
	Mid	/e/	/o/
	Low	/a/	/ɒ/

¹ As mentioned earlier, symbols inside slashes represent distinctive sounds (phonemes); symbols inside square brackets represent sounds as they are pronounced (phones). When a Chamorro word is not inside slashes or square brackets, it is spelled in the CNMI orthography. (Some words are also spelled in the Guam orthography in 29.6.2 and 29.6.3.)

See 29.2 on how these sounds are spelled.

The two low vowels, /a/ and /ɒ/, contrast in some environments but not others. Only the low back vowel /ɒ/ occurs in stressed syllables that end in /w/ (e.g. /mɔwlik/ ‘good’); only the low front vowel /a/ occurs in stressed syllables that end in /j/ (e.g. /majlaʔ/ ‘come (over)!’). Otherwise, the two low vowels are distinguished from each other in syllables that bear primary stress (= are the loudest syllable of the word). Compare /'bɔba/ ‘bad’ with /'baba/ ‘open’, and /'bɔtis/ ‘before’ with /'anti/ ‘spirit’. Under secondary stress, the two low vowels usually merge to /a/. When unstressed, they merge to a low vowel whose backness and rounding are determined by the adjacent sounds. The merged low vowel is represented here as /a/; its pronunciation when unstressed is represented as [a].

In the Rota dialect, the two low vowels have merged, or are undergoing merger, even under primary stress. Most Chamorro words that have /ɒ/ in the other dialects (e.g. /pɔʔgu/ ‘now’, /tɔtti/ ‘back’, /ɔɲus/ ‘years’) have /a/ in Rota (e.g. /paʔgu/, /tati/, /aɲus/). However, /ɒ/ is retained in some words in Rota (e.g. /papɔdza/ ‘papaya’, /hɔfa/ ‘what?’), in a way that varies across speakers, is apparently not predictable, and could conceivably be due to contact with the other dialects. This variation reveals that the merger of /ɒ/ and /a/ is not yet complete.

The low back vowel is pronounced more back and more round in Saipan ([ɒ]) than in Guam ([a]). The low front vowel is pronounced farther front in Guam and Rota ([æ]) than in Saipan ([a]). Consistent with this, Topping and Dungca’s (1973: 18-19) phonemic representations of the low vowels are /æ/ for the low front vowel and /a/ for the low back vowel.

The mid vowels /e, o/ and the high vowels /i, u/ are pronounced lower (lax) when they occur in syllables that end in a consonant that is not glottal stop or /h/. Compare the phonemic representations of the vowels in (2) with their pronunciations:

(2)	PHONEMIC REPRESENTATION	PRONUNCIATION	
	/gweŋgis/	[gweŋgis]	‘scrub’
	/oppi/	[ɔppi]	‘answer’
	/mapput/	[mappUt]	‘hard, complicated’
	/poʔlu/	[poʔlu]	‘put’
	/neni/	[neni]	‘baby’

There will be more to say about the mid and high vowels in 29.5.

Vowels are pronounced long when they occur in open syllables that bear primary stress and are the next-to-last (penultimate) syllable in the word. So

/ˈtitik/ ‘tear’ and /aˈsagwa/ ‘spouse’ are pronounced [ˈtiːtɪk] and [aˈsaːgwa]. When the stressed syllable is not penultimate, lengthening does not occur (or does not occur to the same extent); so /ˈpikaru/ ‘rascally, tricky’, /ˈmamaʔti/ ‘reef’, and /kaˈfe/ ‘coffee’ are pronounced [ˈpikaru], [ˈmamaʔti], and [kaˈfe]. Note that in the progressive aspect (see 2.2.1.1.1), the vowel of the reduplicated CV—which bears primary stress—is pronounced short even when it is penultimate; e.g. /kimaˈsɔson/ ‘burn (progressive)’ is pronounced [kimaˈsɔsɔn].

Finally, in Rota but not in the other dialects, a vowel at the end of a sentence—more precisely, at the end of an intonational phrase—can be pronounced voiceless. (Vowel lenition is a property of word-final or phrase-final vowels in a number of Micronesian languages; see Rehg 1993.)

29.1.2 Consonants

The twenty consonants of Chamorro include seven stops, two affricates, three fricatives, four nasals, two liquids, and two glides. Except for glottal stop, the stops and affricates come in pairs that contrast in voicing. The consonants are represented by IPA symbols, and arranged according to place and manner of articulation, in the chart below.

(3) CHAMORRO CONSONANTS

	Labial	Alveolar	Palatal	Velar	Glottal
Stops					
<i>vceless</i>	/p/	/t/		/k/	/ʔ/
<i>ved</i>	/b/	/d/		/g/	
Affricates					
<i>vceless</i>		/ts/			
<i>ved</i>		/dz/			
Fricatives	/f/	/s/			/h/
Nasals	/m/	/n/	/ɲ/	/ŋ/	
Liquids		/l/, /r/			
Glides	/w/		/j/		

The liquid /r/ occurs only in borrowed words. The glides /w/ and /j/ occur in indigenous words only after a low vowel or (very rarely) after /o/ (e.g. /haˈgoj/ ‘lake’); they have a wider distribution in borrowed words. Some reasons for analyzing the glides as consonants (approximants) rather than parts of complex vowels (diphthongs) are given in 29.3.2.

The affricates /ts/ and /dz/ are often pronounced as alveopalatal [tʃ] and [dʒ] before a mid or high front vowel. This palatalization is frequent in Saipan, but occurs less often in Guam. Glottal stop and /h/ often assimilate

to an adjacent consonant; e.g. /eʔkuŋuk/ ‘listen to’, /pa'lowʔan/ ‘woman’, and /minak'kathu/ ‘my weight’ are typically pronounced [ekkuŋUk], [pa'lowwan], and [mina'kattu]. Otherwise, glottal stop is pronounced when it occurs right after a stressed vowel, but often unpronounced elsewhere; /h/ can be unpronounced wherever it occurs.

29.2 Spelling: basics

The Chamorro language has two official orthographies: one adopted in Guam in 1983 and most recently updated and revised in 2019, and another adopted in the CNMI in 2010. These orthographies differ subtly but significantly: they use the same letters, but deploy them differently in the spelling of words. The two orthographies coexist with a much older, less standardized spelling that was introduced by the Spanish missionaries.² Chamorro speakers, language learners, linguists, and others who read material written in or about the Chamorro language will inevitably encounter all three types of spelling, so it is important to understand how each works and to be able to distinguish them from one another. This chapter focuses on the two official orthographies (henceforth called the CNMI orthography and the Guam orthography). Occasionally, features of the older, less standardized spelling are pointed out as well.

As just mentioned, the CNMI orthography and the Guam orthography use the same letters. The vowels are spelled as shown in (4). The low back vowel /ɒ/ is spelled with a ring (*lonnat*) over the letter *a*; the other vowels are spelled with the symbols used in IPA. The merged low vowel has the same spelling as the low front vowel.

(4) THE SPELLING OF CHAMORRO VOWELS

	Front	Back
High	i	u
Mid	e	o
Low	a	ǎ

(In the older, less standardized spelling, the two low vowels are not differentiated; both are spelled with the letter *a*. Nonlow vowels in the final syllable of a word are generally spelled *e* or *o*.)

The consonants are spelled as shown in (5).

² The older, less standardized spelling is used by e.g. Safford (1903; 1904; 1905) and Sanchez (2009), and found occasionally in newspaper articles.

(5) THE SPELLING OF CHAMORRO CONSONANTS

	Labial	Alveolar	Palatal	Velar	Glottal
Stops					
<i>vceless</i>	p	t		k	'
<i>vced</i>	b	d		g	
Affricates					
<i>vceless</i>			ch		
<i>vced</i>			y		
Fricatives	f	s			h
Nasals	m	n	ñ	ng	
Liquids		l, r			
Glides	u/o		i		

This spelling includes some conventions found in other modern orthographies of Austronesian languages: glottal stop is spelled with an apostrophe (*glota*), and the velar nasal /ŋ/ is spelled *ng*. Other conventions are legacies from the Spanish period. For instance, the palatal nasal /ɲ/ is spelled with a tilde over *n*. The glides are spelled with vowel symbols: /j/ is spelled *i*, and /w/ is spelled *o* (after a low vowel) or *u* (otherwise). The voiceless alveolar affricate /ts/ is spelled *ch*, and—strikingly—the voiced alveolar affricate /dz/ is spelled *y*. Otherwise, the consonants are spelled roughly as in IPA, except that the tap /ɾ/ is spelled *r*.

(In the older, less standardized spelling, glottal stop is sometimes not represented and other times represented by an accent on (the letter for) the preceding vowel. In some versions of this spelling, the voiceless velar stop /k/ is spelled *g* at the end of a word, and *c* elsewhere. The velar nasal is spelled *ñg*; note the tilde.³ Occasionally, the apostrophe is used as a diacritic to separate adjacent vowels, to indicate stress, or for less clear purposes.)

Some examples of words that are spelled the same in the CNMI orthography and the Guam orthography are given below. (The hyphen is used in these orthographies to separate a possessor agreement suffix from the word it is attached to; see 7.1.1.)

³ The older spelling's representation of the velar nasal /ŋ/ as *ñg* succeeds in uniquely identifying this sound, since in Chamorro the palatal nasal /ɲ/ (spelled *ñ*) never occurs just before the voiced velar stop (spelled *g*). In this one respect, the older spelling could be viewed as preferable to the two official orthographies, which have no good way to distinguish an /n/ followed /g/ from both /ŋ/ (spelled *ng*) and /ŋg/ (spelled *ngg*). See the discussion later in the text.

(6)	PHONEMIC REPRESENTATION	SPELLING (CNMI / GUAM)	
	/gumaʔ/	guma'	'house'
	/gwajdza/	guaiya	'love'
	/tupu/	tupu	'sugar cane'
	/tseʔlu/	che'lu	'sibling'
	/palɔwʔan/	palão'an	'woman'
	/ŋɔŋaʔ/	ngānga'	'duck'
	/manŋeʔna/	mannge'ña	'more delicious'
	/sipa/	siña	'can'
	/patgonpa/	patgon-ña	'his/her child'
	/gwifi/	guifi	'dream'
	/hɔdzi/	hāyi	'who?'
	/titidas/	titiyas	'tortillas'
	/adzudzu/	ayuyu	'coconut crab'
	/pweŋi/	puengi	'night'
	/pɔkpak/	pākpak	'clap'

The fact that the velar nasal is spelled *ng*, and the glides are spelled with vowel symbols, has consequences for the spelling of other combinations of sounds. Specifically:

(i) The combination of the alveolar nasal /n/ followed by the voiced velar stop /g/ is spelled not *ng*, but rather *ngg*. This spelling successfully distinguishes /ng/ from the velar nasal /ŋ/, which is spelled *ng*. However, it collapses the spelling of /ng/ with the spelling of /ŋg/, as can be seen in (7).

(7)	PHONEMIC REPRESENTATION	SPELLING (CNMI / GUAM)	
	/mangɔnna/	manggānna	'win (antipassive realis sg./du.)' (= /man-/ + /gɔnna/)
	/maŋaniti/	manganiti	'devil'
	/mɔŋga/	māngga	'mango'

The decision to give /ng/ and /ŋg/ the same spelling has a phonological rationale. In Chamorro, a nasal assimilates in place of articulation to an immediately following stop in the same morpheme, as can be seen from /ombuʔ/ 'carry', /andiʔ/ 'flirt, show off', and /dzanŋin/ 'if'. This nasal assimilation can also occur across morphemes, although there it is disfavored for speakers of the Saipan dialect and for some speakers of the Guam dialect. So /man-biha/ 'old women (pl.)' is pronounced [manbija] or [mambija], /man-

gɔŋgaw/ ‘request (antipassive realis sg./du.)’ is pronounced [mangɔŋgaw] or [mɔŋgɔŋgaw], and so on. The fact that nasal assimilation is always possible makes it reasonable for /ng/ and /ŋg/ to be spelled the same (everywhere). The important point is that this spelling distinguishes both of these consonant clusters from /ŋ/.

(ii) Sequences of adjacent vowels are spelled with an intervening *h*. This *h* is a diacritic: it does not represent a sound, but merely indicates that the two vowels are in different syllables. Thus, /tsandia/ ‘watermelon’ and /gradua/ ‘graduate’ are spelled *chandiha* and *graduha*. The *h* makes it clear that the letters *i* and *u* in the spelling of these words do not represent glides. But it means that the letter *h* serves two functions in the orthography: it can be a diacritic or can represent the fricative /h/, as it does in /siha/ ‘they’, which is spelled *siha*. The ambiguity is perhaps made less serious by the fact that the fricative /h/ is often not pronounced (see 29.1.2).

As mentioned earlier, the CNMI orthography and the Guam orthography differ in how they deploy letters in the spelling of words. To appreciate the difference, one must first understand Chamorro syllable structure, stress, and their impact on how vowels are pronounced. These topics are discussed next. The differences between the two orthographies are presented in 29.6.

29.3 Syllables

29.3.1 Basics

Syllables in Chamorro are either *open* (= they end in a vowel) or *closed* (= they end in a consonant). The vowel forms the *nucleus* of the syllable, any preceding consonants form the *onset*, and any following consonant forms the *coda*. The nucleus is the only obligatory part of a syllable; the onset and the coda can be absent. In Chamorro, the onset of a syllable can be complex: it can consist of a consonant followed by a liquid or glide. The coda, if present, consists of just one consonant. To illustrate: the 3 sg. weak pronoun /gwiʔ/ ‘s/he’ consists of a single closed syllable in which /i/ is the nucleus, /gw/ is the onset, and /ʔ/ is the coda.

The words in (8) are divided into syllables in their phonemic representation.

(8)	PHONEMIC REPRESENTATION	SPELLING (CNMI / GUAM)	
	/gu.maʔ/	gumaʔ	‘house’
	/maj.laʔ/	mailaʔ	‘come!’
	/tseʔ.lu/	cheʔlu	‘sibling’
	/pa.lɔw.ʔan/	palãoʔan	‘woman’

/du.la.lak/	dulalak	‘chase’
/mɒŋ.ga/	mångga	‘mango’
/man.ŋeʔ.ŋa/	mannge’ña	‘more delicious’
/a.dzu.dzu/	ayuyu	‘coconut crab’
/pwe.ŋi/	puengi	‘night’
/pɒk.pak/	påkpak	‘clap’
/plɒn.ta/	plânta	‘set up, place’
/bi.ʔu.du/	bi’udu	‘widower’

The voiceless stops /p, t, k/, the fricatives /f, s/, and the nasals /m, n, ŋ/ can occur freely in the onset or coda of syllables, and at the beginning or end of words. Other consonants have a more limited distribution:

Glottal stop cannot begin a word (= it cannot be the onset of a word-initial syllable). Within the root, it always follows a vowel or glide.

The fricative /h/ cannot end a word (= it cannot be the coda of a word-final syllable.)

The glides /w/ and /j/ occur in onsets only when preceded by another consonant (e.g. /pwe.ŋi/ ‘night’, /kwen.tus/ ‘speak’, /sjen.ti/ ‘feel’).⁴ In Saipan, /j/ is often not pronounced before /e/; very occasionally, the same is also true of /w/. Thus, /sjen.ti/ ‘feel’, /gu.bjet.nu/ ‘governor’, and /bwen binidu/ ‘welcome’ are usually pronounced [sen.ti], [gu.bet.nu], and [ben bi.ni.du]. The status of glides is discussed in 29.3.2.

The liquid /r/ occurs only in onsets.

The voiced stops /b, d, g/ and the liquid /l/ can occur as codas only in geminates (i.e. when the coda and the beginning of the onset of the next syllable are identical; see 29.3.3). Some examples are given in (9).

(9)	PHONEMIC REPRESENTATION	SPELLING (CNMI / GUAM)	
	/a.bab.ban/	ababbang	‘butterfly’
	/ad.daʔ/	adda’	‘mimic, imitate’
	/meg.gaj/	meggai	‘many’
	/hɒl.la/	hålla	‘push’

Finally, the affricates /ts, dz/ and the palatal nasal /ɲ/ cannot end a word, and generally do not occur as codas. The issue of whether they can occur in geminates is discussed in 29.3.3.3.

⁴ A glide occurs alone in the onset in a very few borrowed words, such as /wa.jaʔ/ ‘wire’.

29.3.2 Glides

29.3.2.1 After a vowel

Evidence that the glides /w/ and /j/ are consonants (approximants), not part of complex vowels (diphthongs), comes from their patterning in Chamorro syllable structure. When the glides follow a vowel, they generally behave like codas rather than part of the nucleus.

For instance, consider reduplication for the progressive. In Chamorro, the progressive aspect is signaled on the predicate by a fully regular process of reduplication (see 2.2.1.1.1). The onset and nucleus of the stressed syllable are doubled, and the doubled material (called the *reduplicant*) is placed just to the left of the original syllable. The reduplicant forms an open syllable that bears primary stress; the original syllable bears secondary stress. If the original syllable had no onset, a glottal stop separates it from the reduplicant. Some examples of predicates and their progressive (reduplicated) forms are given below.⁵ (Note that primary stress is represented in these forms, but secondary stress is not.)

(10)	PREDICATE		PROGRESSIVE
	/ˈgu.pu/	‘fly’	/ˈgu.gu.pu/
	/bi.ˈsi.ta/	‘visit’	/bi.ˈsi.si.ta/
	/ˈdɔŋ.ku.lu/	‘big’	/ˈdɔ.daŋ.ku.lu/
	/ˈeŋ.ŋu.luʔ/	‘peek’	/ˈe.ʔeŋ.ŋu.luʔ/
	/ˈat.tuk/	‘hide’	/ˈa.ʔat.tuk/
	/ˈben.di/	‘sell’	/ˈbe.ben.di/
	/ma.ˈtsoʔ.tsuʔ/	‘work’	/ma.ˈtso.tsoʔ.tsuʔ/

Note that reduplication doubles the onset and nucleus of the stressed syllable, but not the coda.

When the vowel of the stressed syllable is followed by a glide, reduplication doubles the vowel but not the glide. (The significance of this fact for the analysis of glides is noted by Topping and Dungca 1973: 25.)

(11)	PREDICATE		PROGRESSIVE
	/ˈtaj.taj/	‘read’	/ˈta.taj.taj/
	/ˈgwaʃ.dza/	‘love’	/ˈgwa.gwaʃ.dza/
	/ˈsɔw.naw/	‘participate’	/ˈsɔ.saw.naw/

⁵ As described earlier (in 29.1.1), the two low vowels contrast under primary stress but merge to the low front vowel under secondary stress. This is why the second vowel of /ˈgɔ.gas.gas/ ‘clean (progressive)’ is a low front vowel; it bears secondary stress in the reduplicated form.

/ˈmɔw.lik/	‘good’	/ˈmɔ.maw.lik/
/a.tra.ˈsɔw/	‘late’	/a.tra.ˈsɔ.saw/

This pattern reveals that the glide is not part of a complex vowel in the nucleus of the stressed syllable. Instead, it occurs in the coda, as a consonant.

Next, consider the morphophonemic rule of gemination (see 30.3). This process affects five Chamorro suffixes with the shape -CV: the possessor agreement suffixes *-hu* ‘1 sg.’, *-mu* ‘2 sg.’, *-ña* ‘3 sg.’, *-ta* ‘1 incl. du./pl.’ and the comparative suffix *-ña* ‘more’. When these suffixes are attached to a word that ends in a vowel and the stressed syllable of the original word is closed, the C of the suffix is doubled (geminated). Exceptionally, the geminated form of the /h/ of *-hu* is /kk/. All this is illustrated in (12), which shows the suffix *-hu* attached to various words that end in a vowel.

(12)	WORD		SUFFIXED W. <i>-hu</i>
a.	/ˈkɔn.ta/	‘song’	/kan.ˈtɔk.ku/
	/maj.ˈrɔs.tra/	‘stepmother’	/maj.ras.ˈtrɔk.ku/
	/pi.ˈneʔ.lu/	‘assumption’	/pi.neʔ.ˈlɔk.ku/
	/ˈded.di.gu/	‘heel’	/ded.di.ˈgɔk.ku/
b.	/ˈnɔ.na/	‘mother’	/na.ˈnɔ.hu/
	/mat.ˈli.na/	‘godmother’	/mat.li.ˈnɔ.hu/
	/ˈhi.ga.du/	‘liver’	/hi.ga.ˈdu.hu/

In (12a), the stressed syllable of the original word is closed, and gemination occurs. But in (12b), this syllable is open, and there is no gemination.

When one of these -CV suffixes is attached to a word that ends in a vowel and the stressed syllable of that word *ends in a glide*, gemination occurs: the C of the suffix is doubled.⁶

(13)	WORD		SUFFIXED W. <i>-hu</i>
	/kuˈmaj.ri/	‘godmother’	/ku.maj.ˈrek.ku/
	/gwiˈnaj.dza/	‘loving’	/gwi.naj.ˈdzak.ku/
	/ˈkɔw.sa/	‘case’	/kaw.ˈsɔk.ku/

This is further evidence that the glide closes the stressed syllable: it does not form part of a complex vowel in the nucleus, but instead occurs in the coda, as a consonant.

⁶ One of the very few exceptions to this generalization is *saina* ‘parent’ (/ˈsaj.na/) (see 30.3). When a -CV suffix is attached this word, gemination exceptionally does not occur; e.g. *saina-hu* ‘my parent’.

Glides are also consonants when they follow a vowel that is *unstressed*. The possessor agreement suffixes *-(n)māmi* ‘1 excl. du./pl.’, *-(n)miyu* ‘2 du./pl.’, and *-(n)ñiha* ‘3 du./pl.’ have two forms. The form with *n* is attached to words that end in a vowel (e.g. /tota/ ‘father’); the form without *n* is used elsewhere (e.g. with /gumaʔ/ ‘house’). When one of these suffixes is attached to a word that ends in an unstressed vowel plus a glide, the form without *n* is used. See the last two forms cited below.

(14)	WORD		SUFFIXED W. <i>-(n)māmi</i>
	/tə.ta/	‘father’	/ta.tan.mə.mi/
	/gu.maʔ/	‘house’	/gu.maʔ.mə.mi/
	/pi.nək.saj/	‘nurturing’	/pi.nək.saj.mə.mi/
	/təw.taw/	‘person’	/taw.taw.mə.mi/

All this evidence indicates that Chamorro glides that follow a vowel are consonants.

However, two other sorts of evidence suggest that in the final syllable of the word, some instances of glides may be part of a complex vowel. First, a small number of words end in a low vowel followed by the glide /j/ plus glottal stop. These include *anai* ‘termite’, a few words borrowed from Japanese (e.g. *otubai* ‘motorscooter’), and a number of nicknames, such as *Chai* ‘nickname for Rosa’, *Kai* ‘nickname for Francisca’, *Pai* ‘nickname for Josepha’, *Umbai* ‘nickname for Jesus’, and so on (see 28.7). It seems more reasonable to identify the glide here as part of a complex vowel (the diphthong *ai*) than as part of the coda, since Chamorro syllables otherwise do not have complex codas. Second, the post-head form of the linker, which attaches as a suffix to the noun, has the form *-n* when the noun ends in a vowel, but is unpronounced when the noun ends in a consonant (see 7.3.1). The linker is generally unpronounced when the noun ends in a vowel plus a glide, e.g. /taw.taw ‘Lu.ta/ ‘Rota person’, /met.kəw ‘Lu.ta/ ‘Rota market’. But some speakers allow the linker to have the form *-n* when the noun ends in a stressed vowel plus a glide, e.g. *metkəon Luta* ‘Rota market’ (from a sign on a building).

Stepping back, it is clear that glides that follow a vowel are generally consonants. The evidence supporting this claim is substantial: reduplication, gemination, and the alternation in the possessor agreement suffixes are processes that are frequent, highly regular, and clearly part of the indigenous sound structure. However, in the final syllable of the word, certain instances of glides instead combine with a preceding vowel to form a complex vowel: this happens in final syllables that end in glottal stop (e.g. *Chai* ‘nickname

for Rosa’) or are stressed (e.g. *metkão* ‘market’). Further investigation is needed to determine the status of this second pattern.

29.3.2.2 Before a vowel

Are the glides consonants when they precede a vowel? If so, the glides in /hu.lju/ ‘July’, /sjen.ti/ ‘feel’, /bjɔ̃.hi/ ‘time, journey’, /kwen.tus/ ‘speak’, and /gwa.ha/ ‘exist’ would occur in the onset of the syllable rather than in the nucleus.

The situation is complicated, as can be seen from the details of infixation. Chamorro has two productive infixes, *-um-* and *-in-*, which serve various grammatical functions.⁷ The infix *-um-* is used to indicate realis sg./du. agreement (see 2.2.2.2.1), infinitival agreement (21.2.1), and the subject form of wh-agreement (see 22.4.1). The infix *-in-* is used to indicate passive (see 10.2.1), the object form of wh-agreement (see 22.4.1), and nominalization (see 28.6.1). In addition, *-in-* is used to derive intransitive verbs from certain types of nouns (see 28.4.4). Whatever their function, infixes are inserted just before the nucleus of the first syllable of the word they combine with. The resulting word is resyllabified so that the infix is split between two syllables; for instance, when *-um-* is combined with /kɔ̃n.ta/ ‘sing’, the result is /ku.mɔ̃n.ta/.

When an infix combines with a word that begins with a consonant followed by a glide, it can be inserted before or after the glide. In (15), the infix is inserted before the glide.

(15) PHONEMIC		
REPRESENTATION		INFIXED FORM
/bjɔ̃hi/	‘take a trip’	/bumjɔ̃hi/
/sjenti/	‘feel’	/sinjenti/
/kwentusi/	‘speak to’	/kumwentusi/
/gwajfi/	‘blow’	/gumwajfi/
/gwaha/	‘exist’	/gumwaha/

In (16), the infix is inserted after the glide, and the glide deletes if it has the same backness and rounding as the vowel of the infix. The deleted glides are shown in parentheses below. (The deletion occurs because Chamorro does not permit the sequences /ji/ or /wu/.)

⁷ A third infix, *-l-*, is found in a small number of onomatopoeic words; e.g. *bilisbis* ‘ooze’ (derived from *bisbis* ‘ooze’), *palaspas* ‘splash’ (from *paspas* ‘splash’), *bulosbus* ‘spurt’ (from *bosbus* ‘swarm’).

(16)	PHONEMIC REPRESENTATION		INFIXED FORM
	/sjenti/	‘feel’	/s(j)inenti/
	/kwentusi/	‘speak to’	/k(w)umentusi/
			/kwinentusi/
	/gwajfi/	‘blow’	/g(w)umajfi/, /gwinajfi/
	/gwaha/	‘exist’	/gwinaha/

Although there is more to say about the details,⁸ the overall point is that glides preceding a vowel can occur in the onset *or* the nucleus. When a glide occurs in the onset, it is a consonant (as in (16)); when it occurs in the nucleus, it is (the initial) part of a complex vowel (15). This result holds not only for borrowed words but also for the many indigenous words in which /w/ follows the voiced velar stop /g/. See the last two words in (15-16) as well as the following.

(17)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/asagwa/	asagua	‘spouse’
	/gwajdza/	guaiya	‘love’
	/gwøhu/	guåhu	‘I’
	/hagwit/	haguit	‘fishhook’

Historically, what is represented as /gw/ in (17) was almost certainly a single sound—the labiovelar stop /g^w/ (descended from Proto-Austronesian *w, just as the affricate /dz/ is descended from Proto-Austronesian *j; see Dahl 1976: 46-51 and Blust 2000: 97-99). But in contemporary Chamorro, this earlier stop has been reanalyzed as a sequence of /g/ plus /w/, since the two sounds can be separated from one another in infix forms like /gumwaha/ ‘exist’, /gumwajfi/ ‘blow’, and /gumwajdza/ ‘love’. Accordingly, /gw/ is treated here as a combination of stop plus glide. (See Safford 1903: 295-296 and Topping and Dungca 1973: 36-37 for similar approaches; cp. Costenoble 1940 and Chung 1983, who adopt the single-consonant analysis.)

29.3.3 Geminates

In Chamorro, a *geminate* is a doubled consonant that is realized as the coda of one syllable and (part of) the onset of the immediately following syllable. 29.3.3.1 introduces the geminates and some rules that create or destroy them.

⁸ For instance, the infix *-in-* is rarely if ever inserted before /w/, and the infix *-um-* seems never to be inserted after /j/.

29.3.3.2 describes the pronunciation and spelling of geminates formed from voiced consonants. 29.3.3.3 suggests that geminates can be formed from the alveolar affricates /ts, dz/ and the palatal nasal /ɲ/, although these geminates are not represented by doubled letters in the official orthographies.

29.3.3.1 Distribution

Chamorro allows geminates to be formed any stop, affricate, fricative, nasal, or liquid except for glottal stop, /h/, and /r/. (Discussion of geminates that are formed from affricates, or from the palatal nasal, is postponed until later; see 29.3.3.3.) The examples below are representative.

(18)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/ap.plɪŋ/	appling	‘twisted’
	/tat.ti.dzi/	tattiya	‘follow’
	/hok.ka/	hokka	‘collect’
	/a.bab.baŋ/	ababbang	‘butterfly’
	/dɒg.gaw/	dāggāo	‘throw’
	/ma.lef.fa/	maleffa	‘forget’
	/hi.nas.su/	hinassu	‘thought, thinking’
	/lem.maj/	lemmai	‘breadfruit’
	/mɒn.nuk/	mānnuk	‘chicken’
	/taŋ.ŋa/	tangnga	‘deaf’
	/hal.lum/	hallum	‘assume’

In the phonemic representations in (18), geminates are divided between the coda of one syllable and (the first part of) the onset of the next. Evidence for this division comes from two processes described earlier: reduplication for the progressive and the morphophonemic rule of gemination (see 29.3.2.1).

When a word like /tat.ti.dzi/ ‘follow’ is reduplicated for the progressive, the second half of the geminate and the stressed vowel are doubled: /tattitidzi/. This is evidence that the second half of the geminate occupies the onset of the stressed syllable. Similarly, when the possessor agreement suffix *-hu* ‘1 sg.’ is attached to a word like /ma.lef.fa/ ‘forget’ or /hi.nas.su/ ‘thought’, the /h/ of *-hu* doubles to /kk/: /maleffɒkku/, /hinassokku/. This is evidence that the first half of the geminate closes the stressed syllable of the original word.

Although geminates are represented here as doubled consonants, they differ from other Chamorro consonant clusters (e.g. /tm/, /kp/, /nt/) in that they are created and destroyed by phonological rules. The morphophonemic rule of gemination creates geminates by doubling the consonant of certain

suffixes under very specific circumstances (see 29.3.2.1 and 30.3). Likewise, the process of degemination destroys geminates by causing them to be pronounced as single (undoubled) consonants after an unstressed vowel. This degemination is responsible for the fact that, except in slow, very careful speech, /tat'tidzi/ 'follow' and /malef'fokku/ 'what I forgot' are pronounced [tatidzi] and [malifokku].

Finally, in the Rota dialect, all geminates have been simplified to single (undoubled) consonants. The Rota forms of e.g. 'follow', 'forget', and 'thought, thinking' in (18) are /tatidzi/, /malefa/, and /hinasu/. In this dialect, there is no gemination rule, and the /h/ of the possessor agreement suffix *-hu* '1 sg.' is never realized as /kk/ (or /k/).

29.3.3.2 Geminates formed from voiced stops

Geminates formed from voiceless stops, fricatives, the nasals /m, n, ŋ/, or /l/ have a straightforward pronunciation: they are phonetically long. But the pronunciation of geminates formed from the voiced stops /b, d, g/ is more variable. In Guam, these geminates are typically pronounced with a voiceless first half and a voiced second half; e.g. /habbun/ 'soap', /soddaʔ/ 'find', and /haggan/ 'turtle' are pronounced [hapbUn], [sɔtdaʔ], and [hakgan]. The fact that the two halves differ in voicing gives a reason for analyzing geminates as doubled consonants rather than single long consonants.

In Saipan, geminates formed from voiced stops can be pronounced as in Guam, or can be voiced throughout. The options are illustrated in (19).

(19)	PHONEMIC REPRESENTATION	PRONUNCIATION (CNMI)	
	/habbun/	[hapbUn], [habbUn]	'soap'
	/soddaʔ/	[sɔtdaʔ], [sɔddɑʔ]	'find'
	/poddun/	[pɔtdUn], [pɔddUn]	'fall'
	/akaggwi/	[akakgwi], [akaggwi]	'left (side)'

Individuals vary in which of these options they prefer, and for which words. For instance, for many speakers of the Saipan dialect, the geminates in /ababban/ 'butterfly', /kɔddu/ 'soup', and /hoggwi/ 'carry in the arms' are voiced all the way through, but the geminates in /habbun/ 'soap', /lalbddi/ 'scold', and /akaggwi/ 'left (side)' vary more freely between the two pronunciations. The details of this variation deserve further study. Nonetheless, whatever the favored pronunciation, it is clear that all of these clusters *are* geminates. They correspond to single (undoubled) voiced consonants in the Rota dialect (e.g. the Rota forms of 'soap' and 'left (side)' are /habun/ and

/akagwi/). And they undergo degemination in suffixed words when they follow an unstressed vowel, as can be seen from (20).

(20) PHONEMIC		
REPRESENTATION	PRONUNCIATION	
/hab'bun-i/	[habuni]	‘clean with soap’
/sod'da?-i/	[suda?i]	‘find for’
/akag'gwe-kku/	[akagwɛkku]	‘my left (side)’

All this suggests that there is no distinctive (phonemic) contrast between a geminate that is voiced throughout (e.g. [bb]) and one whose first half is pronounced voiceless (e.g. [pb]).

In the official orthographies, geminates formed from voiced stops can be spelled *pb* or *bb*, *td* or *dd*, *kg* or *gg*. This flexibility allows the spelling to record some of the word-specific variation in the pronunciation of these sound combinations. Consistent with this, in the CD database there are separate dictionary entries for *habbun* ‘soap’ and *hapbun* ‘soap’; the entry of *potdak* ‘depimple’ lists *poddak* as a variant; and illustrative examples for other entries include alternative spellings for e.g. *sodda*’, *sotda*’ ‘find’ and *poddung*, *potdung* ‘fall’.

29.3.3.3 Geminates formed from affricates and palatals

It is sometimes assumed that Chamorro does not allow geminates to be formed from the affricates /ts, dz/ or the palatal nasal /ɲ/ (see e.g. Topping and Dungca 1973: 38). However, these geminates do occur in Chamorro.

Consider first how geminates formed from these consonants would be pronounced if they were to occur. Phonetically, the most salient difference between geminate and nongeminate consonants is length: a geminate has a longer closure than the corresponding nongeminate (see Ladefoged and Maddieson 1996: 92). The affricates /ts/ and /dz/ are phonetically complex sounds with a stop closure ([t] or [d]) followed by a fricative release ([s] or [z]). This suggests that geminates formed from affricates might simply have a longer stop closure than the corresponding simple affricate; they might be pronounced like [t] followed by [ts], or [d] followed by [dz].

In fact, Chamorro routinely allows clusters of an apparent alveolar stop in the coda followed by an affricate in the onset of the next syllable. Some examples are given below.

(21)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
a.	/gat.tsaʔ/ /im.pɔt.tsu/ /pat.tsa/ /lat.tsaj/	gatcha' impâchu patcha latchai	'step on' 'bored, fed up' 'touch' 'consume'
b.	/ad.dzu/ /ad.dzik/ /ed.dzak/ /med.dzas/	atyu atyik etyak metyas	'that (demonstrative)' 'choose' 'imitate' 'socks'

This cluster of stop plus affricate differs minimally from the single (i.e. undoubled) affricate in examples like the following.

(22)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
a.	/ga.tsaʔ/ /bu.lɔ.tsu/ /fa.tsiʔ/ /la.tsi/	gacha' bulâchu fachi' lachi	'detect, catch up with' 'drunk' 'mud' 'wrong'
b.	/hɔ.dzu/ /tɔ.dzaʔ/ /bu.te.dza/ /is.tre.dzas/	hâyu tâya' buteya istreyas	'wood' 'not exist' 'bottle' 'stars'

Clusters of an alveolar stop plus an affricate act like geminates for the purposes of the sound patterns described earlier. They correspond to single affricates in the Rota dialect; e.g. the Rota forms of 'touch' and 'choose' are /pa.tsa/ and /a.dzik/. And they undergo degemination after an unstressed vowel, in which case they are reduced to just the affricate. For instance, /pi.nat.'tsak.ku/ 'what I touched' is usually pronounced [pi.na.tsak.ku], and /in.ad.'dzek.mu/ 'what you chose' is usually pronounced [i.na.dzek.mu]. In these respects, they differ from clusters formed from a labial or velar stop followed by an affricate; e.g. /pts/ in /tsoptsup/ 'suck', /kts/ in /toktsaʔ/ 'pierce', and /kdz/ in /pɔkdzu/ 'typhoon'. Clusters like /pts/, /kts/, and /kdz/ are not simplified in the Rota dialect, and do not undergo degemination.

In short, clusters of an alveolar stop plus an affricate *are* geminates formed from affricates. This suggests that they might be appropriately represented as /tsts/ and /dzdz/ (but see below).

Similarly, the palatal nasal /ɲ/ could be viewed as phonetically complex, in the sense that the end of this sound (its release) is sometimes perceived as

more obviously palatal than the beginning (its closure). If so, geminates formed from /ɲ/ might simply have a longer default nasal closure than the corresponding nongeminate. In other words, they might sound like [n], the default nasal, followed by [ɲ].

Unsurprisingly, Chamorro permits clusters of an apparent alveolar nasal in the coda followed by a palatal nasal in the onset of the next syllable; see e.g. /anɲa/ ‘beat up’, /danɲaʔ/ ‘be together, congregate’, /honɲuʔ/ ‘press down’. The cluster in these words contrasts minimally with the single (nongeminate) /ɲ/ in e.g. /loɲa/ ‘oil’, the expletive /laɲaʔ/, and /doɲa/ ‘Mrs.’. Further, when the morphophonemic rule of gemination applies to *-ña*, the /ɲ/ of the suffix is doubled to what speakers perceive as /ɲɲ/. This suggests that /ɲɲ/ is actually a geminate formed from /ɲ/; in other words, it might be appropriately represented as /ɲɲ/.

The official orthographies do not have a transparent spelling for geminates formed from affricates or /ɲ/. The Guam orthography generally does not distinguish these geminates from their nongeminate counterparts; both are simply spelled *ch*, *y*, and *ñ*. In the CNMI orthography, geminates formed from /ts/ are spelled *tch*, and geminates formed from /dz/ are spelled *ty* (see (21)). According to the official 2010 description of the CNMI orthography, geminates formed from /ɲ/ should be spelled with a doubled *ñ* (i.e. *ññ*), but that spelling proved so unpopular that it has been replaced in practice by *nñ* (with no tilde on the first letter).

29.4 Stress and intonation

29.4.1 Stress

Chamorro is a language with stress. Each word has one syllable that bears primary stress (i.e. is louder or more prominent than the other syllables in the word). This syllable is generally the penultimate (next-to-last) syllable of the word.

Primary stress is determined differently for roots (unaffixed words) than for affixed words. A substantial number of roots, most of them borrowed from Spanish, exceptionally have primary stress on the last syllable.

(23)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/a'sut/	asut	‘blue’
	/atra'sɔw/	atrasão	‘late’
	/sju'dɔ/	siudå	‘city’
	/tutu'gak/	tutugak	‘cluck’

A substantial number of roots exceptionally have primary stress on the antepenultimate (third-from-last) syllable.

(24)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/ˈdeddigu/	deddigu	‘heel’
	/ˈvʔpakaʔ/	âˈpakaˈ	‘white’
	/aˈpigigiʔ/	apigigiˈ	‘coconut and tapioca dessert’
	/ˈkunanaf/	kunanaf	‘crawl, creep’
	/ˈlilikuʔ/	lilikuˈ	‘revolve’

All other roots have primary stress on the penultimate (next-to-last) syllable.⁹

(25)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/ˈsajna/	saina	‘parent’
	/iˈlotis/	ilotis	‘sweet corn boiled with milk’
	/kaˈdidak/	kadidak	‘tickle’
	/siminˈteddzu/	simintetyu	‘cemetery’

In affixed words, primary stress is determined by whether the affix is a suffix, an inherently stressed prefix, or some other morpheme.

(i) When the affix is a suffix, primary stress falls on the penultimate syllable of the suffixed word. Some examples are given below.

(26)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/kuraˈson-hu/	kurason-hu	‘my heart’
	/kurason-ˈmɔ̃mi/	kurason-mâmi	‘our (excl.) hearts’
	/deddiˈgo-kku/	deddigok-ku	‘my heel’
	/liliˈkuʔ-i/	lilikuˈi	‘encircle’

⁹ A very small number of roots are phonologically or morphologically dependent. Phonologically dependent roots (e.g. *malak* ‘go to’) must lean on other material to form a phonological word; these roots never have primary stress. Morphologically dependent roots (e.g. *ya-* ‘like’, *ga’o-* ‘prefer’) must combine with affixes, and therefore show the stress patterns of affixed words; see below in the text.

(ii) When the affix is a stressed prefix, primary stress falls on the prefix, as illustrated in (27).¹⁰

(27)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/ˈmi-unaj/	miˈunai	‘sandy, full of sand’
	/ˈmi-salappiʔ/	misalappiˈ	‘having lots of money’
	/aˈtsa-oʔsun/	achaˈoʔsun	‘equally bored’
	/ˈsen-agradesi/	sen agradesi	‘really appreciate’

(The reduplicated CV in reduplication for the progressive aspect could be viewed as a stressed prefix that sometimes ends up in the middle of the word; see 2.2.1.1.1.)

(iii) Other affixes do not affect the stress pattern: primary stress falls on the same syllable as in the unaffixed word.

(28)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/man-atraˈsɔw/	manatrasão	‘late (realis pl.)’
	/d-uˈm-ɒŋkulu/	dumâŋkulu	‘become big (realis sg./du.)’
	/man-ˈdɒŋkulu/	mandâŋkulu	‘big (realis pl.)’
	/maˈŋ-eʔlu/	mañeˈlu	‘siblings’
	/man-ma-kaˈdidak/	manmakadidak	‘tickled (passive realis pl.)’

When more than one affix is attached to a root, primary stress is determined by the affix added last. Consider the affixed words *á-tatti-yi* ‘follow one another’ and *mi-tano-ñā* ‘having more land’. Although each word contains a stressed prefix and a suffix, their order of affixation is different. The stressed reciprocal prefix *á-* can be attached to *tatti-yi* ‘follow’ but not to *tátti* ‘back, behind’. So in *á-tatti-yi*, the order of affixation must be *á-* [*tatti-yi*], where *á-* is the affix added last. Primary stress falls on this prefix: /atattidzi/. In contrast, the comparative suffix *-ñā* ‘more’ can be attached to *mí-tanu* ‘having much land’ but not to *tānu* ‘land’. So in *mi-tano-ñā*, the

¹⁰ The stressed prefixes include: *á-* ‘(reciprocal)’, *achá-* ‘together’, *án-* ‘leftover’, *chát-* ‘barely’, *é-* ‘search for’, *há-* ‘often’, *ké-* ‘try to’, *lá-* ‘more’, *mí-* ‘having lots of’, as well as four stressed prefixes that are written as independent words in the official orthographies: *gof* ‘very’, *sen* ‘extremely, most’, *gai* ‘have’, and *tai* ‘not have’.

order of affixation must be *[mí-tano']-ña*, where the suffix *-ña* is the affix added last. Accordingly, primary stress falls on the penultimate syllable of the word: /mita'noʔna/.

Syllables can also bear secondary stress (marked with *ˊ*, immediately before the secondarily stressed syllable). In affixed words, secondary stress falls on the syllable that would bear primary stress in the unaffixed word, as long as that syllable does not immediately precede the syllable that actually bears primary stress. See /deddi'go-kku/ 'my heel', /patgun-'midzu/, 'your (pl.) child', but /pat'gon-hu/ 'my child'. Note that this type of secondary stress can immediately *follow* the primary stress. This happens in words formed with stressed prefixes (e.g. /'keʔ-tuŋuʔ/ 'try to know') or words that have been reduplicated for the progressive aspect (e.g. /'dɔ,daŋkulu/ 'big (prog.)'). In addition, secondary stress falls on any syllable that is not next to any other stressed syllable; e.g. /simin'teddzu/ 'cemetery', /bilim'binis/ 'star apple', /eŋ,kisi'fwesi/ 'no matter', /'bʔpa,kaʔ/ 'white'.

29.4.2 Intonation

Chamorro has a typologically unusual correlation between stress and pitch.¹¹ According to previous descriptions (e.g. Costenoble 1940: 12, Topping and Dungca 1973: 44-46, Chung 1983: 38), primary stress is correlated with low pitch followed by a rise. (In most languages, primary stress is correlated with high pitch.) Some preliminary instrumental research on Chamorro pitch suggests a different characterization: primary stress may be correlated simply with a delayed pitch rise. However it is characterized, one practical consequence of the stress-pitch correlation is that second language learners can find it hard to reliably identify the location of primary stress.

The stress-pitch correlation in Chamorro exhibits regional variation: it is different, or holds over a different phonological domain, in the Rota dialect than in the other dialects. Speakers sometimes characterize the difference by saying that the Rota dialect has 'singing' or 'sing-song' intonation. Further study is needed to elucidate this area of grammar.

29.5 The distribution of Chamorro vowels

Although Chamorro has six distinctive vowels, the distinctions among them are neutralized in many environments. Earlier (in 29.1.1), it was observed that the low vowels /a/ and /ɒ/ merge except under primary stress. There are

¹¹ This could conceivably be an areal phenomenon. High pitch and primary stress are dissociated in several languages of the Micronesian language family (see Rehg 1993).

also circumstances under which the mid vowels /e/ and /o/ merge with the corresponding high vowels, /i/ and /u/. In fact, for large portions of the Chamorro lexicon, the mid and high vowels are in complementary distribution, with mid vowels occurring in some environments and high vowels occurring in others. The details of this distribution are examined here. 29.5.1 describes the patterning of mid and high vowels in roots (unaffixed words), first in the indigenous vocabulary and then in borrowings. 29.5.2 discusses the patterning of all six vowels in affixed words. 29.5.2.1 deals with the low vowels, and 29.5.2.2, with the mid and high vowels. 29.5.3 deals with vowel patterns in the Rota dialect. Finally, 29.5.4 concludes.

29.5.1 Mid and high vowels

29.5.1.1 In indigenous roots

For almost all indigenous roots in Chamorro, the distribution of mid and high vowels can be stated very simply: mid vowels occur in closed syllables that bear primary stress, and high vowels occur elsewhere (= in syllables that are open or unstressed). This pattern is illustrated below.

(29)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/ˈbɒ.ti.luŋ/	áttilung	‘black’
	/a.ˈdzu.dzu/	ayuyu	‘coconut crab’
	/gwa.ˈli.ʔik/	gualiʔik	‘gecko’
	/ˈtsop.tsup/	chopchup	‘suck’
	/ˈtseʔ.lu/	cheʔlu	‘sibling’
	/ˈtsoʔ.tsuʔ/	choʔchuʔ	‘work’
	/ˈdzu.tiʔ/	yutiʔ	‘throw away’

The indigenous roots that are exceptions to this pattern are few indeed. They fall into two groups:

- (i) A very few roots that are apparently indigenous, notably /ˈhuŋ.gan/ ‘yes’, /ˈmuŋ.ŋa/ ‘don’t, let it not be’, and /pweŋi/ ‘night’, have a high vowel in a closed syllable that bears primary stress or a mid vowel in an open syllable that bears primary stress.
- (ii) When a nonlow vowel that bears primary stress is followed by glottal stop and then another vowel, the nonlow vowel is high (as expected) in some indigenous roots but mid in others. Compare the roots in (30) and (31).

(30)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/liʔuf/	liʔuf	‘dive’
	/iʔiʔ/	iʔiʔ	‘baby skipjack’
	/haʔluʔu/	haluʔu	‘shark’
(31)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/deʔun/	deʔun	‘pinch’
	/teʔi/	teʔi	‘scattered (of showers)’
	/doʔak/	doʔak	‘white spot on eye’

Only a small number of roots are involved, and they appear to be roughly evenly divided between the two patterns (see Bibbs 2019).

29.5.1.2 In borrowed roots

The nonlow vowels in many borrowed roots have assimilated to the indigenous pattern: these vowels are mid in closed syllables that bear primary stress, and high everywhere else. However, there are very many borrowed roots whose nonlow vowels have not assimilated. Specifically:

(i) A handful of borrowed roots have a high vowel in a closed syllable that bears primary stress: e.g. /ʔut.ti.mu/ ‘last’, /ʔhun.ta/ ‘meeting’, /ʔpun.tu/ ‘point’, /di.ʔbut.sja/ ‘divorce’, /a.ʔsut/ ‘blue’, /a.si.ʔrin/ ‘sawdust’.

(ii) A large number of borrowed roots have a mid vowel in an open syllable that bears primary stress; some examples are cited below.

(32)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/be.la/	bela	‘wake, vigil’
	/ne.ni/	neni	‘baby’
	/bo.la/	bola	‘ball’
	/so.bri/	sobri	‘envelope’
	/so.baʔ/	sobaʔ	‘noodles’

(iii) Over and above this, a large number of borrowed roots have mid vowels in unstressed syllables. Many of these vowels are in the process of being assimilated to the indigenous pattern, so they are pronounced high by some speakers, presumably because they have been reanalyzed as shown in (33).

(33)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/hen.e.'rɒt/ ~	henerât ~	‘general’
	/hen.i.'rɒt/	henirât	
	/pe.re.'gri.nu/ ~	peregrinu ~	‘pilgrim’
	/pi.li.'gri.nu/	piligrinu	
	/kom.'pju.ta/ ~	kompiuta ~	‘computer’
	/kum.'pju.ta/	kumpiuta	
	/konj.'gre.su/ ~	konggresu ~	‘congressman’
	/kuŋj.'gre.su/	kunggresu	

29.5.2 Vowels in affixed words

Because the distribution of Chamorro vowels is stress-sensitive, it is affected by affixes that change the stress pattern. The low vowels are affected differently from the mid and high vowels, so the two are discussed separately. 29.5.2.1 discusses the low vowels, and 29.5.2.2, the mid and high vowels.

In sorting through the details, the reader should keep in mind three generalizations from 29.4.1. First, in words formed with a suffix, primary stress falls on the penultimate syllable; in words formed with a stressed prefix, primary stress falls on the prefix. Second, in all words, a syllable is unstressed if it comes immediately before the primary stress. Third, if the primarily stressed syllable of the root does not come immediately before the primary stress of the affixed word, it can bear secondary stress.

29.5.2.1 Low vowels

As seen earlier, the low vowels /a/ and /ɒ/ are distinguished under primary stress but merge otherwise (see 29.1.1). The phonetics of the merged vowel can vary, but phonemically it is just one distinctive sound, which is represented here as /a/.

Low vowels in affixed words conform to this pattern. If a low vowel that was primarily stressed in the root does not have primary stress in the affixed word, it is realized as the merged vowel /a/. Compare the low vowels in the roots /tɒnuʔ/ ‘land’, /ɒmut/ ‘medicine’ and /gaguʔ/ ‘lazy’ with their realization in the affixed words /mi-tanuʔ/ ‘having lots of land’, /a'mot-mu/ ‘your (sg.) medicine’, /,amut-'midzu/ ‘your (pl.) medicine’, /ga'goʔ-mu/ ‘your (sg.) laziness’, and /,gaguʔ-'midzu/ ‘your (pl.) laziness’.¹²

¹² The description in the text leaves out the following detail: If a low back vowel that was primarily stressed in the root bears secondary stress in the affixed word, it can be realized as the merged vowel /a/ or as /ɒ/, e.g. /,amut-'midzu/ or /,ɒmut-'midzu/ ‘your (pl.) medicine’ (see Chung 1983).

On the other hand, when a low vowel that was unstressed in the root comes to bear primary stress in the affixed word, this vowel is realized as /ɒ/ in some roots, but /a/ in others. Compare the final unstressed low vowels of the roots in (34) with their realization in the corresponding suffixed words.

(34)	ROOT		SUFFIXED WORD	
a.	/ˈnɒna/	‘mother’	/naˈnɒ-hu/	‘my mother’
	/aˈɡɒʔgaʔ/	‘neck’	/agaʔˈɡɒʔ-mu/	‘your (sg.) neck’
	/ˈduda/	‘doubt’	/duˈdɒ-mu/	‘what you (sg.) doubted’
b.	/ˈsajna/	‘parent’	/sajˈna-hu/	‘my parent’
	/ˈpattsa/	‘touch’	/patˈtsa-mmu/	‘what you (sg.) touched with’
	/baˈlakbak/	‘handbag’	/balakˈbak-mu/	‘your (sg.) handbag’

The backness of these vowels often matches the backness of the vowel that was originally stressed in the root. If the original stressed vowel was front, the stressed low vowel in the suffixed word is often front (/a/); otherwise, the stressed low vowel in the suffixed word generally is back (/ɒ/). However, this apparent tendency has many exceptions, some of which are cited in (35).

(35)	ROOT		SUFFIXED WORD	
	/aˈsagwa/	‘spouse’	/asaˈɡwɒ-hu/	‘my spouse’
	/ˈgwaha/	‘exist’	/ɡwaˈhɒ-ja/	‘what s/he has’
	/maˈleffa/	‘forget’	/malefˈfɒ-kku/	‘what I forgot’
	/faˈmilja/	‘family’	/familˈjɒ-mmu/	‘your (sg.) family’

The exceptions suggest that the backness of a low vowel that comes to bear primary stress cannot be completely predicted from the backness of other vowels in the root (see Topping and Dungca 1973: 22).

More likely, the final unstressed low vowel found in roots is itself the product of merger. On this view, different roots would have different low vowels in their final syllables; for instance, the phonemic representations of ‘parent’ and ‘exist’ would actually be /ˈsajna/ and /ˈgwahɒ/. But the character of these low vowels would be revealed only under primary stress, since they would merge to /a/ in other contexts.

29.5.2.2 Mid and high vowels

Recall that the mid and high vowels are in complementary distribution in almost all indigenous Chamorro roots: mid vowels occur in stressed closed syllables, and high vowels occur elsewhere (see 29.5.1.1). Mid and high vowels in affixed words basically exhibit the same pattern. The details are as follows.

First of all, when a nonlow vowel that is unstressed in the root comes to bear primary stress in an affixed word, it is mid if it occurs in a closed syllable and high otherwise. This generalization has no exceptions. Note that it does not matter whether the root is indigenous or borrowed.

(36)	ROOT		SUFFIXED WORD	
	/ʼad.diŋ/	‘foot’	/ad.ˈdeŋ.hu/	‘my foot’
	/ʼtɔt.ti/	‘back, behind’	/tat.ˈtek.ku/	‘behind me’
	/ʼtɔt.ti/	‘back, behind’	/tat.ˈti.dzi/	‘follow’
	/ʼme.di.ku/	‘doctor’	/me.di.ˈku.hu/	‘my doctor’
	/ʼdɔk.tu/	‘doctor’	/dɔk.ˈtɔk.ku/	‘my doctor’
	/ʼhab.bun/	‘soap’	/hab.ˈbu.ni/	‘clean with soap’

Second, when a nonlow vowel that bears primary stress in the root comes to have secondary stress in an affixed word, it has the same realization as it does in the root. In other words, these nonlow vowels are just as well-behaved (or exceptional) in affixed words as they are in the corresponding roots.

(37)	ROOT		AFFIXED WORD	
	/ʼsensin/	‘flesh’	/,sensinˈmidzu/	‘your (pl.) flesh’
	/ʼsensin/	‘flesh’	/ˈmi,sensin/	‘full of flesh’
	/ʼneni/	‘baby’	/,neninˈmidzu/	‘your (pl.) baby’
	/isˈtorja/	‘story’	/ˈmiʔisˌtorja/	‘having lots of stories’

Third, when a nonlow vowel that bears primary stress in the root is unstressed in an affixed word, the vowel is typically realized as high, because it is unstressed. This conforms to the indigenous pattern.

(38)	ROOT		SUFFIXED WORD	
	/ʼsensin/	‘flesh’	/sinˈsenmu/	‘your (sg.) flesh’
	/ʼpettsu/	‘chest’	/pitˈtsommu/	‘your (sg.) chest’

/di'geru/	'cheat'	/digi'rudzi/	'cheat (s.o.)'
/'tsoʔgwi/	'do'	/tsuʔ'gwidzi/	'do for'
/'boti/	'boat'	/bu'timu/	'your (sg.) boat'
/is'torja/	'story'	/istu'rjɔmu/	'your (sg.) story'

However, in slow, careful speech, it is also possible for such a vowel to be realized as mid, (i) if it occurs in a closed syllable, or (ii) if the root is a borrowed root of type (32)—a root in which the vowel would have been mid in an open syllable. These last options, illustrated below, do not conform as transparently to the indigenous pattern (but see Chung 1983).

(39)	ROOT		SUFFIXED WORD	
a.	/'pettsu/	'chest'	/pet'tsommu/	'your (sg.) chest'
	/'tsoʔgwi/	'do'	/tsoʔ'gwidzi/	'do for'
b.	/'boti/	'boat'	/bo'timu/	'your (sg.) boat'
	/di'geru/	'cheat'	/dige'rudzi/	'cheat (s.o.)'

The distribution of nonlow vowels is fixed only after the Chamorro rules of gemination and degemination have applied. Nonlow vowels in stressed syllables that have been closed by the gemination rule are always mid; see e.g. /tat.'tek.ku/ 'behind me' and /dok.'tok.ku/ 'my doctor' in (36). Similarly, nonlow vowels in unstressed syllables that have been opened by degemination are always high. Compare /gi.nip.pem.mu/ ~ /gi.nep.pem.mu/ 'what you (sg.) jumped over' (from *goppi* 'jump over') with /gi.ni.pem.mu/, in which degemination has applied (not */*gi.ne.pem.mu*/).

On the other hand, the distribution of nonlow vowels is not changed by reduplication for the progressive aspect. Despite the fact that the reduplicant is always an open syllable, nonlow vowels in the reduplicant are mid if the original stressed vowel was mid, and high if the original stressed vowel was high. Some examples: /'sosoddaʔ/ 'find (progressive)' (from *sodda* 'find') and /'tutunjuʔ/ 'know (progressive)' (from *tungu* 'know').

29.5.3 The Rota dialect

The distribution of the low vowels in the Rota dialect is different from the other dialects. As was observed earlier (in 29.1.1), /ɒ/ and /a/ have largely merged in this dialect, even under primary stress. Although the merger is not yet complete, it has gone far enough that when an unstressed low vowel in the root comes to bear primary stress in an affixed word, it is almost always realized as /a/ in Rota. Compare e.g. the Rota forms /i'dat-hu/ 'my age', /naʔ'an-mu/ 'your (sg.) name', and /famil'ja-mu/ 'your (sg.) family' with

their realizations in the other dialects (namely, /i'dɔt-hu/, /naʔɒn-mu/, and /famil'jɒ-mmu/).

What about the mid and high vowels? As mentioned earlier, the Rota dialect has simplified all geminate consonants to single (undoubled) consonants, and has no gemination rule (see 29.3.3.1). As a result, mid and high vowels are not in complementary distribution in this dialect, since they contrast minimally in pairs of words like those in (40). (The Saipan/Guam forms of these words are cited for comparison.)

(40)	ROTA		SAIPAN / GUAM
	/ʔdedigu/	‘heel’	/ʔdeddigu/
	/ʔdididiʔ/	‘few’	/ʔdididiʔ/
	/ʔtsoda/	‘green banana’	/ʔtsodda/
	/ʔtsudaʔ/	‘spill’	/ʔtsudaʔ/
	/sinin'te-hu/	‘what I felt’	/sinin'te-kku/
	/pini'ti-hu/	‘my emotional pain’	/pini'ti-hu/

The phonological differences between the Rota dialect and the other dialects can be summarized as follows. In the Rota dialect:

- (i) The two low vowels have largely merged, even under primary stress (29.1.1);
- (ii) There are no geminate consonants (29.3.3.1);
- (iii) There is no morphophonemic rule of gemination (29.3.3.1);
- (iv) Mid and high vowels are not in complementary distribution;
- (v) The stress-pitch correlation is different than in the other dialects (29.4.2);
- (vi) Vowels are sometimes devoiced at the end of an intonational phrase (29.1.1).

29.5.4 Minimal words

Phonological words bear stress. For instance, *che'lu* ‘sibling’ is a phonological word, and bears stress; the weak pronoun *hão* ‘you (sg.)’, which does not bear stress, is not a phonological word. Indigenous phonological words have a minimal word requirement—they must be at least two syllables long. Borrowed words (e.g. *bos* ‘voice’, *bam* ‘bomb’) and recent creations (e.g. *be* ‘b, the fourth letter of the Chamorro alphabet’) are exempt from the minimal word requirement.

29.5.5 Summary

Overall, the Chamorro vowel system is characterized by neutralization—the collapsing of phonemic distinctions. Although the language has six distinc-

tive vowels, there are many environments in which not all six vowels can occur. Only three vowels occur in the unstressed syllables of most words: the merged low vowel and the two high vowels. Further, except in the Rota dialect, the mid and high vowels are largely in complementary distribution. When all this is combined with the fact that some affixed words are stressed differently from the corresponding roots, the result is a sound system that poses some spelling challenges. These are discussed next.

29.6 Spelling: the official orthographies

Two general goals of orthography (spelling systems) are, first, to represent distinctive sounds simply and accurately and, second, to represent a word uniformly in all the different environments in which it occurs. These goals are encapsulated in the slogans ‘one sound, one symbol’ and ‘one word, one spelling’. The Chamorro sound patterns just described pose a dilemma for orthographies that aim to meet both goals simultaneously. Consider the roots /asagwa/ ‘spouse’ and /sajna/ ‘parent’. In order to spell these words as they sound, their final vowels should be spelled the same, with *a*, the letter used to represent the merged low vowel; e.g. *asagua* and *saina*. But the final vowels of these roots contrast in the suffixed forms /asagwa-mu/ ‘your (sg.) spouse’ and /sajna-mu/ ‘your (sg.) parent’. So, in order for each word to have a uniform spelling wherever it occurs, these vowels should be spelled with different letters; e.g. *asaguâ* and *saina*. Neither spelling of /asagwa/ satisfies both orthographic goals. The same point can be made with the roots /tötti/ ‘back, behind’ and /neni/ ‘baby’. To represent these words as they sound, their final vowels should be spelled with the letter *i*; e.g. *tätti* and *neni*. But given that the final vowel of the root is mid in the suffixed form /tatte-kku/ ‘behind me’, but high in /nini-hu/ ‘my baby’, a spelling that gives a uniform representation to each word wherever it occurs should spell /tötti/ as *tätte* but /neni/ as *neni*. Neither spelling of /tötti/ satisfies both goals.

The two official Chamorro orthographies respond differently to this dilemma. The 2010 CNMI spelling system is a ‘one sound, one symbol’ orthography. It spells words as they sound, even if that means that roots are spelled differently in the different environments in which they occur. The 2019 Guam spelling system (as well as its earlier versions, going back to 1983) adopts ‘one sound, one symbol’ for the low vowels, but in other respects it is a ‘one word, one spelling’ orthography. Roots with mid or high vowels have a uniform spelling in the different environments in which they occur, even if that spelling does not always correlate transparently with sound. The details are described for the 2010 CNMI orthography in 29.6.1, and for the 2019 Guam orthography in 29.6.2.

29.6.1 The CNMI orthography

The 2010 CNMI spelling system is a ‘one sound, one symbol’ orthography. The letters described in 29.2 are deployed to represent distinctive sound, even if the result is that roots are spelled differently in their affixed and un-affixed forms. Some illustrative examples are given below

(41)	PHONEMIC REPRESENTATION	SPELLING (CNMI)	
	/ˈgwaha/	guaha	‘exist’
	/gwaˈhɔ̃-ɲa/	guahã-ña	‘what s/he has’
	/ˈtɔ̃tti/	tãtti	‘back, behind’
	/tatˈte-kku/	tattek-ku / tatek-ku	‘behind me’
	/tatˈti-dzi/	tattiyi / tatiyi	‘follow’
	/ˈpoʔlu/	po’lu	‘put’
	/p-in-eʔˈlo-mmu/	pine’lom-mu	‘what you (sg.) put’
	/puʔˈlu-dzi/ ~	pu’luyi / po’luyi	‘put for’
	/poʔˈlu-dzi/		

The merged low vowel is spelled *a*; the mid vowels are spelled *e* and *o*, the high vowels are spelled *i* and *u*. The near complementary distribution of mid and high vowels in indigenous roots, and the individual variation in pronunciation illustrated above in (33), can lead to the same root being spelled in different ways.

Some details: In the CNMI spelling system, the possessor agreement suffixes are separated from the rest of the word with a dash. This convention is inherited from the orthography adopted by the Marianas Orthography Committee in 1971. In theory, other affixes are not separated from the root with a dash. But the dash is sometimes used in practice with the comparative suffix *-ña*, which is homophonous with the 3 sg. possessor agreement suffix *-ña* and, like it, undergoes the gemination rule.

Geminates are spelled as doubled consonants (e.g. *pp*, *bb*, *ss*, *ll*, *ngng*), except that geminates formed from voiced stops can be spelled *pb*, *td*, *kg* or *bb*, *dd*, *gg*. These spelling options reflect nondistinctive variation in sound (see 29.3.3.2). Geminates formed from affricates are spelled *tch* and *ty*; geminates formed from the palatal nasal are spelled *nñ* (see 29.3.3.3).

Geminates created by the morphophonemic rule of gemination are treated like other geminates for spelling purposes. When the consonant of a possessor agreement suffix is geminated, the dash that separates the suffix from the rest of the word in the spelling is inserted between the letters representing the geminate; e.g. *lipblok-ku* ‘my book’.

Geminates that can be simplified by the degemination rule are sometimes spelled as single consonants, other times as doubled consonants. (In this book they are mostly spelled as doubled consonants, to make it easier to identify the root.)

The glide /j/ is spelled *i* wherever it occurs; e.g. *taitai* ‘read’, *sietti* ‘seven’, *hagoi* ‘lake’. The glide /w/ is spelled *o* when it follows a low vowel and *u* when it precedes a vowel; e.g. *māolik* ‘good’, *kuentus* ‘speak’.

Other details of the CNMI orthography have been modified since 2010. For instance, the official 2010 documentation for this orthography uses *a* or *ā* to spell an unstressed low vowel preceding the glide /w/. Users of the orthography have since decided to spell the combination of a low vowel plus /w/ as *āo* everywhere, regardless of stress. The only exception: the spelling *ao* is used when the syllable immediately follows a morpheme that activates umlaut (see 30.2). This practice is adopted here.

29.6.2 The Guam orthography

The 2019 Guam orthography also spells the low vowels as they sound, even if the result is that a root is spelled differently in its affixed and unaffixed forms. Thus, the Guam spelling of the words below is identical to the CNMI spelling (see (41)).

(42)	PHONEMIC REPRESENTATION	SPELLING (GUAM)	
	/ˈgwaha/	guaha	‘exist’
	/gwaˈho-ɲa/	guahā-ña	‘what s/he has’

However, in other respects the Guam spelling system is a ‘one word, one spelling’ orthography. With one exception (described below), the letters described in 29.2 are deployed to give a uniform spelling to roots in all the different environments in which they occur. What this means for the spelling of nonlow vowels is the following:

(i) In the Guam orthography, a nonlow vowel is spelled *e* or *o* if it is realized as mid in any form of the word, whether affixed or unaffixed; otherwise it is spelled *i* or *u*. Thus, the final vowels of the roots in (43) are spelled *e* or *o*, because these vowels are realized as mid in certain suffixed forms.

(43)	PHONEMIC REPRESENTATION	SPELLING (GUAM)	
	/ˈpɔtɡun/	pātgon	‘child’
	/patˈɡon-hu/	patgon-hu	‘my child’
	/ˈtɔtti/	tātte	‘back, behind’

/tat'te-kku/	tatte-ku	'behind me'
/'poʔlu/	po'lo	'put'
/p-in-eʔ'lo-mmu/	pine'lo-mu	'what you (sg.) put'

The vowels in the nonfinal syllables of the roots in (44) are also spelled *e* or *o*, even in suffixed words in which they are realized as high, because these vowels are realized as mid in the root.

(44)	PHONEMIC REPRESENTATION	SPELLING (GUAM)	
	/'sənsin/	sensen	'flesh'
	/sin'sen-mu/	sensen-mu	'your (sg.) flesh'
	/'boti/	boti	'boat'
	/bu'ti-mu/	boti-mu	'your (sg.) boat'

(ii) An unstressed nonlow vowel that is pronounced high in all forms of the word is nonetheless spelled *e* or *o* when it occurs in a closed syllable; see (45a). In addition, in certain roots, an unstressed nonlow vowel that occurs in an open syllable and is pronounced high is spelled *e* or *o* when it precedes another vowel that is spelled *e* or *o*. This last convention is applied more consistently when the nonlow vowel is back than when it is front, as can be seen from the spelling of the middle vowels of the words in (45b).

(45)	PHONEMIC REPRESENTATION	SPELLING (GUAM)	
a.	/tsin'tsulu/	chenchulu	'fishing net'
	/kum'bida/	kombida	'invite'
	/ginin/	ginen	'from'
b.	/'ettigu/	ettigo	'low'
	/'uttimu/	uttimo	'last, final'
	/'dɔŋkulu/	dɔŋkolo	'big'

(iii) However, when a nonlow vowel occurs in a stressed open syllable and is realized as high, it must be spelled *i* or *u*, even if it is 'normally' spelled *e* or *o*. This systematic exception to (i) produces a different spelling for some roots in certain types of suffixed words. For instance, according to (i), the roots /'tɔtti/ 'back, behind' and /'poʔlu/ 'put' are spelled *tätte* and *po'lo*. But in words formed with the suffix *-(y)i*, the final vowel of the root occurs in a stressed open syllable and is realized as high (e.g. /tat'ti-dzi/ 'follow' and /puʔ'lu-dzi/ 'put for'), so in these words the vowel is exceptionally spelled *i* or *u* (e.g. *tattiyi* and *po'huyi*).

Some details: In the Guam orthography, as in the CNMI orthography, the possessor agreement suffixes are separated from the rest of the word with a dash. See the discussion of this spelling convention in 29.6.1.

Geminates formed from voiceless stops, fricatives, the nasals /m, n, ŋ/, or /l/ are generally spelled as doubled consonants. Geminates formed from voiced stops can be spelled *pb*, *td*, *kg* or *bb*, *dd*, *gg* (see 29.3.3.2). Geminates formed from affricates, or from the palatal nasal, are spelled as single (undoubled) consonants; the Guam orthography does not distinguish them from the corresponding nongeminates. Consistent with the goal of giving just one spelling to each morpheme, the orthography does not represent the results of the phonological rules of gemination or degemination. E.g. /tatte-kku/ ‘behind me’ (which is usually pronounced [tate-kku]) and /pineʔlo-mmu/ ‘what you (sg.) put’ are spelled *tatte-ku* and *pineʔlo-mu*.

The glide /j/ is spelled *i* wherever it occurs; e.g. *taitai* ‘read’, *siette* ‘seven’, *hagoi* ‘lake’. The glide /w/ is spelled *o* when it follows a low vowel and *u* when it precedes a vowel; e.g. *māolek* ‘good’, *kuentos* ‘speak’. Note that a low vowel preceding the glide /w/ is spelled *ā* when stressed but *a* otherwise; e.g. *tāotao* ‘person’, *hānao* ‘go’, *baotismo* ‘baptism’.

When primary stress falls on a syllable that is not penultimate, it is indicated by an acute accent; e.g. *asút* ‘blue’, *tátaitai* ‘read (progressive)’.

Finally, it should be noted that the 2019 Guam orthography capitalizes *ch* and *ng* as though they were single letters. The rationale for this seems to be that *ch* and *ng* each represent a single sound. Perhaps the sociolinguistically most significant result of this convention is a distinctive spelling of the word ‘Chamorro’: *CHamoru*.

29.6.3 Illustration of the differences

The brief excerpt below (from EM 81-82) illustrates some of the differences between the two official orthographies. It is presented in the 2010 CNMI orthography in (46a) and in the 2019 Guam orthography in (46b).

(46)a. CNMI ORTHOGRAPHY

Si Kanâriu mama'chechemchum gi ramas trongkun nunu...Si Kanâriu hinasson-ña na manlilí'i' gui' birak...Tumekkon si Kanâriu ya ha oppi i kuestion Chungi'. Ilek-ña taiguini, “Kão un lí'i' atyu guatu na tinekcha?”

b. GUAM ORTHOGRAPHY

Si Kanârio mama'chéchemchom gi ramas trongkon nunu...Si Kanârio hinasso-ña na manlíí'e' gui' birak...Tumekkon si Kanârio ya ha oppe i kuestion CHunge'. Ilek-ña taiguini, “Kao un lí'e' ayo guatu na tinekcha?”

(47) repeats each sentence of the excerpt in the CNMI orthography, this time with morpheme-by-morpheme glosses and a free translation.

- (47)a. Si Kanåriu mama'chechemchum gi ramas
 UNM Kanåriu AGR.ANTIP.make.nest.PROG LCL branch.L
 trongkun nunu.
 tree.L banyan
 'Kanåriu was making a nest in the branches of a banyan tree.'
- b. Si Kanåriu hinasson-ña na
 UNM Kanåriu WH[OBJ].think-AGR COMP
 manlili'i' gui' birak.
 AGR.ANTIP.see.PROG she ghost
 'Kanåriu thought that she was seeing a ghost.'
- c. Tumekkun si Kanåriu ya ha oppi i
 AGR.bow UNM Kanariu and.then AGR answer the
 kuestion Chungi'.
 question.L Chungi'
 'Kanariu bowed and answered Chungi's question.'
- d. Ilek-ña taiguini, "Kão un li'i' atyu guatu na
 say-AGR like.this Q AGR see that over.there L
 tinekcha'?"
 fruit
 'She spoke like this, "Do you see that fruit over there?"'

29.7 More on glottal stop

Glottal stop is one of several distinctive sounds in Chamorro with a limited distribution within the word. This consonant apparently does not occur at the beginning of words (but see below); when it occurs within a root, it must follow a vowel or glide (see 29.3.1). And although glottal stop is pronounced when it occurs right after a stressed vowel, elsewhere it is often assimilated to an adjacent consonant or simply deleted (see 29.1.2).

This much is reasonably clear. However, glottal stops also occur in spoken Chamorro in environments where they are not obviously distinctive sounds. For instance, when speakers are asked to say a word beginning with a vowel, such as *åsu* 'smoke', in isolation, they sometimes will pronounce the word with no initial onset ([psu]) or with initial breathy voice ([hpsu]), but other times will pronounce it with an initial glottal stop ([ʔpsu]). The last pronunciation raises a question: might the Chamorro words traditionally described as beginning with a vowel actually begin with the phoneme glottal stop? If such a reanalysis were adopted in its most general form, the lan-

guage would have no vowel-initial words at all. Instead, all words formerly thought to be vowel-initial (e.g. *asu*) would begin with an initial consonant, namely, the phoneme glottal stop (as in the hypothetical *'asu*).

A few descriptions of Chamorro phonology advocate this sort of re-analysis (see e.g. Topping and Dungca 1973: 170 and Klein 2005: 973). But when a broader range of facts is considered, it becomes clear that there is little positive evidence for taking word-initial glottal stop to be a *distinctive* sound.

(i) In a study of the perception and production of glottal stop, Garellek (2013) observes that “most languages tend to ‘insert’ glottal stops before vowel-initial words...Glottal stops before word-initial vowels are often optional...No other phonological insertion rule seems to be as widespread as glottal stop insertion across languages” (2013: 2). This crosslinguistic tendency could well lie behind the Chamorro pronunciation patterns described just above. If so, the initial glottal stop sometimes heard in the pronunciation of e.g. *asu* would not be present in the underlying form of the word.

(ii) Glottal stops occur routinely in inflected words in Chamorro to separate two vowels that would otherwise be adjacent. Specifically:

When a prefix or proclitic that ends in a vowel is attached to a vowel-initial word, the two vowels are separated by a glottal stop. See the morpheme combinations and their pronunciations in (48). (Primary stress in these examples is represented with '. For simplicity, glottal stops that may precede the inflected word when it is pronounced in isolation are ignored.)

(48)	MORPHOLOGY	PRONUNCIATION	
	ma- + atan	[maʔatan]	‘be looked at (passive realis sg./du.)’
	mí- + unai	[ˈmiʔunaj]	‘sandy, full of sand’
	á- + ayuda	[ˈaʔadzuda]	‘help one another’
	ha + atan	[haʔatan]	‘look at, watch (3 sg. realis)’

When reduplication for the progressive aspect (abbreviated RED in (49); see 2.2.1.1.1) applies to a stressed syllable with no onset, the reduplicated vowel is separated from the original vowel by a glottal stop.

(49)	MORPHOLOGY	PRONUNCIATION	
	atan + RED	[ˈaʔatan]	‘look at (prog.)’
	á-kuentusi + RED	[ˈaʔakwentusi]	‘speak to each other (prog.)’

The appearance of glottal stop in these environments *could* be viewed as further evidence that words like *atan* ‘look at’, *unai* ‘sand’, and so on begin with the phoneme glottal stop. However, another explanation is available: Chamorro is a language in which adjacent vowels are disallowed in indigenous words.¹³ This makes it just as likely that the glottal stops in (48) and (49) are not present in the roots *atan*, *unai*, etc., but instead are inserted later, to prevent an illegal sequence of adjacent vowels in the inflected word.

(iii) The key test for recognizing distinctive sound is the existence of minimal pairs: pairs of unrelated words that differ in only one sound. Minimal pairs establish that the contrasting sounds are distinctive—different phonemes. Minimal pairs such as *bula* ‘much, many’ and *bola* ‘ball’ establish that /u/ and /o/ are different phonemes in Chamorro, despite the fact that the difference between them is neutralized in many environments. Similarly, the minimal pairs in (50), which differ only in the presence versus absence of glottal stop, establish that glottal stop is a phoneme when it occurs in the coda of a syllable.

(50)a.	<i>luga</i>	‘wall’
	<i>lugaʔ</i>	‘spit out’
b.	<i>ngãngaʔ</i>	‘duck’
	<i>ngãnga</i>	‘open-mouthed’
c.	<i>latti</i>	‘large stone pillar’
	<i>lattiʔ</i>	‘pull a scab off’
d.	<i>ulu</i>	‘head’
	<i>uluʔ</i>	‘worm’
e.	<i>tupu</i>	‘sugar cane’
	<i>tupuʔ</i>	‘well (for water)’

The existence of minimal pairs like these makes it significant that Chamorro has no minimal pairs that differ only in the presence or absence of glottal stop in the onset of a syllable—and, more specifically, at the beginning of the word. This lack of positive evidence suggests that word-initial glottal stop is not a phoneme after all.

(iv) Finally, glottal stops sometimes occur in spoken Chamorro to separate vowel-initial words from prefixes or proclitics that end in sonorant

¹³ The ban on adjacent vowels holds for indigenous words but not for borrowed words, such as the Spanish loanwords /di.a/ ‘day’, /tsan.di.a/ ‘watermelon’, and so on. See 29.2 on the spelling of words containing sequences of adjacent vowels.

consonants—specifically, /j/ or /n/.¹⁴ As with the pronunciation facts described at the beginning of this section, glottal stops in this environment are highly variable across speakers and situations. Impressionistically, they are found more often in slow speech than in fast speech, and more often when the initial vowel is stressed than when it is unstressed. A few examples are cited below.

(51)	MORPHOLOGY	PRONUNCIATION	
	gái- + amiga	[ˈga.ja.mi.ga] ~ [ˈgaj.ʔa.mi.ga]	‘have a friend’
	man- + atan	[ma.ˈna.tan] ~ [man.ˈʔa.tan]	‘look at (antipassive realis sg./du.)’
	man- + áplacha’	[ma.ˈnap.pla.tsaʔ] ~ [man.ˈʔap.pla.tsaʔ]	‘dirty (realis pl.)’

As in (ii) above, the appearance of glottal stop in these environments *could* be viewed as evidence that words like *atan* ‘look at’ begin with the phoneme glottal stop. (If so, this glottal stop would have to delete optionally after prefixes or proclitics ending in sonorant consonants and obligatorily after prefixes or proclitics ending in obstruents.) The alternative is to say that the patterns in (51) result from a failure of resyllabify. Generally, when a consonant-final prefix or proclitic combines with a vowel-initial root, the consonant and vowel are reconfigured as members of the same syllable (e.g. *chát-anti* ‘bad spirit’ is resyllabified as /ˈtsa.tan.ti/). The forms in (51) suggest that this resyllabification does not have to occur when the prefix or proclitic ends in a sonorant consonant (/j/ or /n/). When resyllabification fails, glottal stop is inserted as a remedy, to turn the vowel-initial syllable into a syllable with an onset.

Overall, the evidence just surveyed is either neutral between the two hypotheses (see (i), (ii), and (iv) earlier in this section) or else tilts in favor of the hypothesis that words like *asu* do indeed begin with vowels.

29.8 Further reading

There have been many discussions of the Chamorro sound system, by e.g. Seiden (1960), Topping (1968), Topping and Dungca (1973), Witucki (1973), Chung (1983), Crosswhite (1998), Klein (2000), and Kaplan (2011). The CNMI spelling system and the Guam spelling system are both de-

¹⁴ These happen to be the only sonorant consonants that occur at the end of prefixes or proclitics.

scended from the standard orthography adopted by the Marianas Orthography Committee in 1971, which is described in Topping, Ogo, and Dungca (1975).

30

MORE SOUND PATTERNS

This chapter describes three morphophonemic alternations: umlaut, gemination, and nasal substitution.

30.1 Overview

The sound patterns described in Chapter 29 occur throughout the Chamorro language. Though intricate, they are fully general. Unsurprisingly, Chamorro also has sound patterns that are morphologically restricted, meaning that only certain morphemes activate them or exhibit them. Two of these morphophonemic alternations are used to indicate aspect or mood: reduplication for the progressive aspect (see 2.2.1.1) and the *m/f* alternation (see 2.2.3.1). This chapter is devoted to three morphophonemic alternations that are not used to convey meaning: umlaut (also known as vowel fronting), gemination, and nasal substitution. 30.5 summarizes how these alternations interact with reduplication for the progressive aspect.

30.2 Umlaut

Chamorro has a set of morphemes that cause the vowel of the immediately following syllable to be realized as a front vowel. When this happens, /u/ is realized as /i/, /o/ is realized as /e/, and /ɒ/ is realized as /a/. The similarity of this vowel fronting to the German morphophonemic alternation known as umlaut has been noted by many investigators (e.g. Safford 1903: 294, von Preissig 1918: 6, Chung 1983, Klein 2000, Kaplan 2011).¹ For this reason, the Chamorro alternation is called *umlaut* here.

In Chamorro, umlaut is regularly activated by the following affixes and proclitics: the infix *-in-* (in all its uses), the definite article *i*, the oblique case marker *ni*, the local case marker *gi*, the subject agreement forms *in* ‘1 excl. du./pl.’ and *en* ‘2 du./pl.’ (both phonemically /in/; see 2.2.2.1.1). Umlaut is also activated, optionally, by the stressed prefix *mi-* ‘full of’ (28.4.6), the verbs of possession *gai* ‘have’ and *tai* ‘not have’ (see 14.3), and—for some

¹ Conant (1911) and Topping (1968) instead connect this Chamorro alternation to vowel harmony in e.g. Turkic languages.

speakers—the preposition *ki* ‘than’.² The fact that most of these morphemes contain a high front vowel suggests that at an earlier stage, the language may have had a more general phonological process that assimilated a vowel to any (high) front vowel in the immediately preceding syllable. But whatever its earlier history, umlaut is no longer a general, fully regular alternation in Chamorro today. This can be seen from the following:

(i) When umlaut is activated by the infix *-in-*, it affects the vowel of the immediately following syllable whether that vowel is stressed or not. See the forms in the righthand column below.

(1)		SPELLING		WITH ACTIVATING MORPHEME <i>-in-</i>
	/ˈkɒnnuʔ/	kānnu’	‘eat’	kinannu’
	/ˈpoʔlu/	po’lu	‘put’	pine’lu
	/ˈtugiʔ/	tugi’	‘write’	tinigi’
	/ˈdulalak/	dulalak	‘chase’	dinilalak
	/tuˈtuhun/	tutuhun	‘begin’	tinituhun
	/tuˈlajka/	tulaika	‘change’	tinilaika

(ii) Otherwise, umlaut is sensitive to stress. It affects vowels that bear primary stress, as in (2).

(2)		SPELLING		WITH ACTIVATING MORPHEME
	/ˈtɒnuʔ/	tānu’	‘land’	i tanu’
	/ˈkostat/	kostat	‘sack’	gi kestat
	/ˈunaj/	unai	‘sand’	i inai
	/ˈkɒnnuʔ/	kānnu’	‘eat’	in kannu’
	/ˈpoʔlu/	po’lu	‘put’	in pe’lu
	/ˈhɒgu/	hāgu	‘you (sg.)’	ki hagu

In affixed words, umlaut can optionally affect vowels that are unstressed or bear secondary stress, as long as these vowels would have borne primary stress in the root (see Chung 1983). This is shown in (3a) for suffixed words

² *Gai* ‘have’ and *tai* ‘not have’ are stressed prefixes, despite the fact that they are written as independent words in the official orthographies (see 14.3).

formed from *guma* 'house', and in (3b) for a word formed by attaching the stressed prefix *mí-* (which activates umlaut) to *pugas* 'uncooked rice'.³

(3)			WITH ACTIVATING MORPHEME
		SPELLING	
a.	/ˈgumaʔ/	gumaʔ	gi gimaʔ
	/guˈmɔʔ-hu/	gumǎʔ-hu	gi gumǎʔ-hu ~
			gi gimǎʔ-hu
	/,gumaʔ-midzu/	gumaʔ-miyu	i gumaʔ-miyu ~
			i gimaʔ-miyu
b.	/ˈpugas/	pugas	mipugas ~
			mipigas

But if the activating morpheme is not *-in-*, umlaut does not affect vowels that are unstressed in all forms of the word. Compare the forms in (1) with those in (4).

(4)			WITH ACTIVATING MORPHEME
		SPELLING	
	/puˈpulu/	pupulu	i pupulu
	/kusˈtumbri/	kustumbri	gi kustumbri
	/tuˈtuhun/	tutuhun	in tutuhun
	/tuˈlajka/	tulaika	in tulaika

(iii) Although umlaut applies to many borrowed words, there are many borrowed words that it does not affect. The words in (5a) show this alternation, but those in (5b) do not.

(5)			WITH ACTIVATING MORPHEME
		SPELLING	
a.	/kumˈbida/	kumbida	kinimbida
	/ˈkɔtni/	kåtni	i katni
	/ˈpotta/	potta	gi petta
	/ˈkobbli/	kopbli	i kepbli
b.	/ˈbota/	bota	binota
	/ˈkwɔttu/	kuåttu	i kuåttu

³ No examples are cited of low vowels undergoing umlaut in this context, because the two low vowels merge when they do not bear primary stress (see 29.1.1 and 29.5.2.1).

/bola/	bola	‘ball’	i bola
/'trongku/	trongku	‘tree’	i trongku

Speakers mostly agree on which words are affected by umlaut and which are not, but a few words are treated differently by different speakers. For instance, when the infix *-in-* is attached to *hobin* ‘young’, the result is *hinoben* (without umlaut) for some speakers but *hineben* (with umlaut) for others; when *găyu* ‘rooster’ is preceded by the definite article *i*, the result is *i găyu* (without umlaut) for some speakers but *i gayu* (with umlaut) for others.

(iv) Exceptionally, umlaut can apply in possessed nouns even when no activating morpheme is present, as long as the initial syllable of the word would have borne primary stress in the root. This ‘spontaneous’ umlaut is illustrated in (6), with a possessed noun formed from *guma* ‘house’. Because this possessed noun is the complement of the negative existential verb *tăya* ‘not exist’, it could not be preceded by any of the activating morphemes that normally occur with nouns; namely, the definite article *i* or the case markers *gi* or *ni* (see 14.2.2). Nonetheless, umlaut can optionally occur.

- (6) Tăya’ gimă’-ña si Jose anai umasagua.
AGR.not.exist house-AGR UNM Jose when AGR.marry
‘Jose didn’t have a home when he got married.’ (CD, entry for *guma*)

(v) Umlaut appears to be optional for generic nouns—nouns that refer to typical representatives of a kind. In (7), the nouns *chupa* ‘tobacco, cigarette’ and *chotda* ‘banana tree, green banana’ are used generically: *chupa* refers to smoking in general, not any particular tobacco or smoking event, and *chotda* refers to whatever green bananas are being cooked in the (typical) boiling event described. The initial syllable of both nouns bears primary stress and is preceded by *i*, a morpheme that regularly activates umlaut. Although umlaut applies in (7a), it does not apply in (7b).

- (7) a. I chipa muna’kănsit si Jose.
the tobacco WH[SBJ].make.having.cancer UNM Jose
‘Smoking caused Jose’s cancer.’ (CD, entry for *kănsit*)
b. Saibuk i chotda esta ki âppan i kaddon-ña.
boil the banana until PRT AGR.dry.up the broth-AGR
‘Boil the banana until the liquid dries up.’ (CD, entry for *âppan*)

Compare (8), in which *chotda* refers to a particular group of banana trees, and umlaut occurs.

- (8) Mantinemba i chetda nu i metgut na mǎnglu'
 AGR.PASS.knock.down the banana OBL the strong L wind
 gi ma'pus na sǎkkan.
 LCL past L year
 'The bananas were knocked down by the strong wind last year.'
 (CD, entry for *gelli'appan chotda*)

All of this reveals that umlaut is an alternation in decline—one that has many intricate, idiosyncratic conditions. Consistent with this, there is morphological evidence that umlaut once applied more generally than it does now. Chamorro has two prefixes, *san-* and *ták-*, which attach only to local or directional nouns (see 28.5). The prefix *san-* creates derived nouns that name a location (see 5.5); the stressed prefix *ták-*, which is not productive, creates derived adjectives whose meaning can involve degree. Both prefixes activate umlaut in the small number of derived words in which they occur; compare e.g. *hulu* 'top, above' with *sanhilu* 'top, above' (from *san-* plus *hulu*) and *tákkilu* 'high' (from *ták-* plus *hulu*). Similarly, the prefix *fa'* 'make into' activates umlaut in a small number of derived words, many of which have unpredictable meanings (see 28.4.2); e.g. *fa'baba* 'deceive' (from *fa'* plus *bába* 'bad'), *fa'ga'ga* 'treat dishonestly, make fun of' (from *fa'* plus *gǎ'ga* 'animal').

Observe, finally, that umlaut occurs before reduplication for the progressive aspect (see 2.2.1.1.1). The result is that if the vowel of the CV copied by reduplication is front because of umlaut, then the vowel of the original CV is, too. Compare the verbs in (9a) with their progressive forms in (9b).

(9)			WITH ACTIVATING MORPHEME
	SPELLING		
a. /'songi/	songgi	'set on fire'	sinenggi in senggi
/'pulan/	pulan	'watch over'	pinilan in pilan
b. /'sosonggi/	sosonggi	'set on fire (prog.)'	sinesenggi in sesenggi
/'pupulan/	pupulan	'watch over (prog.)'	pinipilan in pipilan

30.3 Gemination

The morphophonemic rule of gemination affects five suffixes with the shape -CV: the possessor agreement suffixes *-hu* '1 sg.', *-mu* '2 sg.', *-ña* '3 sg.' *-ta*

‘1 incl. du./pl.’, and the comparative suffix *-ña* ‘more’ (see 29.3.2.1).⁴ When one of these suffixes is attached to a word that ends in a vowel and the stressed syllable of the original word is closed, gemination doubles (geminate) the consonant of the suffix. In Chamorro, primary stress always falls on the next-to-last (penultimate) syllable of a suffixed word (see 29.4.1). When the suffix has the shape -CV, primary stress falls on the syllable immediately preceding it—the syllable closed by the first half of the doubled consonant created by gemination. Intuitively, the result is that words with primary stress on a closed syllable maintain that pattern in certain suffixed forms, where they show primary stress on a *different* closed syllable (see Chung 1983).

The effects of gemination are illustrated below (see also 29.3.2.1). Note that the geminated form of *ñ* is spelled *nñ* (see 29.3.3.3). When the consonant of a possessor agreement suffix is geminated, the dash that separates the suffix from the rest of the word in the CNMI orthography is inserted between the doubled letters representing the geminated consonant (see 29.6.1). (Consonants that are doubled by gemination are spelled as single consonants in the Guam orthography; see 29.6.2.)

(10)			WITH -CV SUFFIX
	SPELLING		
/hi.'nas.su/	hinassu	‘thought’	hinassom-mu
/'hun.ta/	hunta	‘meeting’	huntât-ta
/di.'ret.tsu/	diretchu	‘right’	diretchon-ña
/'kɔt.ni/	kâtni	‘meat’	katnen-ña
/'dɔŋ.ku.lu/	dângkulu	‘big’	dangkulonña

The forms in (11) show that gemination does not apply when a -CV suffix is attached to a word that has primary stress on an *open* syllable.

(11)			WITH -CV SUFFIX
	SPELLING		
/'tɔ.ta/	tâta	‘father’	tatâ-hu
/ma.'gɔ.gu/	magâgu	‘clothes’	magagu-mu
/kut.'tu.ra/	kuttura	‘culture’	kutturâ-ta
/di.'ni.da/	dinida	‘doubt’	dinidâ-ña

⁴ The applicative suffix *-i* has the form *-yi* when attached to words ending in a vowel. Despite the fact that *-yi* has the shape -CV, it does not undergo the gemination rule; see below in the text.

When gemination applies to the 1 sg. suffix *-hu*, the /h/ exceptionally doubles to /kk/. Given that Chamorro /h/ is descended from Proto-Malayo-Polynesian **k*, this suggests that gemination is a relatively old feature of the Chamorro language.

(12)			WITH -CV SUFFIX
	SPELLING		
/ma.'tes.tra/	ma'estra	'teacher'	ma'estråk-ku
/'deg.ga/	degga	'footwear'	deggåk-ku
/hi.'neŋ.gi/	hinenggi	'belief'	hinengek-ku

Gemination is an extraordinarily robust alternation. It affects almost all words that satisfy its conditions, whether they are indigenous or borrowed. (The borrowed words in (10) and (12) are *hunta* 'meeting', *diretchu* 'right', *kåtñi* 'meat', and *ma'estra* 'teacher'.) The known exceptions are exceedingly few:

(i) Gemination exceptionally does not apply when a -CV suffix is attached to *che'lu* 'sibling', *saina* 'parent', or *anti* 'spirit', even though these words end in a vowel and have primary stress on a closed syllable. See e.g. *che'lu-hu* 'my sibling', *saina-mu* 'your (sg.) parent', *anti-ña* 'his soul'.

(ii) In the Saipan dialect, gemination exceptionally applies when a -CV suffix is attached to the directional nouns *hâya* 'east, south, away from the ocean' and *lâgu* 'west, north, towards the ocean'; e.g. *hayåk-ku* 'east of me', *lagok-ku* 'west of me' (see 5.4). Gemination does not apply to these forms today in the Guam dialect; e.g. *lagu-hu* 'north of me'. (Both *lagu-hu* and *lagok-ku* 'north of me' are reported by Safford (1903: 512, 1905: 307) for the Chamorro spoken on Guam at the beginning of the twentieth century.) In both Guam and Saipan, gemination exceptionally applies when a -CV suffix is attached to the dependent noun *iyu-* 'possession' (see 7.1.3); e.g. *iyom-mu* 'your (sg.) possession'.

(iii) When a -CV suffix is attached to a derived verb formed with the applicative suffix *-i*, gemination exceptionally occurs even if the verb is not stressed on a closed syllable. This is shown in (13) for the transitive verb *fa'gâsi* 'wash', which contains a fossilized version of *-i*, and the applicative *sangâni* 'tell', which is derived from *sângan* 'say'. Curiously, gemination does not occur when the derived verb is formed with *-yi*, the version of the applicative suffix *-i* that attaches to vowel-final roots. This is shown below for *tattiyi* 'follow', the applicative derived from *tâtiti* 'back, behind'.

(13)			WITH -CV
	SPELLING		SUFFIX
/faʔ.'gɒ.s-i/	fa'gãsi	'wash'	fina'gasem-mu
/sa.'ŋɒ.n-i/	sangãni	'tell'	sinanganen-ña
/tat.'ti.-dzi/	tattiyi	'follow'	tinattiyi-ña

The regular character of gemination makes it possible to use it as a diagnostic for syllable structure. The Chamorro language has two ways of syllabifying word-internal consonant clusters consisting of a consonant followed by a liquid or glide. In the indigenous pattern, the consonant forms the coda of one syllable and the liquid or glide forms the onset of the next syllable (e.g. /lok.luk/ 'boil'). In the borrowed pattern, the consonant forms a complex onset with the liquid or glide, so that the two are in the same syllable (e.g. /li.bra/ 'pound (unit of weight)'). Gemination is sensitive to this difference. When a -CV suffix is attached to e.g. *libra*, the consonant of the suffix is not doubled; see *librã-ña* 'his/her (weight in) pounds'. On the other hand, when a -CV suffix is attached to e.g. *bisiu* 'habit', *familia* 'family', or *rekla* 'menstruation', gemination occurs. This is evidence that in borrowed words of this second type, the syllable structure has assimilated to the indigenous pattern, as shown in the lefthand column of (14).⁵

(14)			WITH -CV
	SPELLING		SUFFIX
/'bis.ju/	bisiu	'habit'	bisiok-ku
/fa.'mil.ja/	familia	'family'	familiãñ-ña
/'rek.la/	rekla	'menstruation'	reklãm-mu

Note, finally, that the Rota dialect has no geminate consonants at all, so it has no gemination rule (see 29.3.3.1).

30.4 Nasal substitution

The alternation known as nasal substitution occurs in most Western Malayo-Polynesian languages (see Blust 2013: 242). In Chamorro, this alternation occurs in words formed with the prefix *man-* and its irrealis form *fan-*. There are four such prefixes: (i) the plural prefix *man-* for human nouns (see 6.1.1.1); (ii) an unproductive prefix that attaches to nouns to form derived

⁵ Further evidence for resyllabification comes from the fact that the stressed mid and high vowels in these roots are pronounced lower (lax), as expected if their syllables are closed; e.g. [bɪs.ju], [fa.mɪl.ja], [rɛk.la] (see 29.1.1).

intransitive verbs (see 28.4.5); (iii) the plural agreement prefix for intransitive verbs and adjectives (see 2.2.2.2); and (iv) the prefix that attaches to transitive verbs to derive the antipassive form (see 10.3.1). When the /n/ of any of these prefixes is immediately followed by a voiceless consonant (/p, t, k, ts, f, s/), the /n/ assimilates to the consonant in place of articulation, and the consonant deletes. Some examples of nasal substitution are given below.

(15)		SPELLING	PREFIXED FORM	
	/pɔliʔ/	páli'	mamáli'	'priests'
	/tɔŋis/	tångis	manångis	'cry (realis pl.)'
	/kahuluʔ/	kahulu'	mangahulu'	'rise (realis pl.)'
	/fɔhan/	fåhan	mamåhan	'buy (antipassive realis sg.)'

Note that when the voiceless consonant is the affricate /ts/ or the alveolar fricative /s/, /n/ becomes the palatal nasal /ɲ/ (spelled *ñ*). This too is characteristic of nasal substitution more generally in the Western Malayo-Polynesian languages.

(16)		SPELLING	PREFIXED FORM	
	/tseʔlu/	che'lu	mañe'lu	'siblings'
	/sɔga/	såga	mañåga	'stay (realis pl.)'
	/soddaʔ/	sodda'	mañodda'	'find (antipassive realis sg.)'

Although the effects of nasal substitution are constant, the conditions under which it occurs vary from one prefix to another. So does the interaction of nasal substitution with reduplication for the progressive. The details are laid out below.

30.4.1 In plural nouns

A very few Chamorro nouns are obligatorily marked for the plural with the prefix *man-*; namely, *che'lu* 'sibling', *saina* 'parent', and *páli* 'priest'. These plural nouns show nasal substitution.

(17)	NOUN		PLURAL
	che'lu	'sibling'	mañe'lu
	saina	'parent'	mañaina
	páli'	'priest'	mamáli'

In addition, the nouns *palão'an* 'woman' and *pâtgun* 'child' have irregular plural forms in which nasal substitution can be discerned; i.e. *famalão'an* 'women' and *famagu'un* 'children'.

Otherwise, human plural nouns are marked only optionally with *man-* (and inanimate nouns do not show this marking at all; see 6.1.1.1). Nasal substitution usually does not occur in plural nouns as this type, as (18) shows. (The plural of *sântu* 'saint' is an exception to the generalization.)

(18)	NOUN		PLURAL
	tâta	'father'	mantâta
	parentis	'relative'	manparentis
	titugi'	'writer'	mantitugi'
	katoliku	'Catholic'	mangkatoliku
	sakki	'thief'	mansakki
	sântu	'saint'	mañântus

30.4.2 In denominal verbs

In Chamorro, the prefix *man-* (or its irrealis form *fan-*) is attached to a small number of nouns to create derived intransitive verbs that mean 'evolve, undergo development of [whatever the noun names]' (see 28.4.5). The derived verbs are *m/f* predicates (see 2.2.3.1). These verbs typically undergo nasal substitution when the conditions for the alternation are satisfied. In the forms cited in (19), the only denominal verb that fails to show nasal substitution is *mamfloris* 'bloom'.

(19)	NOUN		DERIVED VERB
	châda'	'egg'	mañâda' 'lay eggs'
	chetnut	'wound'	mañetnut 'become infected'
	chugu'	'sap'	mañugu' 'ooze'
	susu	'breast'	mañusu 'bud, develop'
	floris	'flower'	mamfloris 'bloom'

Nasal substitution in denominal verbs like (19) occurs before the verb undergoes reduplication for the progressive. In other words, the nasal that 'replaces' the voiceless consonant of the original noun is doubled when the stressed CV of the denominal verb is reduplicated, as (20) shows.

(20)	DERIVED VERB		PROGRESSIVE
	mañetnut	'become infected'	mañeñetnut
	mañugu'	'ooze'	mañuñugu'
	mañusu	'bud, develop'	mañuñusu

Given that word formation (here, the creation of the denominal verb) typically occurs before the derived word is inflected, this is unsurprising.

30.4.3 In intransitive verbs and adjectives

When an intransitive verb or adjective has a plural subject, it is marked with the plural agreement prefix *man-* in the realis mood, and *fan-* in the irrealis. Predicates that are marked with the plural agreement prefix generally show nasal substitution when they describe an event, but not when they describe a state (see 2.2.2.2.1). Compare the predicates in (21a), which show the realis plural prefix *man-* and undergo nasal substitution, with those in (21b), which do not.

(21)	PREDICATE		REALIS PL.
a.	tohgi	‘stand up’	manohgi
	kānta	‘sing’	mangānta
	kalamtin	‘move’	mangalamtin
	chotchu	‘eat’	mañotchu
	sāga	‘stay, live’	mañāga
b.	puti	‘hurt, ache’	manputi
	fotgun	‘wet, soaked’	manfotgun
	chaddik	‘quick’	manchaddik
	sāfu	‘safe’	mansāfu

This overall tendency has some exceptions. Certain event predicates that are marked with the plural agreement prefix show nasal substitution only optionally, or not at all.

(22)	PREDICATE		REALIS PL.
	peska	‘catch fish’	mameska ~ manpeska
	finu’	‘speak (a language)’	manfinu’
	kimason	‘burn’	mankimason

Certain state predicates that are marked with this prefix can or must show nasal substitution.

(23)	PREDICATE		REALIS PL.
	popbli	‘poor’	mamopbli ~ manpopbli
	tai	‘not have’	mantai ~ manai
	siha	‘together (3 pers.)’	mañiha

Moreover, even though passive verbs are intransitive (see 10.2), they do not show nasal substitution when they are marked for plural agreement, even when they describe events.

(24)	PREDICATE		REALIS PL.
	pininu'	'be killed'	manpininu'
	tinigung	'be rushed at'	mantinigung
	chiniku	'be kissed'	manchiniku
	sinangãni	'be told'	mansinangãni

Note, finally, that when a predicate is marked with the plural agreement prefix, nasal substitution takes effect *after* reduplication for the progressive. The result is that even when a voiceless consonant in the doubled CV is 'replaced' by the nasal of the plural agreement prefix, the voiceless consonant in the original CV remains unchanged. This distinctive pattern is illustrated below.

(25)	PROGRESSIVE VERB		REALIS PL.
	popoddung	'fall (prog.)'	mamopoddung
	totohgi	'stand (prog.)'	manotohgi
	kåkanta	'sing (prog.)'	mangåkanta
	chochotchu	'eat (prog.)'	mañochotchu
	såsaga	'stay, live (prog.)'	mañåsaga

See the next subsection for more discussion.

30.4.4 In antipassive verbs

In Chamorro, the antipassive of most transitive verbs is formed with the antipassive prefix *man-* (or its irrealis counterpart *fan-*). The result is an intransitive form of the verb whose internal argument cannot be realized as a direct object, but instead is implicit, or else realized as a noun phrase in the oblique case (see 10.3).

Antipassive verbs that are formed with the antipassive prefix undergo nasal substitution with great regularity, whether they are indigenous or borrowed words.

(26)	VERB		ANTIPASSIVE (REALIS SG.)
	punu'	'kill'	mamunu'
	padesi	'suffer'	mamadesi
	tugung	'rush at'	manugung

More sound patterns

tenta	‘tempt’	manenta
kumbida	‘invite’	mangumbida
fa’nâ’gui	‘teach’	mama’nâ’gui
chagi	‘try’	mañagi
setbi	‘serve’	mañetbi

Only a very few antipassive verbs exceptionally do not show nasal substitution, or show it only optionally. Two such verbs, both of them borrowed words, are cited below.

(27)	VERB		ANTIPASSIVE (REALIS SG.)
	prensa	‘iron’	mamrensa ~ manprensa
	translåda	‘translate’	mantranslåda

When nasal substitution applies to an antipassive verb, the alternation takes effect *before* reduplication for the progressive. In other words, if a voiceless consonant in the doubled CV is ‘replaced’ by the nasal of the antipassive prefix, then the consonant in the original CV is, too. This is the reverse of what was seen earlier (in 30.4.3) for intransitive predicates that are marked with the plural agreement prefix. Compare the antipassive verbs in the righthand column of (28) with the predicates that show plural agreement in (25).

(28)	PROGRESSIVE VERB		ANTIPASSIVE (REALIS SG.)
	pupunu’	‘kill (prog.)’	mamumunu’
	tutugung	‘rush at (prog.)’	manunugung
	kakassi	‘tease (prog.)’	mangangassi
	chagi	‘try (prog.)’	mañañagi
	sodda’	‘find (prog.)’	mañoñodda’

Recall now that antipassive verbs are intransitive. When they have a plural subject, they show the plural agreement prefix, as shown below.

(29)	VERB		ANTIPASSIVE (REALIS PL.)
	punu’	‘kill’	manmamunu’
	tugung	‘rush at’	manmanugung
	kassi	‘tease’	manmangassi
	sodda’	‘find’	manmañodda’

Each verb in the righthand column of (29) contains two *man-* prefixes: the antipassive prefix and the plural agreement prefix. Because nasal substitution treats these prefixes differently when it interacts with reduplication, it is possible to use the difference to determine which prefix occurs first when they occur together. In fact, plural antipassive verbs that are marked for the progressive aspect show the ‘antipassive’ pattern of nasal substitution: if the consonant of the doubled CV is ‘replaced’ by the nasal of the prefix, then the consonant of the original CV is, too. This pattern, illustrated in (30), reveals that the prefix closest to the verb is the antipassive prefix. In other words, the order of prefixes is plural agreement followed by antipassive.

(30)	PROGRESSIVE VERB	ANTIPASSIVE (REALIS PL.)
	pupunu’	‘kill (prog.)’
	kassi	‘tease (prog.)’
	sodda’	‘find (prog.)’
		manmamumunu’
		manmangangassi
		manmañoñodda’

30.5 Interaction with reduplication

The preceding sections have not dealt systematically with reduplication for the progressive aspect (see 2.2.1.1). However, the issue of how this reduplication interacts with other morphophonemic alternations, and with the sound structure of Chamorro more generally, has come up several times before. The details described earlier are brought together here.

The following morphophonemic alternations, and other aspects of Chamorro sound structure, are fixed *before* a predicate is reduplicated for the progressive:

- (i) umlaut (see 30.2);
- (ii) gemination (see 30.3);⁶
- (iii) nasal substitution with the denominal verb prefix (see 30.4.2) and the antipassive prefix (see 30.4.4);
- (iv) the distribution and pronunciation of mid and high vowels (see 29.1.1, 29.5.1, and 29.5.2.2).

The following morphophonemic alternations, and other aspects of sound structure, are fixed only *after* reduplication for the progressive has occurred:

⁶ Gemination takes effect before reduplication for the progressive aspect for the following reason: it must take effect before the distribution of mid and high vowels is determined (see 29.5.2.2). Because the distribution of mid and high vowels is fixed before reduplication occurs, gemination too must occur before this point.

More sound patterns

- (v) nasal substitution with the plural agreement prefix (see 30.4.3);
- (vi) the distribution and pronunciation of low vowels (see 29.1.1 and 29.5.2.1).

Finally, the infixes *-um-* and *-in-* are inserted only *after* reduplication for the progressive has occurred (see Harizanov 2017 for discussion).

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