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Adam J. Tallman

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A GRAMMAR OF CHÁCOBO (PANO),

A SOUTHERN PANO LANGUAGE OF THE NORTHERN BOLIVIAN AMAZON

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A Grammar of Chácobo, a southern Pano language of the northern Bolivian Amazon

by

Adam J. Tallman

Dissertation

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A GRAMMAR OF CHÁCOBO, A SOUTHERN PANO LANGUAGE OF

THE NORTHERN BOLIVIAN AMAZON

by

Adam J. Tallman, PhD

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Supervisor: Patience Epps

This dissertation provides a description of the Chácobo language, a southern Pano language spoken by approximately 1200 people who live close to or on the Geneshuaya, Ivon, Benicito and Yata rivers in the northern Bolivian Amazon. The grammatical description emerges out of an ethnographically based documentation project of the language. Chapter 1 contains an overview of the cultural context in which the Chácobo language is embedded and a brief ethnohistory of the Chácobo people. I also discuss the general methodology of the dissertation touching specifically on issues related to data collection. Chapter 2 introduces the phonology of the language focusing on the categories necessary for its description. Chapter 3 provides a discussion of morphosyntactic structures and relations. This chapter provides a discussion of how headdependent relations and the general distinction between morphology and syntax are understood throughout the dissertation. Parts of speech classes (nouns, verbs, adjectives, adverbs) are also defined and motivated based on semantic and formal criteria. Chapter 4 describes predication and its relationship to clause-typing. Chapter 5 is concerned with constituency which refers to hierarchical structures motivated through distributional properties and relations and the relative degree of contiguity between linguistic categories. Chapter 6 provides an extensive discussion of morphophonology and its relation to constituency. Chapter 7 and 8 are concerned with the language's alignment and valenceadjusting systems. The next five chapters provide a description of the functional domains relevant to the verbal domain including; Tense (Chapter 9); Temporal distance (Chapter 10); Aspect (Chapter 11); Associated Motion (Chapter 12); Perspective (Chapter 13). The last two Chapters focus on categories in the nominal domain. Chapter 14 provides a description of noun compounding, adjectives and possession. Chapter 15 provides a description of number, quantification and deixis inside and outside the nominal domain.

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ABBREVIATIONS

Abbreviations of example source

ELIC Elicitation (production experiment, elicitation, story board)

TXT Text (natural speech, dynamic interview)

OBSV Participant observation

STORY Story board

Abbreviations for structural classes, boundaries, categories and glosses

| | Domain | Description |
|-------|------------------------------------|---|
| - | Chácobo segments/interlinear gloss | affix boundary |
| = | Chácobo segments/interlinear gloss | clitic boundary |
| [] | Chácobo segments/interlinear gloss | morphosyntactic constituent |
| () | Chácobo segments/interlinear gloss | morphophonological domain |
| (C) | Chácobo segments | underlying consonant which does not |
| | | surface |
| CAT | interlinear gloss | (semi)functional category |
| cat | interlinear gloss | lexical category |
| () | Free English translation | material that does not appear in the |
| | | example sentence (e.g. discourse context) |
| (lit) | Free English translation | literal translation |

Abbreviations for glosses

| 1, 2, 3 | 1 st , 2 nd 3 rd person | INT | intentional |
|----------|---|--------|--|
| A | transitive subject | ITR | intransitive |
| ABIL | abilitative | INTER | interrogative |
| ACC | accusative | INTRC | interactional |
| ADMON | admonitive | IPV | imperfective |
| ANTERIOR | anterior, relative past | IRR | irrealis |
| ANTIPASS | antipassive | MID | middle |
| ANX | anxietive | MIR | mirative |
| APPL | applicative | N/ADJ | nominalizer/adjectivalizer |
| APPROX | approximative | NECES | necessitative |
| ASS | assertive | NEG | negative |
| ASSOC | associative | NMLZ | nominailzer |
| AUG | augmentative | NMLZ:P | past tense nominalizer |
| AUX | auxiliary | OBLIG | obligative |
| AUTH | authoritative | P | Object of monotransitive predicate |
| BENEF | benefactive | P5 | position 5 formative |
| CAUS | causative | PART | partitive |
| CERT | certitudinal | PASS | passive |
| | | PAUC | paucal (two or more) |
| CMPL | completive | PERF | perfect |
| CNTRDIR | counter directional | PFV | perfective |
| CNTRFCT | counterfactual | PL | plural |
| COM | comitative | PNCT | punctual |
| COMP | comparative | POSS | possessive |
| CONCESS | concessive | PSBL | speaker internal possibility, declarative positive |
| CONCUR | subordinate clause temporally concurrent with main clause | PSBL2 | speaker internal possibility, interrogative/negative |
| COND | conditional | PRIOR | subordinate clause temporally prior to main clause |
| CONJ | conjunction | PURP | purposive |
| COOR | coordinator | R | recipient of ditransitive |
| CRAS | crasternal, tomorrow | RECP | recent past |

| $D{A,S}$ | different subject {A,S} | REGRET | regretative |
|----------|--------------------------------|--------|--|
| DAT | dative | REL | relative |
| DEC | declarative | REMF | remote future |
| DEM1 | proximal demonstrative | REP | reportative |
| DEM2 | distal demonstrative | RFLX | reflexive |
| DEM3 | out of view demonstrative | S | intransitive subject |
| DES | desiderative | SG | singular |
| DIR | directive | | |
| DIST | distal source | SIMIL | similative |
| DISTP | distant past | SPAT | spatial |
| DISTR | distributive | SUBSEQ | subordinate clause temporall subsequent to main clause |
| | | SYMP | sympathetic |
| EMPH | emphatic | T | theme of ditransitive |
| EPEN | epenthetic formative | V | verbalizer |
| EPIS1 | epistemic, speaker belief | VERID | veridative |
| EPIS2 | epistemic, speaker speculation | VOC | vocative |
| EPIS3 | epistemic, speaker inference | IPV | imperfective |
| ERG | ergative | MID | middle |
| EXPL | expletive | MIR | mirative |
| FUT | future | ADJVLZ | adjectivalizer |
| HAB | habitual | | |
| GEN | genitive | | |
| HORT | hortative | | |
| IDEO | ideophone | | |
| IMM | immediative | | |
| IMP | imperative | | |
| INESS | inessive | | |

TERMS FROM LOCAL SPANISH (BENI, BOLIVIA)

| Local Spanish | Chácobo | Description |
|---------------|-----------------------|--|
| ambaibo | <boco></boco> | A type of plant with a flower (Linnaean: Cecropia |
| | /boko/ | membranacea). The Chácobo use its vines for rope. |
| bachi | <poa></poa> | Type of fruit or tree producing this fruit, also known as achacha |
| | /poa/ | (Linnaean: Garcinia Humilis) |
| bono | <bono></bono> | A cash payment made to some families including the Chácobo |
| | /bono/ | by the Bolivian (municipal or federal) government. |
| cachorro | <xëyapi></xëyapi> | A type of fish (Linnaean: Acestrorhynchus pantaneiro) |
| | şɨyápi | |
| carayana | <carahai>,</carahai> | A non-indigenous Bolivian person. The Chácobo sometimes use |
| | <carayana></carayana> | it to mean native Spanish speaker. |
| | /karaʔái/ | |
| caripe | <mëhi></mëhi> | Type of timber tree (Linnaean: Aspidosperma cylindrocarpon). |
| | /mɨʔi/ | The Chácobo use its bark to make a pan for toasting chive. |
| chicha | <jënë></jënë> | A fermented drink usually made from yuca. It can be made from |
| | /hɨnɨ/ | corn, pumpkin, bachi among other fruits or vegetables. The |
| | | word <i>hini</i> generally refers to any consumable liquid. Water is |
| | | referred to as hɨnɨ paṣa (lit. crude water). |

Terms from Local Spanih (Beni, Bolivia), cont.

| chive | <moto></moto> | A Chácobo spice that is made by drying yuca or corn in the sun. |
|---------------|---------------------------|---|
| | /moto/ | |
| motacu | <xëbini></xëbini> | A type of palm tree (Linnaean: Attalea phalarenta) with edible |
| | /ṣɨbíni> | fruits. The leaves are used to cure diarrhea (Boom 1996: 24) |
| motacusillo | <xëbichoqui></xëbichoqui> | A type of palm tree (Linnaean: Attalea maripa) with edible |
| | /ṣɨbitʃóki/ | fruits. The leaves are sometimes used for rooftops. |
| pataimichi | <canapa></canapa> | A type of tree or fruit from this tree (Linnaean: Helicostylis |
| | /kanápa/ | tomentosa) |
| patuju | <manihua></manihua> | A type of flower (Linnaean: Heliconia rostrata). |
| | /maníwa/ | |
| tareche / | <chiquëpë></chiquëpë> | A type of bird (Linnaean: Aratinga weddellii) |
| catorra de | /tʃîkɨpɨ/ | |
| cabeza oscura | | |
| waracha | <huaracha></huaracha> | A wooden plank elevated a few feet off the ground that the |
| | /warátʃa/ | Chácobo and many indigenous groups of Bolivia use for a bed. |
| walusa | <mataca></mataca> | A type of tuber similar to a potato (Linnaean: Colocasia |
| | /matáka/ | Esculenta?) harvested in some Chácobo communities. |

Chapter 1. The language and its speakers

Chácobo is spoken by approximately 1400 people who live in some 20 communities in the northern Bolivian Amazon (South America). Chácobo belongs to the Panoan language family, which consists of approximately 33 languages, 17 of which are extant (Fleck 2013; Zariquiey & Valenzuela *forthcoming*). The origin of the name of the Chácobo is unknown. The language is spoken either near or on the Geneshuaya, Ivon, Benicito and Yata rivers. The Chácobo live primarily in their Original Communitarian Land (Tierra Comunitaria de Origen or *TCO*), which encompasses approximately 500,000 hectares in the department of Beni. Since the 1990s many Chácobo have started to relocate to the local Bolivian town of Riberalta. There are now approximately 300 speakers in Riberalta, which is approximately 100 kilometers north of the Chácobo TCO. Figure 1.1 identifies the approximate location of the Chácobo territory.

1.1. GEOGRAPHY AND DEMOGRAPHY

There are between 1600 and 2000 ethnic Chácobo. Ethnic Chácobo that do not speak the language seem to always be the children of one Chácobo parent and another local Bolivian. It is my impression that there are approximately 1400 fluent speakers of Chácobo across the TCO and in Riberalta. Fluent speakers of Chácobo do not necessarily identify non-speakers as *ethnically* Chácobo and it is fairly common for ethnic Chácobo who do not

speak the language to not consider themselves Chácobo either. Most ethnic Chácobo in this sense live in Riberalta. It is very uncommon to find an ethnic Chácobo (in the sense of having at least one parent who speaks the language) who lives in the TCO and does not speak the language fluently.

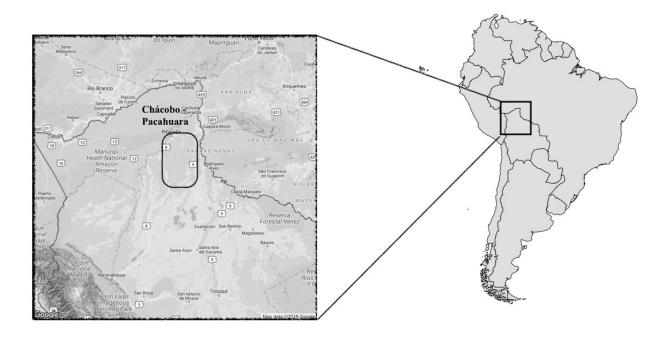


Figure 1.1. Approximate location of Chácobo and Pacahuara speakers (2018)

Most of the Chácobo still live in traditional communities where the language is spoken in daily life and is learnt as a first language. The Chácobo generally prohibit non-Chácobo from living in the villages with the exception of teachers who tend to be primarily from Riberalta and Bolivians who are married to a Chácobo. The main Chácobo communities are listed in Table 1.1. The figures and numbers are estimates based on my field notes from visits to these communities. They should be regarded as approximations.

Communities that are marked with one asterisk * are those that I have at least visited; those that marked with two asterisks are communities I spent at least two weeks in doing fieldwork. I have visited all of the communities listed below except Nucleo. Two communities were founded between 2011-2017 when I conducted my fieldwork; San Ignacio (in 2014) and Puerto Barrero (in 2015).

The population of the Chácobo villages varies depending on the season. For instance, Alto Ivon and the other communities close to the Ivon river are much more populated during the almond harvesting season (December to February). I have also listed the number of teachers Chácobo and non-Chácobo in each community in the table above. These numbers change fairly quickly in that teachers are frequently relocated to different communities. Furthermore, it should be noted that the boundaries between some villages are fuzzy. Many one house hamlets between Cachuelita and Alto Ivon are referred to as part of Motacusal, which sometimes just designates a general region between Alto Ivon and Cachuelita, but sometimes designates a specific area with a higher population density and a school. Palmeras includes a concentrated village with approximately 8 houses and a smaller village with 4 houses 4 hours away by boat from the more densely populated area.

There are approximately 300-400 Chácobo speakers living in the local town of Riberalta out of a population of approximately 100,000 Bolivians. Many speakers have houses in the TCO and in Riberalta and live in one or the other locations depending on the season. For example, one of my consultants, Miguel Chavez, teaches in the TCO and visits his wife and family on the weekend, occasionally attending classes at the local college.

Table 1.1. Main Chácobo communities

| | River | Chácobo Population | Teachers |
|-------------------|-------------------------|--------------------|---------------|
| **Cachuelita | Geneshuaya | 74 | 1 (Chácobo) |
| *Puerto Barrero | Geneshuaya | 60 | 2 (Bolivian) |
| *Las Limas | Ivon (accessible to | 40 | 2 (Bolivian) |
| | Geneshuaya by road) | | |
| **Motacusal | Between Geneshuaya & | 84 | 1 (Chácobo) |
| | Ivon | | 2 (Bolivian) |
| **Alto Ivon | Ivon | ~400 | 2 (Chácobo) |
| | | | 10 (Bolivian) |
| *Las Palcas | Ivon | 12 | 0 |
| *Tokio | Ivon | 16 | 0 |
| *San Ignacio | Ivon | 24 | 0 |
| Nucleo | Ivon | 20? | 0 |
| *Alegre | Between Ivon & Benicito | 10 | 0 |
| **Siete Almendros | Benicito | 50 | 1 (Bolivian) |
| *Fortaleza | Benicito | 40 | 0 |
| *Tres Bocas | Benicito | 48? | 0 |
| *Las Petas | Yata | 44 | 2 (Bolivian) |
| **Las Palmeras | Yata | 76 | 1 (Bolivian) |
| **Paraiso | Yata | 18 | 0 |
| Total | | 1016 | |

1.2. SOCIOLINGUISTIC SITUATION

Chácobo is extraordinarily vital compared with other languages of the region (Córdoba et al. 2012). It is still learnt as a first language in all the communities listed above. Children begin to learn Spanish in school at around 5 years of age but contact with non-native Chácobo speakers is frequent enough that they often begin before this. Chácobo who are born and grow up in Riberalta typically do not speak the language. There are several semispeakers in Riberalta that are usually sons and daughters of one Chácobo speaking parent (Córdoba 2008 for more details).

In the TCO, Chácobo is spoken in all aspects of daily life. Townhall meetings in Alto Ivon are usually translated into Spanish so that local Bolivian teachers can understand them, but frequently, Chácobo is the only language that is spoken.

Code switching between Chácobo and Spanish can sometimes be observed in the communities. My impression is that code-switching has actually declined as a consequence of the national political environment, which has encouraged the revitalization of indigenous languages.

In the 1970s, SIL missionaries developed a Spanish based orthography. Chácobo of the communities of Alto Ivon, Cachuelita, Motacusal have basic reading and writing skills using this orthography. The orthography is discussed in Section 1.12.1. Only a few Chácobo of the Yata river can read and write the language.

Chácobo is one of 36 official languages of Bolivia. According to Bolivian law the government is constitutionally obliged to provide funding for its documentation and revitalization. In 2012, the National government created the Chácobo Institute of Language and Culture tasked with creating pedagogical materials for the community and non-Chácobo speakers. I have not observed a preference for teaching the language to ethnically Chácobo who do not speak the language compared with non-Chácobo.

Another southern Pano group lives amongst the Chácobo called the Pacahuara. The Pacahuara consist of one family that originally lived in the department of Pando. Up until recently they lived in a community on the edge of the Chácobo territory called Puerto Tujuré, but the family is scattered across 3 Chácobo villages. Many younger Pacahuara who were not born in the department of Pando have a passive knowledge of Pacahuara, but do not speak the language in day to day life. When I started fieldwork (2011) there were six speakers of Pacahuara. As of writing (2018) there are three. Pacahuara has been described as a dialect (or "codialect") of Chácobo (Fleck 2013: 77), but preliminary research I conducted suggests that mutual intelligibility between Pacahuara and Chácobo is relatively low. I return to the status of Pacahuara in Section 1.11.

1.3. PHYSICAL ENVIRONMENT, SUBSISTENCE AND CULTURE

This section provides a brief overview of the life of Chácobo in their traditional communities based on Prost (1970), Kelm (1972) and Córdoba (2008). Much rich ethnographical and anthropological work has been conducted by the anthropologists Diego Villar, Lorena Córdoba, and Philippe Erikson, published in various articles (see References).

The Chácobo communities are located on rivers or close to small streams or rivers. The westmost communities are those that are located beside streams (Las Limas, Cachuelita, Puerto Barrero, Alto Ivon, Motacusal, Las Palcas, San Ignacio, Tokio, Nucleo). Communities that are beside rivers are Siete Almendros and Fortaleza on the Benicito river and Las Petas, Las Palmeras and Paraiso on the Yata river. Most communities are surrounded by thick jungle. Between rivers and/or lakes are vast stretches of pampa (savannah). There are two communities to my knowledge that are located squarely within pampa areas; Cachuelita close to the Geneshuaya river and Tres Bocas close to Benicito. The climate is tropical and temperatures hover around 30°~35° Celsius during the day. In most communities the temperature dips to 20° Celsius at night. The rainy season begins in October or November and lasts until approximately April. The Chácobo make a general distinction between the rainy season which they refer to as *oiyá tia* 'lit. the time with rain' and the dry season *bariyá tia* 'lit. the time with sun'.

The dry season runs from late May until October. During the dry season cold winds from the high lands of La Paz that local Bolivians refer to as *el sur* 'the south' can cause temperatures to drop to below 0° Celcius. The Chácobo refer to the wind as *yotáno* and it is said to be caused by the southern wind woman (*yotáno yóṣa*) as she passes through the Chácobo farm plots.

The Chácobo's main means of subsistence in the traditional communities are hunting, fishing, fruit gathering and slash and burn agriculture. The Chácobo cultivate plantain, yuca, rice and corn. Many Chácobo families now buy rice in large quantities from Riberalta. Other consumer goods purchased from town include canola oil, sugar, potatoes, eggs, soap, various types of candies, gasoline and alcohol. Many Chácobo now keep domesticated chickens and pigs. The use of consumer goods is *much* more prevalent in the central communities of Cachuelita, Puerto Barrero, Motacusal and Alto Ivon than elsewhere.

In Cachuelita and Alto Ivon, a few Chácobo store consumer goods purchased in Riberalta in their homes which they sell to other Chácobo or passersby. There are at least two such stores in Alto Ivon, and two in Cachuelita. These communities are much more reliant on outside consumer goods.

Increasing their reliance on outside consumer goods, most Chácobo families in the central communities now own and rely on motorcycles for transportation to and from Riberalta and their farm plots. In more traditional communities such as those on the Benicito and Yata rivers, farm plots are walking distance from one's respective house.

However, in Alto Ivon, farm plots can be up to a 1-hour motorcycle trip from one's house, making access to gasoline and motorcycle parts crucial. Motorcycles started to become widely used by the Chácobo in the 2000s and they have now become or are fast becoming a practical necessity for life in the central communities of Cachuelita, Motacusal and Alto Ivon. In contrast, there I did not see any motorcycles in the communities on the Benicito (2016) and Yata (2015) rivers.

The preparation and consumption of chicha is an extremely important social practice for the Chácobo. Chicha is typically made from fermented yuca, but there are some varieties of it made from corn, pumpkins, and achacha (*Garcinia Humilis*). The production and consumption of large quantities of chicha are obligatory for Chácobo festivals, even where traditional dance and music has tended to fall by the way side. Philippe Erikson has conducted detailed research on the chicha production and consumption and its cultural importance in Chácobo society (Erikson 2004).

Hunting and fishing still constitute an important part of Chácobo life. Hunting of game is primarily done with rifles and shotguns for which bullets and cartridges are purchased in Riberalta. On the Benicito and Yata rivers, bow and arrows are still used, I observed bow and arrows still in use on the communities of the Yata and Benicito rivers in 2015 and 2016 respectively. However, I am not aware of younger generation Chácobo (those younger than 40) who know how to or can still use bow and arrows.

Fishing is primarily conducted with fish hooks and fishing lines purchased from Riberalta in the central communities. In communities on the Benicito and Yata rivers,

mass-produced fish hooks were the primary means of fishing although I did observe the use of some bow and arrows for fishing in communities on the Benicito and Yata rivers.

The Chácobo have a fixed set of 24 personal "real" names (hani hani-ria). The Chácobo have specific rules based on descent and order of birth for which single name of the 24 a child is assigned that are described in detail in Córdoba (2008). There are two types of nicknames. There are a fixed set of nicknames that are associated with specific names and then there are nonce nicknames that are associated with specific individuals. For example, the nickname sakitá is associated with the real name hiri, and the nickname ró?o is associated with the Maro (Diego Villar personal communication). The Chácobo are also fond of providing nonce nicknames that are specific to individuals. For instance, toro is a nickname that refers specifically to the president of CIRABO (Central Indigena Regional de la Amazonia Boliviana) Rabi Ortiz, apparently borrowed from the word for bull in Spanish (Diego Villar and Philippe Erikson personal communication). The word toro does not refer to any other person named Rabi to my knowledge. More information on Chácobo onomastics can be found in Córdoba and Villar (2013) and Córdoba (2008).

The Chácobo still practice matrilocal residence whereby a newly formed family will move in with the family of the mother/wife. From my own observations deviations from the practice are fairly rare. According to Philippe Erikson (personal communication) this practice procures social importance to daughters to the extent that social influence and power in a community is a function of the size of one's family. Sons are more likely to leave and relocate.

1.4. HISTORY

The Chácobo are southern Panoans along with the Pacahuara (or "Pacaguara"). A few other groups appear in the historical record such as the Caripuna and the Sinabo. It is not clear whether the contemporary Chácobo should be identified with the Pacahuara present in the historical record. Here I provide a brief overview of what is known about the ethnohistory of southern Pano-speaking groups in Bolivia from first contact until the present time. I refer the interested reader to Córdoba (2008) (and other works published by Lorena Córdoba and Diego Villar) which reconstruct the ethnohistory of Bolivian Pano groups based on a rich and incisive investigation of ethnographic literature and archives in Bolivia together with original fieldwork.

Relatively little is known about pre-1950s Southern Panoan history. In 1767, the explorer Lorenzo Hervás described the *pacabara* language spoken in San Borja (south of the current location of the Chácobo and Pacahuara speakers). In the 1780s, there were numerous reports of the Pacahuara attacking San Borja and Reyes. In 1790, Nicholas Armentia with the Franciscans visited the Pacahuara (Córdoba 2008; 28 from Armentia 1903: 253). Throughout the late 18th century and early 19th century the Pacahuara are mentioned usually in relationship to conflicts with mission outposts. The term Chácobo is mentioned for the first time in 1845 by the explorer José Agustin Palacios. They were described with reference to a group living on the Yata river and Palacios was never able to visit them because his guides refused to go down the river. Starting in the 1850s, Panoan

groups (Pacahuara, Chácobo, Capuibo, Caripuna, Sinabo) are mentioned in the context of armed conflicts, and in 1860 the national army was sent in to control a rebellion of Pano speaking groups.

By the 1870s the rubber boom reached Beni, and indigenous people around the area are either enslaved or beguiled into debt peonage or systematically hunted down (Fifer 1960; Córdoba 2012). Throughout this period the Chácobo are considered a subtribe of the Pacahuara. In the early 1900s, the price of rubber falls and then Panoan groups stopped being mentioned in the historical record.

In 1912, Erland Nordenskiöld visited the Chácobo and wrote an ethnography. Panoan speaking groups again essentially disappeared from the historical record until they were visited by Wanda Hanke (1956). By this time the Chácobo were considered a separate group from the Pacahuara, although earlier accounts described them as a subgroup of the latter (Nördenskiold [2003] and Métraux [1942], cited in Córdoba & Villar [2013: 177]). Other Panoan groups had vanished from the picture by this time. The Caripuna were described as being able to muster an army of 10,000 warriors in the 19th century but had completely disappeared and Hanke was unable to locate the Pacahuara. The literature on Panoan ethnohistory emphasize that the use of ethnonyms reflects the goals and understanding of colonizers, missionaries, rubber tappers and explorers (Córdoba and Villar 2010; Córdoba 2008). The shifting terminology used to refer to Panoan groups reflects such understandings at least as much as it tells us anything about the actual history

of the groups in question. For instance, Erikson (1993) emphasizes that these broad stroke ethnonyms likely ignore intermediate levels of social structure such as clans.

The 1950s saw a new era in contact with outsiders as the Summer Institute of Linguistics missionaries arrived in Bolivia using the Tumichucua (about 25 kilometers south of Riberalta) as their base in 1954. In 1955, Gilbert and Mirian Prost initiated a 25-year stay. At the time of contact with the SIL missionaries the Chácobo were located primarily on the Benicito and Yata rivers although many had started to migrate back west towards the Ivon and Geneshuaya rivers. Older Chácobo report that the community of Nucelo close to the Ivon river was founded by the Chácobo slightly earlier, but the Prost family encouraged many Chácobo to relocate from the Benicito river, founding the new community of Alto Ivon in 1956 where rubber tapping and almond extraction offered more integration into the regional economy. Other Chácobo stayed on the Yata river (approximately 70) and the Benicito river (approximately 210). The SIL missionaries acted as intermediaries between the Chácobo and the national government. This was important after 1952 when a revolution put a government in power that was concerned with land redistribution and nationalization.

As described by Córdoba (2008), apart from missionizing efforts, the SIL missionaries also attempted to eliminate matrilocality and introduce a pastoral life style to the Chácobo in imitation of an idyllic image of rural Anglo-Saxon society. One practice that the missionaries introduced that the Chácobo unequivocally adopted is the dawning of European clothes. On the other hand, the Chácobo continue to be essentially matrilocal and

pastoral life has not taking hold systematically, except for a few projects run by the CIRABO. The most lasting effect of the missionary influence apart from relocation was the establishment of the Ortiz family in power. While a number of families exert various degrees of influence over the TCO, Rabi Ortiz ("Toro") and Maro Ortiz ("Coni") are clearly the most influential Chácobo politicians. Coni is the head chief (gran capitán) of the Chácobo TCO, and Toro is the president of CIRABO, which is an NGO in Riberalta that represents the Chácobo, the Cavineña, and the Araona.

In the 1980s and 1990s indigenous people began to organize for territorial, cultural and civil rights across Bolivia. In the 1980s, CIDOB (Confederación de Pubelos Indígenas de Bolivia) was formed with it's educational wing CEAM (Confederación Educativo Amazónico Multiétnico) and CIRABO (Central Indígena de la Región Amazónica de Bolivia). The indigenous movement "Marcha por el territoria y la dignidad" eventually resulted in the creation of "Original Communitarian Lands" for each indignous group.

During the 1990s there was a favourable international scene. In Convention 169 the International Labor Organization recognized the aforementioned indigenous organizations. This allowed the indigenous groups to protest government policies when they were not in accordance with indigenous rights according to the convention (see Herrera et al. 2003 for more details). Throughout the 1990s, CIDOB started to organize with the left resistance to the government which consisted of an alliance between coca growers and tin miners. Coalitions between indigenous groups and labor eventually culminated in the historic

election of Evo Morales in 2006 the leader of the Movimiento al Socialismo and the first indigenous president of Bolivia (Webber [2010, 2017] for more details).

The MAS government began the process of forming a new constitution and created new laws that were designed to protect indigenous languages and cultures. The law of the 2nd of August called "General law for linguistic rights and policies" (ley general de derechos y políticas lingüísticas) established 36 indigenous languages of Bolivia as official languages and made it a constitutional prerogative to "recuperate, vitalize, revitalize and develop official languages in risk of extinction, establishing materials for its use in all of its aspects...". To follow through with this prerogative, the government established the Plurinational Institute of Language and Culture (El Instituto Plurinacional de Lengua y Cultura) which is itself tasked with the creation of lower level Institutes of Language and Culture (ILCs) for each indigenous group.

The Chácobo and Pacahuara ILCs were established with paid Chácobo researchers in 2012. Their goal is to document the Chácobo and Pacahuara languages and develop educational materials. The contemporary Pacahuara are a distinct group from the Chácobo.

1.5. GENETIC AFFILIATION

The Pano family was first proposed by Raoul de la Grasserie (1890) based on a cognate list of 90 forms. A tentative reconstruction of the Pano family was conducted by Shell (1965, 1975). This reconstruction was tentative because it excluded the Mayoruna branch

of the family. Shell refers to it as "Reconstructed Pano" rather than "Proto-Pano". An updated and new reconstruction of the family has been proposed by Oliveira (2014). Oliveira (2014: ch.1) also provides a critical summary of the comparative Pano literature (Loos 1999; Fleck 2013; Zariquiey & Valenzuela *forthcoming* for more overviews of the family).

Pacahuara was identified as a Panoan language by Raoul de la Grasserie (1890). Chácobo is one of the languages that Shell (1965/1975) uses in her reconstruction of Reconstructed Pano. Chácobo is a part of the Bolivian subgroup of the Nawa group of the Mainline branch of Pano. A highly simplified classification of some of the better described and extant Panoan languages is reproduced from Fleck (2013) below.

Based on an analysis of the typological features present in WALS supplemented by additional information from alignment facts across Panoan languages, Valle (2013) suggests that Chácobo is one of the most divergent Panoan languages and could be regarded as its own subgroup from the Mainline branch based on a neighbor net analysis (he does not consider Pacahuara for which the relevant data are not mentioned). However, Chácobo and Pacahuara, unlike many other Panoan languages in Peru and Brazil are currently in not contact with other Panoan languages. Its possible that the divergence is areally based rather than genetically based.

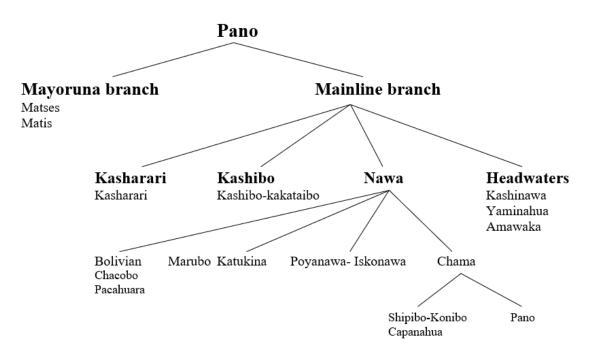


Figure 1.2. The Panoan language family, simplified from Fleck (2013).

Based on a historical analysis of tonogenesis in Panoan, Neely (2017) has suggested that Amahuaca has much more in common with the Bolivian subgroup, a position she states is potentially supported by structural similarities in the verb complex between Chácobo and Amahuaca. Based on my understanding of the Amahuaca literature (e.g. Sparing-Chávez 1998; Clem 2018), I find this proposal very plausible, however, the issue clearly requires more serious attention and awaits a more extensive documentation and description of Amahuaca.

Affinities between Panoan and Takanan languages of northern Bolivia have been noted in the literature. Key (1968) and Girard (1971) provided reconstructions of some Proto-Pano-Takanan morphemes. Girard reconstructs (1971) 116 vocabulary items for

Proto-Pano-Takanan. 29 of these are "basic vocabulary" from the 100 core vocabulary items on the Leipzig-Jakarta word list, which consists of vocabulary items which are least likely to be borrowed (Haspelmath and Tadmor 2009). This provides some evidence for a distant genetic relationship between the two families, however, more research in the reconstruction of Panoan and Takanan is needed in order to earnestly assess the hypothesis. A summary of the literature on the Pano-Takana hypothesis is provided in Zariquiey and Valenzuela (forthcoming).

1.6. PREVIOUS WORK ON THE LANGUAGE

Apart from some early wordlists (e.g. Hanke 1954, 1956), work on Chácobo grammar began with the SIL missionaries. Prost (1960, 1967a) provides a phonemic inventory of the language. Prost (1965, 1976b) provides a description of Chácobo in a tagmemic grammar framework. Prost (1962) is a brief overview of some of the transitivity marking in Chácobo grammar that mentions ergative case marking, transitivity harmony and same subject marking. Zingg (1998) published a Spanish-Chácobo, Chácobo-Spanish dictionary of the language which contains a brief grammatical sketch. There are no substantial differences (analytic or terminological) between Prost's and Zingg's descriptions from what I can discern except that Zingg's work is more accessible by virtue of not being written in a tagmemic framework.

Pilar Valenzuela and Oliver Iggesen published a few articles on Chácobo. Valenzuela (2005) provides a description of the participant agreement system. Valenzuela & Iggesen (2007) provide a description of Chácobo's case marking system comparing it to Shipibo-Konibo. Unpublished articles by these authors are Valenzuela (2004) and Iggesen (2006, 2007). Córdoba, Villar and Valenzuela (2012) provide a grammatical sketch of Chácobo which seems to be based on Zingg (1998) and Valenzuela's work. A few short texts are also provided in Córdoba et al. (2012). These works did not produce any substantial corpus or documentary record of the language and seem to be based primarily on elicitation data.

Various anthropological works touch on linguistic issues, such as greetings (Erikson 2010), joking (Villar 2012, 2013), onomastics (Córdoba 2008; Córdoba and Villar 2013), and terminology surrounding death and shamanism (Villar 2004). Brian Boom's work on the Chácobo ethnobotany is also a rich source of lexical material (Boom 1996).

1.7. FIELDWORK

I was introduced to the Chácobo language by Antoine Guillaume in 2010 at the 3L International Summer School of Language Documentation and Description (Leiden University Center for Linguistics, July 5-7, 2010). With help from Dr. Guillaume and funding from Laboratoire Dynamique du Language I was able to undertake a pilot study with the Chácobo in 2011. I received letters of support to work with the Chácobo in Alto

Ivon from CIDOB (Santa Cruz) and CIRABO (Riberalta) and arrived in Alto Ivon for my first field trip in June 2011. Dr. Guillaume provided me with guidance throughout the field research and representatives from CIDOB and CIRABO were also instrumental in this regard as well.

In the summers of 2012-2013 I received funding from various sources from the University of Texas at Austin to continue work with the Chácobo (Sherzer fellowship, Carlota Smith Grant, Lozano Long Fellowship). In 2014 I received NSF and ELDP grants to begin longer and more extensive fieldwork with the Chácobo.

Table 1.2. Fieldtrips between 2011 and 2017

| | Time | Months |
|--------|---------------------------|--------|
| Trip 1 | June 2011-July 2011 | 2 |
| Trip 2 | June 2012-August 2012 | 3 |
| Trip 3 | July 2013-August 2013 | 2 |
| Trip 4 | September 2014 – May 2015 | 9 |
| Trip 5 | March 2016 – October 2016 | 6 |
| Trip 7 | June 2017 – August 2017 | 3 |
| Total | | 25 |

Audio and video recordings were made on a Zoom 4N recorder and a Vixia HD camcorder. Each recording was assigned a code chapac xxxx and then backed up on my

computer and two external hard drives. Most texts were transcribed and translated directly into the text-to-audio program ELAN. Some speakers were trained in ELAN and were able to transcribe and translate texts directly. Philippe Erikson provided a few recordings some of which were transcribed and translated and are part of the corpus that serves as the empirical base for this thesis. Naturally occurring speech, usually observed in the context of participant observation, was also written down in physical notebooks. Data from elicitation was written in notebooks and in some cases directly into a word processor.

Fieldwork was conducted in Alto Ivon, Cachuelita, Motacusal, Las Limas Tokio, Las Palcas, San Ignacio, Palmeras, Paraíso, Siete Almendros and Riberalta. Because of differences in access to electricity, certain field locations are more amenable to certain types of research activities. For instance, because I used ELAN for transcription and translation, most transcriptions and translations were conducted in Riberalta and Alto Ivon where there is ready access to electricity. Recordings of naturalistic speech were made throughout the communities in the TCO. Table 1.3 provides a summary of the research activities and the time spent in each of the communities. For basic descriptions of the different types of research activities and data collection techniques see Section 1.8.

Table 1.3. Locations, time spent and research activities across Riberalta and Chácobo¹ villages

| LOCATION | APPROXIMATE TIME | RESEARCH ACTIVITIES |
|-------------------|------------------|---|
| | SPENT | |
| Riberalta | 9 months | Text work, elicitation, storyboards |
| Alto Ivon (Ivon | 7 months | Text work, elicitation, production tasks, |
| river) | | storyboards, dynamic interviews, naturalistic |
| | | speech recording |
| Siete Almendros | 1 month | Naturalistic speech recording, dynamic |
| (Benicito) | | interviews |
| Cachuelita | 2 months | Naturalistic speech recording, dynamic |
| (Geneshuaya) | | interviews, elicitation |
| Palmeras (Yata) | 1 month | Naturalistic speech recording, dynamic |
| | | interviews, elicitation |
| Paraiso (Yata) | 1 month | Naturalistic speech recording, dynamic |
| | | interviews, elicitation |
| Motacusal | 1 week | Naturalistic speech recording, dynamic |
| (Ivon/Geneshuaya) | | interviews |

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¹ Note the time spent conducting research does not add up to the total time spent in the field because the latter also conists of time spent in La Paz dealing with VISA issues.

Table 1.3, cont.

| Las Limas | 2 days | Naturalistic speech recordings, dynamic |
|--------------------|--------|---|
| | | interviews |
| Tokio (Ivon) | 1 day | Naturalistic speech recording, dynamic |
| | | interviews |
| Las Palcas (Ivon) | 1 day | Naturalistic speech recording, dynamic |
| | | interviews |
| San Ignacio (Ivon) | 1 day | Naturalistic speech recording, dynamic |
| | | interviews |

I also made several field trips to Puerto Tujuré, the one Pacahuara community approximately one hour by motorcycle from Alto Ivon.

1.8. DATA AND CORPUS

The primary data for this thesis is 26 hours of naturally produced speech transcribed and translated in ELAN. The analysis is supplemented by a variety of field methods. I divide these into 6 general types (production experiments; elicitation; targeted construction story boards; dynamic interviews; natural speech recordings and text analysis; participant observation). Below I briefly discuss these sources of data roughly on a continuum from

the most controlled to the most naturalistic observations. The vast majority of the data from the project has been archived and deposited at ELAR.

1.8.1 Production Experiments

Production experiments consist of stimuli meant to elicit specific structures or properties in a target language. Production experiments were used in order to gather controlled data to analyze the phonetic contrast between stress and tone categories in Chácobo (Tallman & Elias-Ulloa 2017). I also used the MPI picture and video stimuli in order to elicit specific structures of typological interest and enrich the documentary record generally (e.g. Levinson et al. 1992; Bohnemeyer et al. 2001; Bowerman et al. 2004).

1.8.2 Elicitation (translation tasks and context-induced)

Elicitation is used in the initial stages of research in order to develop a basic vocabulary of the language. In more advanced stages of research elicitation can be used to test specific hypotheses grammatical structure that emerge from text analysis. Following Matthewson (2004), I view careful elicitation as an important source of negative evidence. Furthermore, context-induced semantic elicitation can help reveal details of semantic structure that cannot easily be inferred from text data. Literature on formal semantics have developed a number of diagonistic tests for investigating semantic structure (Waldie et al. 2009; Bruil

2015) that I use to probe certain aspects of Chácobo grammar that are not easily discernible from text data.

1.8.3 Targeted construction story boards

Targeted construction storyboards consist of pictorial representations of stories that consultants are asked to describe in their own words. They are used to reduce the influence of the metalanguage in the elicitation of specific constructions (cf. Burton and Matthewson 2015). Data from storyboards are intermediate in naturalness between elicitation data and naturalistic speech. They allow the linguist to elicit specific constructions within a more natural discourse context without relying on the chance occurrence in elicitation, or problems in the interpretation of elicited data. I developed storyboards from those found in the Totem Field Storyboards http://www.totemfieldstoryboards.org/stories/. I used and modified existing story boards in order to investigate the semantics of tense, aspect, number and modality.

1.8.4 Dynamic interviews

Dynamic interviews involve two or more participants where one participant asks questions related to common Chácobo cultural activities (when was the last time you went fishing? what did you catch?), questions that are meant to elicit narratives at different temporal distances from the speech time (what were you doing about a month ago? What were you

doing two weeks ago? What do you plan to do tomorrow/in a week?), and questions that are meant to elicit speaker perspectives (recount a story that you heard that you don't believe is true and explain why? Have you ever seen a ghost? How did you know it was a ghost?). Some of the questions were about stories that had already been relayed to my interviewing consultants earlier. The interviewing consultants were instructed to attempt to maintain a dialogue with the other speakers in order to record more conversational speech. Ostensibly the purpose of recording discourse at distinct temporal distances was to better understand how tense, aspect, temporal adverbials, and temporal distance morphemes (or "graded tense" morphemes) were encoded, and their relationship to perspectival meanings such as reported evidentials and assertive modals. This was important because the corpus developed from the first year of fieldwork was biased towards traditional folk stories, which are always in the remote past. The aforementioned interviews were designed to gather more data about the use of temporal distance morphemes in the distant and recent past times, and the crasternal ("tomorrow") and remote future times. While such interviews were meant to capture more interactional speech, it should be noted that it is difficult to separate interactional speech registers and monologues at all in my corpus. The reason is that even in oral histories and folk stories, where one might expect longer uninterrupted monologues, the Chácobo consistently engage in conversation throughout, asking clarifying questions to the main speaker, and sometimes stopping to discuss interpretation of a story in the case of folk stories.

1.8.5 Natural speech recordings and text data

As stated above, the description of Chácobo presented in this thesis is based on 26 hours of transcribed and translated naturalistic speech. What I refer to as natural speech recordings fall into 5 categories; (i) folk stories; (ii) personal narratives; (iii) ethnohistory; (iv) conversations and (v) explanations of cultural activities or instructions on indigenous technologies. Together with dynamic interviews and participant observation, naturalistic speech in this sense constitutes the primary data source from which the descriptions of this thesis draw. A list of all of the texts used in this dissertation is provided in Table 1.5 which contains information on the length of the recording, the type of recording it is and the language. I also include the texts for Pacahuara in this list, although they are not used in the dissertation which focuses on Chácobo. Descriptions of these recordings along with relevant metadata can be found on the ELAR deposit page for Chácobo and Pacahuara (https://elar.soas.ac.uk/Collection/MPI485795). Table 1.5 also contains the ELAR code for each transcription/translation used in this dissertation. These codes will be referenced throughout the thesis when data from a given text is presented.

1.8.6 Participant observation

My field work also involves observation of the language in its natural context by living in the communities and partaking in cultural practices (Cover 2015 on participant observation). Most data observed in this fashion was written in a notebook rather than recorded in audio or video format. Participant observation also brought important cultural and social context into the analysis of linguistic structure.

1.9. LANGUAGE DOCUMENTATION, COMMUNITY PARTICIPATION AND LINGUISTIC CONSULTANTS

This dissertation is part of documentation project of the Chácobo language. Apart from the development of a corpus mentioned above this project involved developing a large collection of audio and video recordings and the production of texts for community use. The project also involved participation of community members throughout and the training of community members in documentation techniques such as ELAN. Many of the texts listed in Table 1.5 were transcribed by Chácobo community members (Paë Yaquë Roca and Caco Moreno Ortiz). The documentary materials with metadata have been deposited at ELAR.²

The analyses presented in this dissertation are influenced by all members of the Chácobo community that participated in the documentation project. Some speakers have had more influence over the analyses than others because I interacted with them most and/or they were primary consultants in elicitation contexts where subtle aspects of the grammar were teased apart. Some brief biographical information on these speakers are

² The collection can be found at the following URL: https://elar.soas.ac.uk/Collection/MPI485795

presented below. They are mentioned throughout the dissertation in cases where they have provided relatively explicit judgments and insights concerning certain constructions in Chácobo grammar. Occasionally my primary consultants have disagreed about the grammaticality of certain constructions. I consider such disagreements to provide important evidence concerning dialect variation in Chácobo.

Caco Moreno Ortiz lived in Alto until the 2000s when he moved to Riberalta to teach the Chácobo language. He has taught at a number of institutions of higher education in Riberalta. He has been collaborating with Phillip Zingg in creating a new dictionary of the Chácobo language as a co-author for a number of years. He is currently 56 years old. Caco Moreno helped with elicitation tasks and targeted construction story boards. He speaks a central dialect of Chácobo from Alto Ivon. Caco Moreno currently lives in Riberalta.

Miguel Chávez Ortiz is a Chácobo language teacher who was born in Alto Ivon. He lived various years as a medic in Siete Almendros (Benicito River) and Paraíso (Yata river). He taught Chácobo at the Instituto Superior Normal Riberalta. He has been a primary school teacher in various Chácobo communities including Cachuelita and Motacusal. He is approximately 40 years old. Miguel Chavez helped with elicitation tasks, targeted construction story boards and was an interviewer in dynamic interviews. He primarily speaks the central dialect of Chácobo from Alto Ivon. He is currently a primary school teacher in Alto Ivon where he lives.

Milton Ortiz Vaca is the coordinator of the Pacahuara Institute of Language and Culture. He was a primary school teacher in Alto Ivon until 2013. Milton Ortiz helped with elicitation tasks, targeted construction story boards and was an interviewer in dynamic interviews. He primarily speaks the central dialect of Chácobo from Alto Ivon. Milton Ortiz currently lives in Riberalta.

Paë Yaquë Roca is a student pursuing a bachelor's degree in Alto Ivon. His father is Pacahuara (Maro Yaquë Chao) and his mother is Chácobo (Bosi (Christina) Roca Chávez). He speaks Chácobo and has a passive knowledge of Pacahuara. He lived in Puerto Tujuré (Pacahuara community) until he was 6 years old. Later in life he lived in Cachuelita and received his high school diploma from Alto Ivon. He is 22 years old. Paë Yaquë helped with elicitation tasks, targeted construction story boards and was an interviewer in dynamic interviews. He also transcribed in ELAN a significant amount of the corpus (aproximately 6 hours) on which this dissertation is based (see ELAR documentation for details). He also served as my assistant in workshops on ELAN taught in Riberalta. He currently lives in Alto Ivon.

1.10. Typological overview

Chácobo has relatively small segmental phonological inventory and a very restricted syllabic structure. Complex codas are prohibited, and only sibilants are permitted in coda positions. Stress is assigned to the first syllable of a stem by default and on the second syllable of a stem if there is there is an underlying high tone in this position. Chácobo makes a phonological contrast between syllables with high tone and syllables without tone. The distinction is lexical in Chácobo and the language contains a number of tone-based minimal pairs that demonstrate the phonological contrastiveness of tones down to the level of the morpheme. Toneless syllables are assigned a low pitch. The acoustic correlates of stress are intensity and pitch and the acoustic correlates. The dual function of pitch in the stress and tone system resulted in the language being described as containing three tones, but it can be demonstrated that it only contains one contrastive high tone.

The complexity in the tonal system does not stop there. Chácobo marks case relations with high tones and various morphosyntactic domains are signaled by the differential insertion or reduction of high tones. Tone sandhi in Chácobo is highly complex and interacts with the alignment system.

Chácobo can be loosely characterized as agglutinating in the sense that in most cases one coherent meaning corresponds can be associated with one form. Deviations from biuniqueness present themselves in a number of places in the grammar. Prefixes interact with transitivity markers such that the prefixes sometimes seem to have a transitivizing

function and sometimes not. In certain syntactic contexts high tone case markers are deleted through tone reduction rules leaving only their tone sandhi effects on other morphemes as exponents of their realization. Chácobo contains "epenthetic" case formatives on its pronouns which seem to have no function but to meet conditions of phonological minimality.

Where a language is positioned on the analytic-(poly)synthetic continuum depends on a notion of word and/or how the linguist cuts the division between "morphological" and "syntactic" phenomena. I view much of the grammar of Chácobo as straddling the boundary between morphology and syntax such that a global distinction between words and phrases and morphology and syntax is perhaps unmotivated on language specific grounds. Symptomatic of this type of profile, the grammar of Chácobo will be presented as ubiquitously built out of clitics.

The Chácobo language contains a complex system of "graded tense" expressed through morphemes that encode various degrees of temporal distance from a reference time (up to 9 distinctions). Their behavior in discourse suggests that they straddle the boundary between tense and aspect categories. Chácobo encodes aspectual categories through a variety of constructions and morphemes, but most striking from a typological perspective through word order. Result perfect readings are achieved through positioning the subject after a clause-type/rank morpheme; a morpheme which is obligatory in verbal predicate constructions.

Chácobo displays a split ergative alignment. The first split is conditioned by nominal type such that full noun phrases are ergative-absolutive and pronouns are nominative-accusative. The alignment is neutralized when the subject {A,S} argument appears after the aforementioned clause-type/rank morpheme. Another typologically salient characteristic of Chácobo that is present in other Panoan is its participant agreement system and its same/different subject marking. Chácobo marks certain adjuncts as associated with an A or an S argument. The system extends to clause-combination where subordinators encode whether their subject is coreferential or different from an A or an S of a matrix clause. Like many languages of South America, tail-head linkage, whereby the information from a preceding sentence is partially repeated in the following sentence, is common in Chácobo discourse.

1.11. SOME TENTATIVE NOTES ON PACAHUARA OR TAPANAHUA

As described in Section 1.2 Pacahuara now refers to a family that originally lived in the department of Pando. The Pacahuara language refers to the language that this family speaks. It is unclear what the relationship is between the Pacahuara of the historical record (Section 1.4) and the Pacahuara that is used today (see Córdoba 2008 for discussion).

In the 1970s the Pacahuara were being massacred by loggers in the department of Pando.³ The SIL missionary Gilberto Prost convinced to come live near the Chácobo and around 1980 they moved. After this family were flown by the SIL missionaries to the Chácobo territory, the Pacahuara lived in a community called Puerto Tujuré. Having conducted interviews with the Pacahuara myself, it seems that Pacahuara is an exonym that was applied to this group by the Chácobo, SIL missionaries and probably local Bolivians. According to Baji Yaquë Chao, the family referred to themselves as the Tapanahua (lit. almond people). It is not clear to me whether the Tapanahua family referred to themselves an Pacahuara before escaping the department of Pando.

The Pacahuara language is extremely endangered. When I began fieldwork with the Chácobo and Pacahuara in 2011, there were 6 members of the Tapanahua family; Bosi (siri) Yaquë Chao, Baji Yaquë Chao, Boca Yaquë Chao, Bosi (pistia) Yaquë Chao, Maro Yaquë Chao, Tohi Yaquë Chao. The oldest of the Tapanahua still alive was Bosi Yaquë Chao (also known as *Bosi siri* or "old Bosi"), who had flown from Pando when she was a teenager. The rest of the Pacahuara were children when they left their home territory. Since then the Pacahuara have gradually integrated with the Chácobo. As of now (2018), none of

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³ The sources for this are the Pacahuara themselves. It is confirmed by Shell (1980). I conducted fieldwork with the Araona in 2016 who reported similar massacres south of Pando in the Amazonian department of La Paz.

the Pacahuara live in Puerto Tujuré except Boca Yaquë. Tohi Yaquë and Maro Yaquë intermarried with the Chácobo.

Second generation Pacahuara do not speak Pacahuara to my knowledge. Although it is clear many of them have a passive knowledge of the language. I collected numerous recordings of speech from the Tapanahua family throughout my fieldtrip two and a half hours of which were transcribed and translated (see Table 1.5 below). The Tapanahua family are bilingual between Chácobo and Pacahuara. The Pacahuara recordings were usually done with a Chácobo interviewer. It is thus not clear to me at this point how much of these recordings should be considered Pacahuara or Chácobo spoken with some interference from Pacahuara.

Pacahuara is regarded as a dialect of Chácobo in the Pano literature (Fleck 2013: 77). However, this characterization maybe misleading. It might be more accurate to refer to Chácobo and Pacahuara as distinct languages.

Throughout the transcription and translations of the speech of the Tapanahua family, there are some recordings (especially those of Bosi (siri) Yaquë and Baji Yaquë) that many of the Chácobo claim to not understand very well. However, second generation Pacahuara did not struggle as much as the Chácobo with the transcription and translation of the recordings of Tapanahua speech. Furthermore, some Chácobo report that mutual intelligibility between the Chácobo and the Pacahuara was quite low when the Tapanahua family arrived in the 1980s, and that Boca Yaquë had to serve as a translator between the Chácobo of Alto Ivon and the Tapanahua family living in Puerto Tujuré.

Analysis of Pacahuara grammar is methodologically challenging because of the possibility of interference of Chácobo due to heavy and sustained contact. It is outside the scope of this dissertation to provide a description of Pacahuara.

Some salient phonological and phonetic differences between Chácobo and Pacahuara are summarized below (see Chapter 2 and 5.3.4.4 for a description of phonology in Chácobo).

• Glottal stop in first or second syllable: In Chácobo vowel-vowel sequences glottal stops do not occur in coda position. In Pacahuara a glottal stop occurs in the coda position of the first syllable of a lexical item as in (1.1). It is unclear whether this is related to metrical structure or prominence. In Pacahuara the glottal stop does not occur when the first syllable has the highest pitch (or high tone?) as shown in (1.2). For some lexical items a glottal stop occurs in between vowels as the onset of the second syllable as in (1.3).

| (1.1) | | Chácobo | Pacahuara | |
|-------|----|----------|------------|-------------|
| | a. | ká.tì | ká?.tì | 'back' |
| | b. | ká.şò | kà?.şó | 'spine' |
| | c. | há.nà | hà?.ná | 'mouth' |
| | d. | pī.pà.tí | pì?.pā.tí? | 'shoulders' |
| | e. | kà.ní.kò | ká.?.nì.kó | 'cup' |

| (1.2) | | Chácobo | Pacahuara | |
|-------|----|----------|---------------------|---------------------|
| | a. | tí.mà.kì | tí.mà.kì | 'She/he grounds it' |
| | b. | βá.tʃì | βá.tʃì | 'egg' |
| | c. | tʃó.mò | ∫ ^j ó.mò | 'container' |
| (1.3) | | Chácobo | Pacahuara | |
| | a. | kò.í.nì | kò.ʔī.ní | 'smoke, snow' |
| | b. | rà.ì.tí | rà.?í.tì | 'clothes' |

• i:i correspondence: Across some cognate forms, the /i/ of Chácobo is pronounced as
[i] in Pacahuara. The Pacahuara [i] in place of Chácobo [i] appears to occur word
finally.

| (1.4) | | Chácobo | Pacahuara | |
|-------|----|---------|----------------|----------|
| | a. | pį́?ì | pí?ì | 'wing' |
| | b. | nò.kí | nò?.ki̇́~nókì̀ | 'we, us' |
| | c. | kɨwi | kɨwɨ | ʻjaw' |

• **k:k**^w **correspondence**: Across some cognate forms, the /k/ of Chácobo is pronounced as [k^w] in Pacahuara. The only form this is attested in is [kwáɾò] 'lumber'.

The difference between Chácobo and Pacahuara with respect to glottal stops make some sense from a comparative Pano perspective. A coda position glottal stop is reconstructed in Proto-Pano for certain lexical items (Shell 1980: 55; Oliveira 2014: 198). While a k^w:k correspondence is found across some cognate sets (Shell 1980: 56; Oliveira 2014: 200-204), the k^w in *kwaro* 'lumber, firewood' is not attested in any other Pano languages (Oliveira 2014: 428). A i:i correspondence is also found across some cognates in Pano (Oliveira 2014: 294-295).

The surface pitch patterns of Pacahuara lexical items elicited in isolation tend to be distinct from Chácobo in all cases. Nearly all of phonological differences stated above make reference to the supposed prosodic categories (prominent syllable, tone, stress) of Pacahuara. But the prosodic system of Pacahuara is not understood and so the statements are at best tentative starting points for analysis. Pacahuara also displays a number of lexical differences with Chácobo. A description of such differences requires checking with multiple Pacahuara and Chácobo consultants. Pacahuara should be studied in its own right not as derivative or dialectal variant of Chácobo.

1.12. Presentation of data and glossing conventions

In this section I discuss the notational conventions in this grammar related to the presentation of data and examples; (i) the phonemic orthographic representation used in this dissertation and how it deviate from the IPA and the orthography used by most of the

Chácobo (Section 1.12.1); notation related to suprasegmental categories (Section 1.12.2); the representation of underlying versus surface forms (Section 1.12.3); notational conventions related to structural categories such as suffixes, clitics, words and compounds (Sections 1.12.4, 1.12.5, 1.1.1 and 1.1.1). With a few exceptions I follow the Leipzig glossing rules in this grammar (Comrie et al. 2008). I discuss the exceptions below.

1.12.1 Orthographic conventions

As pointed out in the introduction, the Chácobo have different degrees of literacy across their population. The Chácobo use a Spanish-based alphabet invented by the missionary linguists Gilbert and Miriam Prost from the Summer Institute of Linguistics. The Chácobo translation of the bible and numerous religious texts make use of this alphabet. The swiss missionary Philipp Zingg from the Swiss mission continued to use this alphabet when he entered the Chácobo community in the 1980s.

| CD 11 | 1 1 | α_{1} , 1 | .1 | 1 . |
|--------|------|------------------|----------|----------|
| Table | 1 /1 | Chácobo | orthogra | nhiae |
| 1 autc | 1.T. | Chacooo | ormogra | σ |

| IPA | Prost/Zingg | In this dissertation |
|---|--|----------------------|
| i | ë | i |
| i | i | i |
| o | o | o |
| a | a | a |
| p | p | p |
| t | t | t |
| k | c (before a and o) / qu (before i and i) | k |
| 3 | h | 3 |
| β | ь | b |
| ts | ts | ts |
| $\mathfrak{t}\mathfrak{f}^{\mathfrak{j}}$ | ch | tſ |
| S | S | S |
| ſ | sh | ſ |
| ş | x | ş |
| h | j | h |
| ſ | r | r |
| m | m | m |
| n | n | n |
| W | hu | W |
| j | у | У |

The reason I do not adopt the Spanish based missionary orthography in this thesis is because it is not phonemic (see Chapter 2). In the orthography used here one sound corresponds to one symbol. In phonemic representations, I adopt the standardized Pano orthography of Fleck (2013) with two exceptions. I do not adopt any representations that are not phonemic. I do not use <sh> and <x> for /ʃ/ and /ɛ/, rather I use the IPA symbols. I do not adopt the vowel <e> for [i]. Instead I use the IPA symbol. The reason for the latter decision is because I want to reserve <e> for cases where Spanish forms with /e/ are found in naturalistic speech.

1.12.2 Tone, stress and length diacritics (\acute{V} , \grave{V} , \bar{V} , \dot{V} ,

The symbols "V" and "C" represent vowels and consonants respectively. The acute accent marks on a vowel (\acute{V}) marks high tone or high pitch on its associated syllable. Phonologically Chácobo only contrasts syllables with high tones and toneless syllables. The grave accent (\grave{V}) and the macron ($\~{V}$) mark low pitch and mid pitch respectively. They are needed to describe phonetic representations (see Section 1.12.3) that arise from the interaction of stress with tone (see Chapter 2 for illustration). They are never used for underlying phonological forms. Stress is predictable in Chácobo. The primary stress symbol ('(C)V) is only used for phonetic representations and will be marked only where it is relevant to a specific point being made. Length is not phonologically contrastive in Chácobo. However, certain vowel-vowel sequences are pronounced as uninterrupted long

vowels. In relevant cases these forms will be marked with the length diacritic (V:) (see Chapter 2 and 5.3.4.4 for illustrative examples).

1.12.3 Underlying phonemic surface phonemic and phonetic representation

There are two ways of displaying examples used in this grammar. The first combines an **underlying phonemic representation** with a **surface phonetic representation**. When the difference between the surface and underlying form is important, the underlying phonemic representation occurs under the phonetic representation in square brackets. This presentational style is illustrated in (1.5). The mapping between the underlying phonemic representation and the phonetic representation is described in detail in 5.3.4.4 which describes the morphophonology of Chácobo.

When the difference in underlying and surface form is not important, the Chácobo is displayed in a surface phonemic representation which appears in italics. An illustration of this representation is provided in (1.6) below.

The illustrative displays in (1.5) and (1.6) are representing the same utterance. The surface phonemic representation in italics from (1.6) does not display information in the same way as the underlying phonemic representation illustrated in (1.5). The phonemic representation contains all of the underlying high tones of all of the morphemes in the sentence, even when they are deleted on the surface. The phonemic representation of (1.6) only displays high tones as they appear on the surface. For instance, the underlying final high tone of the morpheme = fari 'crasternal, tomorrow' is deleted through a tone sandhi rule (see Section 6.2.3) and thus does not appear on the surface. In contrast, the phonemic representation in (1.5) contains the underlying high tone, the surface form being captured in the phonetic representation.

Chácobo also has a number of latent final stops that only surface in certain circumstances (see Section 6.1.2). For instance, the latent nasal /n/ of =tikin 'again' is dropped in certain environments where it surfaces as [tiki]. In surface phonemic representations a dropped consonant is represented in parentheses as in (1.6). In underlying surface phonetic representations it is not represented at all, because such representations

always accompany an underlying phonemic representation where it be displayed as in (1.5).

In the surface phonemic representation, tones that encode grammatical functions are represented differently from tones that do not. For instance, the high tone = is represented as undocked in (1.5). This is exception is made in order to more easily gloss examples in the surface phonemic representations.

1.12.4 The hyphen (-) in glossing

Following Rule 2 of the Leipzig glossing rules, the hyphen is used to mark an affix boundary. Prefixes occur with a hyphen on their right edge and suffixes are displayed with a hyphen on their right edge. The definition of an affix used in this grammar is provided in Section 3.2.

1.12.5 The equal sign (=) in glossing

The equal sign is used to indicate that a morpheme is a specific type of "clitic". This practice requires some comment because the term "clitic" is applied to a highly heterogeneous group of formatives cross-linguistically. In this grammar a clitic is defined as a bound element (fails the minimum free form test) that can be separated from a lexical head (verb, noun, adjective) be a free form (a form that passes the minimum free form test) (see Section 3.2. for more details and illustration). This definition does not say anything

explicit about the morphophonology of the clitic and thus phonological deficiency (however it is defined) does not play a part here.

Not all clitics are marked with an equal sign. The equal sign is reserved for *enc*litics. These are clitics that integrate into some morphophonological domain (see 5.3.4.4 for a description of morphophonological domains and illustrations of the concept of integration). In all cases, this integration occurs from right-to-left rather than left-to-right. Therefore, the equal sign only ever appears on the left edge of a morpheme.

1.1.1 The tilde (~) in glossing

Following the Leipzig glossing rules (Rule 10), elements in a reduplicative construction are separated by a tilde. I do not, however, follow the Leipzig glossing rules in glossing one of the doubled constituents as the grammatical category expressed by the reduplicative construction. Rather I gloss each of the copies twice as in (1.7) separated by a tilde.

ína tá-ni ξ =´ ~ tá-ni ξ =´=ki hóni

dog foot-tie=LNK ~ foot-tie=LNK=DEC:P man

'The man was tying the legs of the dogs.'

The reasons for this practice are provided in Section 6.4 in the context of a description of reduplication phenomena in Chácobo.

1.1.1 The underscore (_) in glossing

Following Rule 4A of the Leipzig glossing rules and underscore is used to separate words of the metalanguage that are rendered by one unsegmentable formative in Chácobo. For instance, the verb root *osa* translates as "laugh at" and is glossed as laugh at.

1.1.2 Orthographic word segmentation or spacing

The concept of a word (morphosyntactic or phonological) is not used in this grammar. Instead, I describe the constituent structure in Chácobo motivated by constituency and wordhood tests. Nothing insightful emerges out of referring to one of these constituents (or "layers") as the "word" (see Chapter 5 for details). In the presentation of examples I represent all combination that include affixes and clitics as one "word" orthographically. The only exception to this is where one or more of the verbal clitics are interrupted from the head verb by their subject as in (1.8) (see Sections 5.2.3.6, 7.1.1.1 and 7.2.2.1 on the fronted-VP construction).

(1.8)
$$h\acute{a}tsi$$
 $yonoko=y\acute{a}ma$ i $=yam\acute{\iota}(t)=k\acute{\iota}$ then work=NEG 1SG =DISTP=DEC:P 'Then I didn't work.' TXT 100:246

The reason for this orthographic choice is for readability; the reader can more easily find the arguments of the verb. The spacing conventions used in this grammar do not represent a word or any other constituent. They are just a convention used used for readability.

Table 1.5. Texts and their grammar and ELAR codes; N = narrative; UC = uncontrolled conversation; DI = Dynamic interview; P = Pacahuara; CH = Chácobo; E = Recorded by Phillipe Erikson

| Grammar | ELDP/ELAR | Year recorded | Length | Language | Туре |
|---------|-----------|---------------|--------|----------|------|
| code | code | | | | |
| 001 | 006 | 2011 | 5:49 | СН | N |
| 002 | 007 | 2011 | 4:57 | СН | N |
| 003 | 008 | 2011 | 12:15 | СН | N |
| 004 | 011 | 2011 | 8:25 | СН | N |
| 005 | 012 | 2011 | 5:46 | СН | N |
| 006 | 013 | 2011 | 5:14 | СН | N |
| 007 | 014 | 2011 | 24:00 | СН | N |
| 008 | 016 | 2011 | 7:15 | СН | N |
| 009 | 019 | 2011 | 5:15 | СН | N |
| 010 | 020 | 2011 | 2:20 | СН | N |
| 011 | 027 | 2011 | 1:35 | СН | N |
| 012 | 028 | 2011 | 4:25 | СН | N |
| 013 | 029 | 2011 | 13:25 | СН | N |
| 014 | 031 | 2011 | 1:50 | СН | N |
| 015 | 015 | 2011 | 11:38 | СН | N |
| 016 | 033 | 2011 | 2:43 | СН | N |
| 017 | 034 | 2011 | 1:15 | СН | N |
| 018 | 038 | 2011 | 1:14 | СН | N |

Table 1.5, cont.

| 019 | 041 | 2011 | 3:47 | СН | N |
|-----|-----|------|-------|----|---|
| 020 | 042 | 2011 | 1:00 | СН | N |
| 021 | 045 | 2011 | 3:32 | СН | N |
| 022 | 046 | 2011 | 1:31 | СН | N |
| 023 | 047 | 2011 | 1:25 | СН | N |
| 024 | 048 | 2011 | 1:38 | СН | N |
| 025 | 050 | 2011 | 2:55 | СН | N |
| 026 | 181 | 2011 | 40:24 | СН | N |
| 027 | 321 | 2011 | 5:46 | СН | N |
| 028 | 323 | 2011 | 1:50 | СН | N |
| 029 | 329 | 2011 | 1:38 | СН | N |
| 030 | 338 | 2011 | 5:30 | СН | N |
| 031 | 339 | 2011 | 2:36 | СН | N |
| 032 | 051 | 2012 | 24:05 | СН | N |
| 033 | 052 | 2012 | 3:05 | СН | N |
| 034 | 053 | 2012 | 24:40 | СН | N |
| 035 | 054 | 2012 | 7:06 | СН | N |
| 036 | 055 | 2012 | 4:40 | СН | N |
| 037 | 056 | 2012 | 9:51 | СН | N |
| 038 | 057 | 2012 | 6:50 | СН | N |
| 039 | 058 | 2012 | 3:05 | СН | N |

Table 1.5, cont.

| | | 1 | _ | | 1 |
|-----|-----|------|---------|-----|---|
| 040 | 213 | 2012 | 10:45 | СН | N |
| 041 | 215 | 2012 | 12:48 | СН | N |
| 042 | 325 | 2012 | 2:24 | СН | N |
| 043 | 100 | 2014 | 31:47 | PAC | N |
| 044 | 101 | 2014 | 21:17 | PAC | N |
| 045 | 116 | 2014 | 24:14 | СН | N |
| 046 | 133 | 2014 | 32:47 | СН | N |
| 047 | 243 | 2014 | 10:59 | СН | N |
| 048 | 273 | 2014 | 23:33 | PAC | N |
| 049 | 312 | 2014 | 37:12 | СН | N |
| 050 | 483 | 2014 | 1:26:43 | СН | N |
| 051 | 484 | 2014 | 52:16 | PAC | N |
| 052 | 508 | 2014 | 53:55 | СН | N |
| 053 | 515 | 2014 | 20:55 | СН | N |
| 054 | 531 | 2014 | 58:11 | СН | N |
| 055 | 587 | 2014 | 1:08:18 | СН | N |
| 056 | 695 | 2014 | 30:56 | СН | N |
| 057 | 567 | 2015 | 13:02 | СН | N |
| 058 | 582 | 2015 | 58:10 | СН | N |
| 059 | 628 | 2015 | 2:19 | СН | N |
| 060 | 629 | 2015 | 8:45 | СН | N |
| 061 | 635 | 2015 | 43:15 | СН | N |

Table 1.5, cont.

| 062 | 636 | 2015 | 7:36 | СН | N |
|-----|-----|------|-------|-----|---|
| 063 | 638 | 2015 | 21:57 | СН | N |
| 064 | 642 | 2015 | 9:02 | PAC | N |
| 065 | 657 | 2015 | 9:35 | СН | N |
| 066 | 672 | 2015 | 6:38 | СН | N |
| 067 | 691 | 2015 | 18:58 | СН | N |
| 068 | 708 | 2015 | 23:37 | СН | N |
| 069 | 778 | 2015 | 00:46 | СН | N |
| 070 | 780 | 2015 | 12:16 | СН | N |
| 071 | 781 | 2015 | 21:40 | СН | N |
| 072 | 783 | 2015 | 7:03 | СН | N |
| 073 | 788 | 2015 | 3:22 | СН | N |
| 074 | 795 | 2015 | 4:54 | СН | N |
| 075 | 804 | 2015 | 8:43 | СН | N |
| 076 | 807 | 2015 | 4:56 | СН | N |
| 077 | 810 | 2015 | 2:48 | СН | N |
| 078 | 813 | 2015 | 6:06 | СН | N |
| 079 | 816 | 2015 | 1:41 | СН | N |
| 080 | 817 | 2015 | 1:08 | СН | N |
| 081 | 818 | 2015 | 4:13 | СН | N |
| 082 | 838 | 2015 | 00:41 | СН | N |
| 083 | 839 | 2015 | 7:34 | СН | N |

| 1 | 1 | 1 | 1 | |
|------|--|--|--|---|
| 852 | 2015 | 6:46 | СН | N |
| 856 | 2015 | 1:40 | СН | N |
| 873 | 2015 | 22:00 | СН | N |
| 876 | 2015 | 00:49 | СН | N |
| 880 | 2015 | 1:45 | СН | N |
| 903 | 2015 | 14:02 | СН | N |
| 1004 | 2016 (E) | 7:52 | СН | N |
| 1081 | 2016 | 4:33 | СН | UC |
| 1153 | 2016 | 46:20 | СН | N |
| 1154 | 2016 | 7:28 | СН | DI |
| 1156 | 2016 | 11:50 | СН | DI |
| 1157 | 2016 | 14:55 | СН | DI |
| 1804 | 2016 | 1:28 | СН | N |
| 1826 | 2016 | 2:10 | СН | N |
| 1831 | 2016 | 9:06 | СН | N |
| 1835 | 2016 | 18:47 | СН | DI |
| 1838 | 2016 | 19:39 | СН | DI |
| 1840 | 2016 | 12:34 | СН | DI |
| 1851 | 2016 | 13:10 | СН | DI |
| 1855 | 2016 | 8:04 | СН | N |
| 1858 | 2016 | 2:55 | СН | N |
| 1867 | 2016 | 22:42 | СН | DI |
| 1930 | 2016 | 4:00 | СН | N |
| | 856 873 876 880 903 1004 1081 1153 1154 1156 1157 1804 1826 1831 1835 1838 1840 1851 1855 1858 | 856 2015 873 2015 876 2015 880 2015 903 2015 1004 2016 (E) 1081 2016 1153 2016 1154 2016 1157 2016 1804 2016 1831 2016 1835 2016 1838 2016 1840 2016 1851 2016 1858 2016 1858 2016 1857 2016 | 856 2015 1:40 873 2015 22:00 876 2015 00:49 880 2015 1:45 903 2015 14:02 1004 2016 (E) 7:52 1081 2016 4:33 1153 2016 46:20 1154 2016 7:28 1156 2016 11:50 1157 2016 14:55 1804 2016 1:28 1826 2016 2:10 1831 2016 9:06 1835 2016 18:47 1838 2016 19:39 1840 2016 12:34 1851 2016 13:10 1855 2016 8:04 1858 2016 2:55 1867 2016 22:42 | 856 2015 1:40 CH 873 2015 22:00 CH 876 2015 00:49 CH 880 2015 1:45 CH 903 2015 14:02 CH 1004 2016 (E) 7:52 CH 1081 2016 4:33 CH 1153 2016 46:20 CH 1154 2016 7:28 CH 1156 2016 11:50 CH 1157 2016 14:55 CH 1804 2016 1:28 CH 1826 2016 2:10 CH 1831 2016 18:47 CH 1838 2016 19:39 CH 1840 2016 12:34 CH 1851 2016 13:10 CH 1855 2016 8:04 CH 1858 2016 2:55 CH 1867 < |

Table 1.5, cont

| | 1 | | | | |
|-----|------|----------|-------|----|----|
| 107 | 1932 | 2016 | 10:00 | СН | N |
| 108 | 1938 | 2016 | 4:55 | СН | N |
| 109 | 2065 | 2016 | 54:14 | СН | UC |
| 110 | 2118 | 2017 | 3:21 | СН | N |
| 111 | 2119 | 2017 | 25:09 | СН | N |
| | | | | | |
| 112 | 2120 | 2017 | 4:10 | СН | N |
| 113 | 2123 | 2017 | 19:00 | СН | N |
| 114 | 2134 | 2017 | 5:05 | СН | N |
| 115 | 2153 | 2017 | 33:03 | СН | UC |
| 116 | 624 | 2014 | 8:18 | СН | N |
| 117 | 146 | 2014 | 21:04 | СН | N |
| 118 | 362 | 2010 (E) | 10:59 | СН | N |

Chapter 2.Basic phonology and phonetics

This Chapter provides a description of the basic categories of Chácobo phonology. Chácobo phonology uses segmental and suprasegmental contrasts. The language contains a relatively small inventory of phonemes (Section 2.2). The syllable structure is discussed in Section 2.2. The syllabic structures in Chácobo are V, CV or CVC. Only voiceless fricatives can occupy the coda position. The suprasegmental system is also relatively simple with respect to the number of contrastive categories it has. The language displays some marginal evidence for weight-by-position where coda consonants are counted as one mora, but in general syllables do not need to be distinguished from moras. Tone and stress are discussed in Section 2.3. Chácobo syllables either bear a single high tone or else are toneless. High tone never spreads to adjacent syllables. In general, toneless syllables are realized with lower pitch and in some circumstances shorter vowel duration. Problems in the phonetic distinction between tone and stress are also discussed in Section 2.3. Stress is not lexical in Chácobo. It predictably falls on the first or second syllable of a stem. The acoustic correlates of stress in Chácobo are intensity and pitch. The phonological accommodation of loan words from Spanish is discussed in Section 2.4. Some discussion of the phonetics of these categories is also provided where it seems necessary. Orthographic conventions used in this grammar and by the Chácobo themselves are also discussed.

While the inventory of phonological categories in Chácobo is relatively small, both at a segmental and suprasegmental level, the morphophonology or the application of phonological processes at morphosyntactic junctures is highly complex. For the most part, this aspect of Chácobo phonology is treated later in Chapter 5.3.4.4. Since I will provide a detailed treatment of the syntagmatic extent of each phonological process in the language, it is logical to provide a description of phrase and clause structure first (Chapter 3 on morphosyntactic structure; Chapter 5 on constituency).

2.1. SEGMENTAL PHONOLOGY

In the following discussion, the examples are given in both phonemic and phonetic transcriptions. The phonemic transcriptions are the same as the orthography used in this grammar. They are distinct from the orthography typically used by the Chácobo themselves which is briefly described in Section 1.12.1.

2.1.1 Vowels

The vowel inventory of Chácobo contains four contrasting segments.

Table 2.1. The Chácobo vowel inventory

| | Front | Central | Back |
|------|-------|---------|------|
| High | i | i | |
| Mid | | | 0 |
| | | a | |
| Low | | | |

Chácobo is not unusual or innovative in its vowel inventory compared with other Panoan languages (see Shell's [1980] reconstructed Panoan). The contrastive vowel phonemes of Table 2.1 are illustrated with minimal pairs or near minimal pairs in Table 2.2. The near minimal pairs only diverge from minimal pairs in that they do not all display the same tonal patterns across the contrastive forms.

Table 2.2. Chácobo vowel contrasts

| i | i | a | О |
|----------------|-------------------|-------------------|-----------------------|
| hína [hí.na] | hɨna [hɨ.nà] | hána [há.nà] | hóna [hó.nà] |
| 'penis, tail' | 'how do' | 'tongue' | 'coming' |
| hima [hí.mà] | hɨma [hɨ.mà] | hama [há.ma] | hóma [hó.mà] |
| 'blood, kin' | 'Jema (name)' | 'but' | 'to one side' |
| nia [níà] | nɨa [nɨ.à] 'here' | naa [nâ :] | noa [nó.à] |
| 'throw' | | 'this' | 'first person plural' |
| maní [má.nì] | manɨ [má.nɨ] | mana [mánà] | mano [má.nò] |
| ʻpatuju' | 'knife' | 'wait' | 'fontanel' |
| mapi [má.pì] | mapí [mà.pí] | mapá [mà.pá] | mapo [má.pò] 'head' |
| 'brain' | 'open' | 'cover' | |
| riá [rì.á] | raa [ɾâː] 'send' | rɨa [rɨ.à] 'fill' | roa [ɾò.á] 'curse, |
| 'augmentative' | | | threaten' |
| | | | |

In Chácobo two vowels can be juxtaposed inside a morpheme without an intervening consonant. Generally, juxtaposed vowels that are separated by a morpheme boundary will be separated by an epenthetic glottal stop (Chapter 5). The full spectrum of vowel-vowel combinations inside morphemes are illustrated with examples in Table 2.3.

Table 2.3. Vowel-vowel combinations inside morphemes in Chácobo

| | a | i | i | 0 |
|---|--------------------------------------|-----------------------------|---------------------------------------|------------------------|
| a | raa [râː] 'send' | mai [máj] 'earth' | pai [pá.i] 'Pae (name)' | pao [páw] 'stream' |
| i | pia [pí.a] 'arrow' | bii [bî:] 'mosquito' | şii [şí.i] 'yellow- billed cuckoo' | ∫io [ʃiw] 'marigui' |
| į | pia [pí.à] ~ [pí.ʔà] 'Pea (name)' | pɨi [pɨ.ì] 'wing (of bird)' | tii [tí]:] 'sweet' | tsio [tsiw] 'lock' |
| o | koa [kó.à] 'boney' | oi [wì] 'rain' | koɨ [kó.ɨ] 'sad' | koo [kó`:] 'pus' |

In this grammar these vowel-vowel sequences are analyzed as two syllables rather than as one syllable with a diphthong or a vowel-glide combination; V.V and CV.V rather than VG and CVG respectively (where C is a consonant, V is a vowel, G is a glide and a period represents a syllable boundary). This analysis is adopted despite the fact that in certain VV sequences, the second vowel approaches a glide phonetically. Examples of this are *mai* [máj] 'earth' and *oi* [wí] 'rain'. The first vowel is only realized as a glide in VV sequences (e.g. in *oi* 'rain'). The first vowel is never realized as a glide in CVV contexts. Thus, *koo* 'pus' is not realized as [kwo] nor as [kwo], but as [ko`:].

There are two reasons for not treating such VV sequences as diphthongs, despite their phonetic realization; (i) there are no phonological processes that treat a VV sequence as one syllable; (ii) there *are* phonological processes that treat the VV sequence as two syllables identically to a (C)VCV structure. For instance, the spatial locative enclitic is realized as a high tone on the final syllable of the noun phrase with which it combines (or

marks as a dependent). For VV combinations, even if they are realized as VG diphthongs in isolation, the high tone combines with the final vowel. The example in (2.1a) shows that the final vowel of *mai* is treated the same as the final vowel of a CVCV structure as in *misa* 'table' in (2.1b) with respect to the docking of a high tone. If the final vowel of *mai* 'earth' was treated as a glide phonologically one would expect the high tone enclitic to skip over it onto the first vowel producing *máj*; but this does not occur.

- (2.1) a. [mà.í àr.òs .há .hà.pá.kɨ]

 mai= arósa há hapá=kɨ

 floor=SPAT rice 3 spill=DEC:P

 'S/he spilled rice on the floor.'
 - b. [mì.sá à.ròs. há. hà.pá.kɨ]

 misa=' arósa há hapá=kɨ

 table=SPAT rice 3 spill=DEC:P

 'S/he spilled rice on the table.' ELIC.

In cases where the adjacent vowels are identical (e.g. *bii* 'mosquito) it is less clear whether they should be treated as long vowels (monosyllabic but bimoraic). Like diphthongs, such combinations are treated the same as (C)VCV forms with respect to tone assignment. However, there is one context where (C)VV combinations are treated the same as CVC forms. This is discussed briefly in Section 2.2 because the phenomenon provides evidence for morae in Chácobo. Since there are no other compelling reasons for

considering such forms as monosyllabic, beside the fact that they are realized as one unbroken vowel, they are transcribed as containing two vowel phonemes; a (C)V.V structure.

Phonetic variation in the frontness or backness of Chácobo vowels is better studied using quantitative phonetic analysis, because, if it exists, it is too subtle for me to identify systematically. The most obvious candidate for conditioning vowel allophony based on current descriptions of Panoan would be stress (see for instance Elias-Ulloa [2006, 2011] on Shipibo-Konibo). An acoustic study of a number of vowel correlates found no significant difference in the F1 or F2 of vowels conditioned by stress or tone (Tallman & Ellias-Ulloa 2017). Other conditioning factors have not been systematically investigated in this fashion, and thus the following points on vowel allophony are highly tentative.

The phoneme [o] encompasses a phonetic space overlapping [u] and [o]. Its pronunciation varying as a consequence of the surrounding vowels with high vowels triggering u and low vowel a triggering o. This is illustrated in (2.2).

(2.2) a. hóni $[h\acute{\mathbf{u}}.ni]$ 'man' b. koníwa [k**ù**.ní.wà] 'eel' 'hummingbird' [pí.n**ù**] c. pino 'woman' d. yoşa [yó.şà] [ò.má.kà] 'tucunaré' e. omáka f. awáso [à.wá.s**ò**] 'wolf fish' kamáno [kà.má.n**ò**] 'jaguar' g.

But the differences represented in the transcriptions above are very subtle and at best tendencies. It is possible that the vowels are as much affected by the surrounding consonants as they are by adjacent vowels. The phonetic realization of /o/ requires quantitative acoustic analysis, which I have not yet undertaken.

2.1.2 Consonants

Chácobo has 16 contrasting consonant phonemes. The inventory is provided in Table 2.4. The phonemic representation used in this dissertation follows the IPA except in its use of /r/ for [r], /y/ for [j] and /b/ for [β]. Phonetic representations of surface forms which occur in this section and in Chapter 5 only use IPA forms.

Table 2.4. The Chácobo consonant inventory

| | Bilabial | Alveolar | Alveo-palatal | Retroflex | Velar | Glottal |
|---------------------|----------|----------|---------------|-----------|-------|---------|
| Voiceless stop | p | t | | | k | 3 |
| Voiced fricative | b [β] | | | | | |
| Voiceless affricate | | ts | t∫ | | | |
| Voiceless fricative | | S | ſ | Ś | | h |
| Liquid | | | | r [ɾ] | | |
| Nasal | m | n | | | | |
| Glide | W | | | | у[ј] | |

The phonemic contrasts in bilabials /p/, /b/, /m/ and /w/ are illustrated with the minimal pairs and near minimal pairs in Table 2.5.

Table 2.5. Bilabial consonants in Chácobo

| p | b | m | W |
|---|----------------------------|----------------------------------|--------------------------------|
| ipa [í.pà] 'father' | iba [í.βà] 'Iba (name)' | ima [í.mà] 'roast' | iwa [í.wà] 'mother' |
| pakɨ [pà.kɨ] 'fall' | ba.kɨ [βà.kɨ] 'child' | mákɨ [má.kɨ] 'piranha' | |
| poro [pó.rò] 'rotten' | boro [βό.ɾò] 'Boro (name)' | moro [mó.ɾò] 'traditional tunic' | |
| yopa [jó.pà] 'look for and not find' | yoba [jó.βà] 'council' | yoma- [jó.mà] 'steal' | |
| para [párà] 'flat' | bara [βá.ɾà] 'bullet' | | wara [wá.ɾà] 'Huara (name)' |
| pasi [pá.sì] 'quiet' | basi [βá.sì] 'close' | | wasi [wá.sì] 'grass' |
| | | himi [hí.mì] 'blood' | hiwi [hí.wì] 'tree, stick' |

The phoneme /b/ is realized as a voiced fricative [β] in Chácobo in both stem internal and stem initial position. This is illustrated with the spectrogram in Figure 2.1, which represents the bolded portion of the sentence in (2.3).

(2.3) [há.tsì. hó.nì. mà.βà.rá.βà.kí.rì.sò.ní.kì]

hatsi hóni mabara= bakí riso=ní=ki

then man bald=GEN son die=REMP=DEC:P

'Then the bald old man's son died.'

The spectrogram below demonstrates that the oral bilabial in *mabara* 'bald' and in *baki* 'son' are not stops because there is energy in the spectrogram during the closure. Furthermore, the voiced oral bilabial is not an approximant because it does not have clear formant bands (Reetz & Jongman 2009).

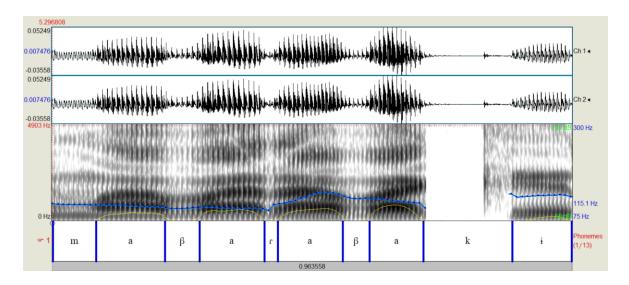


Figure 2.1. Spectrogram from mabara 'bald' baki 'child' from the sentence in (2.3).

The phonemic contrasts of alveolar consonants are illustrated with the following minimal pairs and near minimal pairs in Table 2.6.

Table 2.6. Alveolar consonants in Chácobo

| t | ts | S | n |
|-----------------------|-------------------------|-----------------------|------------------------|
| kito(ma) [kì.tó] | kítso [kí.tsò] 'bring | kíso [kí.sò] 'accuse' | kɨnó [kɨ.nó] 'sharpen' |
| 'border of patio' | together' | | |
| hati [hà.tí] | hatsi [há.tsì] 'then' | hasi(ni) [hà.sí] | |
| 'together' | | 'mutun' | |
| tio [tíw] 'big' | tsio [tsíw] 'cigarra | sío [síw] 'drip' | |
| | (insect)' | | |
| tiri- [tí.rì] 'hit' | tsíri- [tsí.rì] 'laugh' | siri [sí.rì] 'old' | |
| to?i [tó.?ì] 'Tohi | tso?i [tsó.?ì] 'fried | | no?í [nò.?í] 'love' |
| (name)' | (adj)' | | |
| máti [má.tì] 'taller' | mátsi [má.tsì] 'cold' | | maní [mà.ní] 'bring |
| | | | together / bundle' |
| tawi [tá.wi] 'dig out | | sawɨ [sá.wɨ] 'put on | nawɨ [ná.wɨ] 'make |
| (trunk)' | | clothes' | something deeper' |
| wita [wi.tà] 'take | witsa [wí.tsà] | | |
| out, dig out' | 'other' | | |
| matáka [mà.tá.kà] | matsáka [mà.tsá.kà] | | |
| 'hualusa?' | 'mud' | | |
| | | | |

Minimal pairs and near minimal pairs of alveo-palatal consonant contrasts are presented in Table 2.7. I include minimal pairs with the alveolar affricate /ts/ to demonstrate that it is not an allomorph of /t J/.

Table 2.7. Alveo-palatal consonants in Chácobo

| ſ | tſ | ts |
|----------------------------------|--|------------------------------------|
| ſapo [ʃiá.pò] 'strong' | tsapo [ts ^j á.pò] 'cricket' | |
| aʃī [á.ʃ ⁱ ì] 'bathe' | atʃī [á.tʃi] 'be grabbed' | |
| ſĭta [ʃʲí.tà] 'cross' | tʃita [tʃi.tà] 'stay' | |
| | atsa 'grab someone/something' | atsa 'yuca' |
| | t∫aka 'wash' | tsaka 'shoot at something/someone' |
| | tʃani 'word, phrase, speech' | tsani 'do you know? (expr.)' |
| | tsi?o 'stay behind' | tsi?o 'cicada' |

Chácobo has two retroflex consonants, an approximant [r] and a fricative [§]. Minimal pairs and near minimal pairs are provided in Table 2.8.

Table 2.8. Retroflex consonants in Chácobo

| r | ş |
|--|-----------------------------|
| rașo [rá.șò] 'peel' | şaşo [şá.şò] 'fulling mill' |
| roa [ró.à] 'speak badly / threaten' | şoa [şó.à] 'fat' |
| pɨrɨ [pɨ.ɾɨ] 'burn' | pɨṣɨ [pɨ.ṣɨ] 'light' |

Chácobo makes a contrast between glottal fricatives and glottal stops. As noted in Section 2.1, the language also allows sequences of two vowels. Minimal pairs showing the phoneme contrasts between glottal consonants and VV sequences are provided in Table 2.9.

Table 2.9. Glottal consonants contrasting with VV sequences in Chácobo

| Ø | h | 3 |
|-------------------------------------|--|--|
| nii [nî] 'stopped' | nihi [níhì] 'rise to the surface of the water' | ni?i [ní?ì] 'jungle' |
| roo [rô:] 'polish' | roho [ró.hò] 'peel, skin' | ro?o [ró.?ò] 'manechi' |
| tii [tî:] 'start to become sick' | tihi [tí.hì] 'arrive at the limit' | ti?i [tí.?i] 'all these / indefinite amount of time' |
| roi [rój] 'take away' | rohi [róhì] 'make noise' | |
| bii [βî:] 'mosquito' | | bi?i [βí?ì] 'a flock of birds which turns around.' |

As in other Pano languages (Shell 1980), Chácobo contrasts three sibilants; alveolar, alveo-palatal and retroflex. The articulation of the alveo-palatal /J/ has a very noticeable front release, often resulting in a diphthong like articulation in the following vowel. It is transcribed as a complex articulation $[J^j]$ to reflect this. Minimal pairs and near minimal pairs contrasting the sibilants in Chácobo are provided in Table 2.10.

Table 2.10. The sibilants of Chácobo

| s | ſ | ş |
|--|----------------------------------|--|
| siri [sírì] 'type of bird' | ſiri [ʃˈi.ɾi] 'cook' | şɨrɨ [şɨ.cɨ] 'pull' |
| sara [sárà] 'type of unpleasant odor' | ʃara [ʃ ^j á.ɾà] 'bee' | şara [şárà] 'inside' |
| riso [rí.sò] 'point, final' | rɨʃo [ɾɨ̞ʃʲò] 'flu, flem' | |
| pisi [pí.sì] 'rotten' | piʃi [pí.ʃʲi] 'rib' | |
| mɨʃa [mɨ.ʃʲá] 'burn' | mɨṣa [mɨ.ṣà] 'rip out' | |
| sao [sáw] 'post' | | şao [şáw] 'bone' |
| sani [sá.nì] 'fish (v.)' | | şani [şá.nì] 'pubic hair' |
| pasa [pá.sà] 'go through' | | paşa [páşà] 'new' |
| | şoa [şó.à] 'Geneshuaya river' | ∫oa [ʃ ⁱ ó.à] 'The benicito river' |

Allophony in Consonants

Chácobo consonants do not display particularly striking allophony. /k/ is sometimes voiced intervocalically. In between [i] and [i], /k/ often undergoes lenition to [γ]. My general impression is that this lenition is more likely with more frequent morphemes. For instance the /k/ of =tiki 'again' seems to always surface as [γ] in fast speech.

The phoneme /tʃ/ assimilates to a retroflex fricative of a following syllable. It is realized as [tş].

In contrast to some other Pano languages (e.g. Matses [Fleck 2003]), there is currently no evidence that [tʃ] and [ts] are contrastive phonemes in Chácobo.

There is one glide-vowel sequence which is very frequently reduced to one vowel.

/ya/ is very frequently reduced to /i/ in naturalistic speech. But the reduction only seems to affect function words and/or enclitics. These are listed below.

```
(2.5)
        a.
              /=yáma
                              [íma] 'negation'
              /=yamít/ >
         b.
                              [imít]
                                     'distant past'
              /=bayá/
                                     'do and go (tr/pl)'
                              [βaí]
         c.
         d.
              /=kayá/
                         >
                              [kaí]
                                     'do and go (intr./sg.)'
               /=yá/
                              [í]
                                      'comitative'
         e.
```

The phoneme sequence /nia/ is realized as /pa/. Examples are provided in (2.6). Notice that the reduction only occurs when the /i/ is toneless. Morphemes like /nía/ 'throw' which contain a high tone on their first syllable never undergo this reduction.

(2.6) a. hawinia [hà.wí.nà] 'where'
b. niániá [ná.nà] 'Niania'
c. tsánia [tsá.nà] 'kingfisher'

The phone [n] could be regarded as a separate phoneme or the phonetic realization of two phonemes /ni/. I have no strong reasons to favor either analysis. /ni/ is perhaps better analyzed as a CV sequence because the palatal realization *only* occurs before? /a/; a /n/ analysis would mean that Chácobo would have one phoneme with an uncharacteristically restricted distribution in comparison with the other consonants of the language.

In Chácobo the glottal stop can be realized as vowel glottalization rather than as a full stop when it occurs inside a morpheme. For instance, in the following spectrogram of

the utterance *ni?i hoa* 'wild flower' produced by Caco Moreno, the lack of silence between the vowels in *ni?i* 'flower' shows that the glottal consonant is not always realized as a full stop. In the spectrogram we see that the glottal consonant is realized as glottalization.

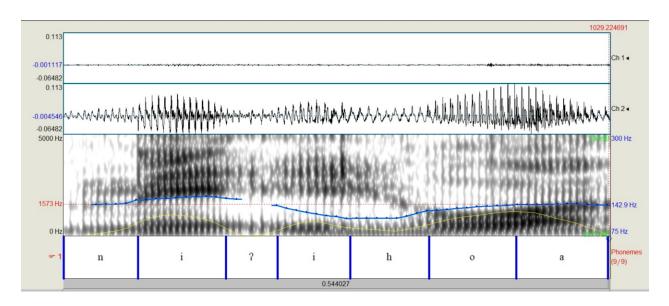


Figure 2.2. Spectrogram for the compound *ni?i hoa* 'wild flower' produced by Caco Moreno.

Glottal stops are inserted intervocalically between morpheme boundaries in certain contexts. The morphophonology of glottal stop insertion is extremely challenging to describe due to a large degree of speaker variation. The morphophonology of glottal stop deletion and epenthesis is described in detail in Chapter 5.3.4.4 (Section 6.1.1).

2.2. SYLLABLE AND MORA

Syllable structure

Chácobo has a simple syllable structure; (C)V(C). The nucleus of the syllable in Chácobo is always a vowel. All consonants can occur in the onset position. Only voiceless fricatives /s/, /ʃ/, /s/ and /h/ can occur in the coda position. The glottal fricative /h/ is restricted such that it never occurs at the end of a morpheme or stem. The spectrum of consonant clusters allowed in Chácobo are illustrated in Table 2.11 and Table 2.12.

Table 2.11. Consonant clusters in Chácobo I

| | p | t | k | m |
|---|---------------------|--------------------------|-------------------|-------------------|
| S | kóspo [kós.pò] | wistí [wis.tí] 'one' | bamísko | hismá [hísmà] |
| | 'dandruff' | | [βà.mís.kò] 'arm' | 'splash' |
| ſ | míſpo [míʃ.pò] | wíſtima [wíʃtìmà] | biʃka [βíʃ.kà] | bakí∫marí |
| | 'dust' | 'star' | 'wring out' | [βàkíʃmàɾí]'early |
| | | | | in day' |
| ş | báspoto | nɨştí [nɨş.tí] 'catfish' | bíşko [βíş.kò] | waşmini |
| | [βáş.pò.tò] | | 'frog' | [wàṣ.mɨ.nɨ] |
| | 'elbow' | | | 'cotton' |
| h | -póhpo [póh.pò] | [hóh.tà.tà] 'laughing | şahka [şáh.k] | _ |
| | 'dust outs hitting' | falcon' | 'breathe' | |

Table 2.12. Consonant clusters in Chácobo II

| | n | r | _# |
|---|-------------------------------|-----------------------------|--|
| S | isnɨpa [ʔìs.nɨ.pà] 'thorn' | _ | his [hís] 'see' |
| ſ | mí∫ni [mí∫nì] 'small' | _ | tʃiki∫[tʃì.kíʃ] 'be stupid' |
| ş | paşna [páşnà] 'hunger' | _ | maşaş(a) [mà.şá.şà] ~ [mà.şáş] 'rock' |
| h | mahna [máhnà] 'very tall' | bahra [báhrà] 'brighten' | _ |

Sibilant-approximant clusters (/sw/, /ʃw/, /sw/, /sy/, /fy/, /sy/, /sr/, /ʃr/, /sr/) and sibilant-glottal stop clusters (/s?/, /ʃ?/, /s²/) and /hm/ are not attested intramorphemically in my database. Currently it is not clear whether such forms are not attested because of statistical accident (gaps in the database) or whether they are phonotactically disallowed in Chácobo. The fact that a large percentage of these gaps can be stated in terms of natural classes, as sibilant-approximant or sibilant-glottal combinations, suggests that it is a phonotactic constraint that applies over the morphemes. There is no comparable explanation for the lack of a /hm/ combination in the database.

Sibilant-approximant and sibilant-glottal stop combinations are permissible at the juncture between morphemes, however. Examples of Sibilant-w sequences are provided in (2.9). All of these examples involve combination with the transitive marker -wa.⁴

(2.7) a. *bɨmɨs-wa*

good_archer-V:TR

'Make/teach someone to be good archer.'

b. *rí-wif-wa*

end-sharp-V:TR

'Sharpen the point or end of something.'

c. bɨ-t/ɨkɨs-wa

face-dirty-V:TR

'Make someone's face dirty.' ELIC

⁴ The form *roswa* 'tell someone off' potentially presents a counterexample to the claim that sibilant-approximant combinations only occur at junctures between morphemes. The reason is that is it more problematic to analyze this form as complex, because there does not appear to be a corresponding intransitive form *ros*.

Examples of sibilant-/y/ sequences occurring at the juncture between two morphemes are provided in (2.8). These all involve verbs combining with the negative marker =yama 'negative'.

(2.8) a.
$$tsipis=y\acute{a}ma=ki$$
 fart=NEG=DEC:P 'S/he didn't fart.

c.
$$t/is=y\acute{a}ma=ki$$

cure=NEG=DEC:P

'He/she cured him/her'

Fricative-glottal combinations are also possible at the juncture between morphemes. Illustrative examples are provided in (2.9).

(2.9) a.
$$tsipis=2\acute{a}=na$$
 fart=NMLZ:P=EPEN 'The one who farted.'

b.
$$t fiki f = 2 \acute{a} = na$$

be_lazy=NMLZ:P=EPEN

'The one who was lazy.'

c.
$$t \int i s = 2 \dot{a} = na$$

cure=NMLZ:P=EPEN
'The one who cured him.'

There are two latent coda consonants in Chácobo; /n/ and /t/. By latent coda consonants I mean C_2 in a morpheme with an underlying $(C_1)VC_2$ structure, that never surface as codas on the surface. Latent coda consonants either delete or resyllabify as the onset of a following syllable. The latent status of these consonants can be attributed to the fact that they are not sibilants and that Chácobo only allows sibilants in coda position on the surface. Furthermore, such forms only surface when they combine with a morpheme that contains an underlying glottal stop. For instance the final /k/ of ak 'do, make' surfaces in (2.10a). The final /n/ of =tikin 'again' surfaces in (2.10b) and the final /n/ of =kan 'third person plural' surfaces in (2.10c).

In all other environments the final consonant of these morphemes drops as in the examples below.

Unless a phonetic transcription is provided in square brackets, I will represent dropped latent coda consonants in parentheses as in (2.12) below. The phonetic form of of this example is [àtikíki].

(2.12)
$$\dot{a}(k) = tiki(n) = ki$$
 do=AGAIN=DEC:P 'S/he did it again.'

Sibilant-sibilant combinations only arise at the juncture between two morphemes. There are no morphemes that contain sequences of sibilants. Sibilant-sibilant clusters across morpheme boundaries undergo reductions. However, the environments and the type of reductions are complicated and not treated until Chapter 5.3.4.4 (Section 6.1.2).

Many nouns that contain more than two syllables have, in certain environments, alternating two-syllable "short" forms (Valenzuela & Iggesen 2007; Tallman 2017) where the last vowel undergoes apocope (see Section 6.3.1). If the rightmost consonant is a

sibilant, then only the final vowel is dropped for the short form and the final sibilant is syllabified as the coda consonant in the final syllable, as is shown in (2.13).

If the last syllable of the long form contains a non-sibilant consonant this consonant drops as well in order to avoid a non-sibilant coda consonant.

$$(2.14) \quad a. \qquad /pV\#/$$

$$titipa [tì.ti.pà] \sim [ti.ti] \qquad \text{`grey headed kite'}$$

$$b. \qquad /kV\#/$$

$$botoko [\beta \acute{o}.t\grave{o}.k\grave{o}] \sim [\beta \acute{o}.t\grave{o}] \qquad \text{`picazuro pigeon'}$$

$$c. \qquad /tJV\#/$$

$$kibitJi \ [kì.\beta \acute{i}.tJi] \sim [kì.\beta \acute{i}] \qquad \text{`lips'}$$

$$d. \qquad /rV\#/$$

$$\acute{a}wara \ [\acute{a}.w\grave{a}.r\grave{a}] \sim [\acute{a}.w\grave{a}] \qquad \text{`tapir'}$$

e. /mV#/

popóma [pò.pó.mà] ~ [pò.pó] 'duck'

f. /nV#/

kamáno [kà.má.nò] ~ [kà.má] 'jaguar'

g. /tsV#/

ma?ítsa [mà.?í.tsà] ~ [ma.?í] ~ [ma.?ís] 'in vain'

The one exception to this is *maʔitsa* 'in vain' which has an alternate short form where the final /ts/ is /s/.

The phonological process of apocope and the dropping of the final consonant further demonstrates the constraint against consonants which are not voiceless fricatives occurring in coda position.

Moraic structure

Some morphophonological processes in Chácobo provide evidence for moras as distinct from syllables. In Chácobo the vowels of monosyllabic roots with (C)V syllables double/lengthen if they cannot phonologically incorporate an affix or an enclitic. For instance, compare the examples in (2.15a) and (2.16a) to the examples in (2.15b) and (2.16b) below. In the latter cases the vowel of the root obligatorily doubles.

```
(2.15) a.
             [ká.kɨ.hó.nì]
              ká=kɨ
                        hóni
              go=DEC:P man
              'The man has gone.'
             [kâː.hó.nì.kɨ]
        b.
              káa hóni =kɨ
              go
                   man=DEC:P
              'The man went.'
             [pí.kɨ.hó.nì]
(2.16) a.
             pí=ki
                        hóni
              eat=DEC:P man
              'The man has eaten.'
        b.
             [pî:.hó.nì.ki]
                   hóni =kɨ
              píi
              eat
                   man =DEC:P
              'The man ate.'
```

In the same position a bisyllabic verb root does not lengthen any of its vowels as in (2.17b). This suggests that the lengthening seen in the examples above are the product of a minimality constraint (see Section 6.3.2 for details).

```
(2.17) a. [hà.βá.kì.hó.nì]
habá=ki hóni
run=DEC:P man
'The man has run.'
b. [hà.βà.hó.nì.kì]
haba hóni =ki
run man=DEC:P
```

'The man ran.'

Recall from above that we analyzed cases such as *kaa* [kâ:] 'go' and *pii* [pî:] 'eat' as containing two vowel segments even though the VV combination is realized as one long vowel phonetically. According to the syllabic structure defended above, this means that such forms are phonologically bisyllabic. However, the reason the vowel lengthening of monosyllabic CV roots cannot be stated in terms of bisyllabicity is that CVC roots do not lengthen (or double) their vowels in the same context as do CV roots. In other words, CVC roots behave like CVCV roots with respect to vowel lengthening, suggesting that something else besides syllables is being counted in the conditioning of vowel lengthening/doubling. An example of a CVC root not lengthening its vowel is provided in (2.18). If the vowel lengthening/doubling observed in (2.15) and (2.16) occurred because of a constraint based on minimal bisyllabicity, then we would expect *his* 'see' to surface as *hi:s* 'see' in (2.18b), but it does not.

```
(2.18) a. [hís.kɨ.hó.nì]

hís=kɨ hóni

see=DEC:P man

'The has seen him/her/it.'

b. [hìs.hó.nì.kɨ]

hís hóni =kɨ

see man =DEC:P

'The man saw him/her/it.'
```

These facts suggest that the constraint on minimal size is based on moras and that a coda consonant is counted as one mora. The vowel lengthening found in (2.15) and (2.16) can therefore be analyzed as involving the addition of a mora (see Couto [2017: 61] for this analysis of a similar phenomenon in Saynáwa-Yaminawa). This phenomenon could be used to argue that Chácobo has phonologically distinct long vowels. However, apart from the lengthening process described above, CV: forms are treated as CVV phonologically.

2.3. TONE AND STRESS

This section provides a description of suprasegmental categories in Chácobo.⁵ Chácobo contains two types of suprasegmental prominence. Prominence 1 uses a combination of pitch and vowel duration. Prominence 2 uses a combination of pitch and intensity. Prominence 1 is obligatory and culminative in its domain of application. Prominence 2 is neither obligatory nor culminative. The distributional properties of these two types of prominence suggest that Prominence 1 is "stress" and Prominence 2 is "tone", according to Hyman's (2006, 2009) definition of these categories. The phonetic data are less clear, however, since both types of prominence are marked by pitch.

For expositional purposes I will refer to Prominence 1 as "tone" and Prominence 2 as "stress" following Hyman (2006, 2009). In this section I first demonstrate that stress and tone are distinct phonological categories. I then return to the issue of their phonetic interpretation at the end of the section.

This section is concerned with (i) describing the rules for stress assignment; (i) showing that tone is lexically contrastive; (iii) describing the relationship between tone and stress; (iv) describing the basic distributional properties of tone and stress, and (v)

Chapter 5.3.4.4 (Section 6.2).

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⁵ The analysis of suprasegmental categories presented in this dissertation is distinct from that presented in Tallman (2017). The reasons for rejecting the analysis presented in Tallman (2017) are briefly discussion in

describing the phonetic differences between tone and stress. A full description of tonal processes (tone sandhi and tone insertion) is reserved for Chapter 5.3.4.4, because it requires detailed knowledge of morphosyntax.

In the stress domain, syllables are either stressed or unstressed. In the tone domain, syllables either bear a high tone or do not; i.e. they are toneless. The domain of stress assignment is the first two syllables of the root or prefix-root combination. If the root is only one syllable long, then the stress domain is extended to include a root+suffix combination or root+enclitic combination (see Chapter Chapter 3 for definitions of roots, prefixes, suffixes and enclitics). I will refer to this two syllable window as the **stress domain**. The rule of stress assignment is stated in (2.19).6

(2.19) Stress rule:

- a. Assign-to-H-tone: Assign stress to the syllable that contains a high tone in
 a two syllable window on the left edge of the stress domain.
- b. First-syllable-stress: If no high tone is present on the second syllable of the stress domain assign stress to the first syllable (or assign stress to the first syllable elsewhere).

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-

⁶ See Loos (1968: 188-189) for what seems to be an identical rule in Capanahua. The difference between Chácobo and Capanahua appears to be that Capanahua permits adjacent high tones in far more contexts than Chácobo.

In what follows I indicate stress with a straight line diacritic to the left of the stressed syllable (e.g. ['tʃa.ko. β o] 'Chacobo'). High tone is indicated with a \acute{V} over the vowel and low pitch is indicated with a \acute{V} over the vowel. Mid pitch is indicated with a \acute{V} pitch over the vowel. The stress rule is illustrated in the examples in (2.20) and (2.21).

In (2.20) we can see the application of the Assign-to-H-tone rule where the stress is assigned to first syllable in a left-aligned two-syllable window that contains a high tone. In (2.20a), the stress is assigned to the underlying high tone of $han\acute{a}$ 'vomit' by second-syllable-stress rule described in (2.19a). In (2.20b), the stress is assigned to the second syllable of $kas\acute{a}$ 'play' which has an underlying high tone.

(2.20) a. [hà.'ná.kì]

haná=ki

vomit=DEC:P

'S/he vomited.'

b. [kà.ˈsá.nò]

kasá=no

play=HORT

'Let's play!'

The following examples show the application of the first-syllable-stress rule as specified in (2.19b). (2.21a) and (2.21b) show the stress assigned to the first syllable of *hana* 'leave' and *káṣa* 'be angry' respectively.

(2.21) a. ['há.nà.kì]

hana=ki
leave=DEC:P

'S/he left it.'

b. ['ká.ṣà.nò]

káṣa=no

be_angry=HORT

'Let's get angry!'

In both of the examples stress and high tone overlap on the surface. The verb root hana 'leave' has no underlying high tone, and $k\acute{a}ga$ 'be angry' does, but the difference the Assign-to-H-tone stress rule neutralizes this prosodic distinction.

If high tone and stress always overlapped there would be no basis for distinguishing these categories. There are stressed syllables without high tones and unstressed syllables with high tones, however. An example where stress occurs on a syllable without high tone is provided in (2.22). In this example we see that stress is assigned to the first syllable, even though no high tone is present underlyingly or on the the surface of this syllable.

When a syllable is stressed and toneless it is realized either with a low or a mid pitch as is represented in the example in (2.22). This example shows clearly that it is an overgeneralization to simply say that stress is attracted to all syllables with a high tone. It falls on the first syllable by default, and on the second syllable if there is a high tone present on this syllable.

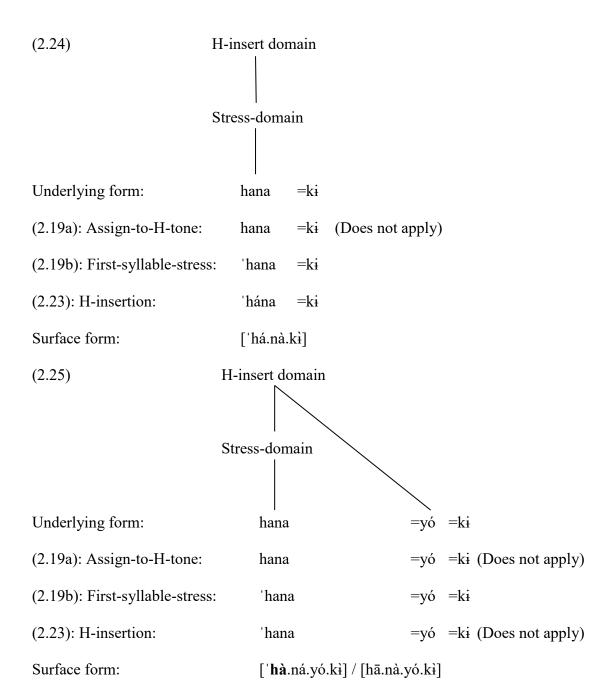
As stated above, tone is lexically contrastive. Syllables of morphemes are specified as bearing a high tone or containing no tone underlyingly. High tones can be inserted onto syllables in certain circumstances. As already mentioned, syllables with an underlying high tone attract stress if they occur on the second syllable of a stem. A converse situation also applies with the insertion of high tones; high tones are inserted onto stressed syllables. The rule for high tone insertion is stated in (2.23).

(2.23) High tone insertion rule (H-insertion):

Insert a high tone on the first syllable of a high tone insertion domain (H-insert domain) if there is no high tone in this domain.

The high tone-insert-domain is aligned at the left edge of the stress domain. We can see the H-insertion rule operative in (2.21), where a high tone is assigned to the first syllable of *hana* 'leave'. The result in this case is that high tone and stress occur on the same syllable.

However, the right extent of the H-insert domain is not coterminous with the stress domain. This is shown in (2.22), where the H-insertion domain extends at least to the right edge of the clitic $=y\phi$ 'completive'. H-tone is not assigned to the first syllable because an H-tone is already present on $=y\phi$ 'completive'. If the H-insertion domain was coterminous on the left and right edges of the stress domain, we would predict the insertion of a H-tone on the first syllable of *hana* 'leave' as in (2.21). The relationship between the domain of stress assignment and the domain of high tone assignment in (2.21a) and (2.22) above are respectively depicted in (2.24) and (2.25).



The rightmost extent of the H-insert domain is determined by the specific affix, clitic or stem that occurs to the right of the root and/or stress domain. In this thesis I will

say that the morpheme $=y\acute{o}$ **incorporates** into the H-insertion domain in this example. The evidence for this in the example above is that it blocks the insertion of H-tone on the first syllable of a root. H-insertion only applies when there is no other H-tone in this domain. If the clitic $=y\acute{o}$ did not incorporates into the H-insertion domain, we would expect *hana* 'leave' to surface with a high tone on its first syllable in (2.22) contrary to fact.

Whether a given morpheme incorporates into the H-tone domain cannot be predicated from its structural category. For instance, not all clitics, as they are defined in Chapter Chapter 3 (Section 3.2), incorporate into H-tone domains. Some do *not* block H-tone insertion on roots such as *hana* 'leave' (see Section 6.2.1 for a detailed description).

Another important property of the H-insertion domain is that H-tone is not culminative in this domain. There can be more than one H-tone. Stress is obligatory (at least 1) and culminative (no more than 1) in the stress domain. There is one and only one stress in the two-syllable window of the stress domain. However, in the H-insertion domain, more than one H-tone can occur as long as these are present underlyingly. For instance, the sentence in (2.26) is identical in prosodic structure to the sentence represented in (2.25b), except that there are two underlying high tones in the latter. These surface high tones result from two underlying high tones, one on $k\dot{a}sa$ 'be angry' and the enclitic $=y\dot{a}$ 'completive'.

(2.26) [ká.şà.jó.kɨ]

káşa=yó=ki

be angry=CMPL=DEC:P

'They all get angry.'

Furthermore, H-tones inserted into H-insertion domains can be deleted through tone sandhi rules, resulting in H-insertion domains without any H-tones. Such cases are discussed in Chapter 5.3.4.4 (Section 6.2), where tone sandhi is taken up in detail. The point here is that H-tone is neither obligatory nor culminative in the H-tone domain.

Finally, whether a root projects a H-insertion domain depends on its syntactic position. Clauses in Chácobo all contain a clause-typing morpheme. By clause-type I mean categories such as declarative, interrogative, imperative and hortative (Chapter 4). When a root precedes the clause-type morpheme it projects an H-insertion domain. This can be seen from the example in (2.27a). The proper noun root *rabi* 'Rabi (male proper name)' contains no underlying H-tone. An H-tone is inserted via the rule of H-insertion. (2.27b) provides an example of an identical sentence with the proper noun *rámi* 'Rami (female proper name)'. The tonal realization of *rabi* 'Rabi' and *rami* 'Rami' is identical showing that the distinction between a form with no underlying high tone and one with a a high tone on the first syllable is neutralized in certain contexts.

However, *after* the clause-type morpheme, the H-insertion domain is not projected above noun roots. When *rabi* 'Rabi' and *rámi* 'Rami' occur after the clause-type morpheme, the difference in underlying tonal structure can be observed. For instance, in (2.28a) we see that *rabi* 'Rabi' does not surface with a high tone. It simply contains a stressed syllable. An identical sentence, but with the noun root *rami* 'Rami' instead of *rabi* 'Rabi' is in (2.28b). The root *rámi* 'Rami' surfaces with a H-tone. I attribute this to the fact that *rámi* 'Rami' has an underlying H-tone but *rabi* 'Rabi' does not.⁷

⁷ To clarify further the tonal difference between *rabi* 'Rabi' and *rámi* 'Rami' is only neutralized when a toneless form such as *rabi* 'Rabi' is in a syntactic position where it projects a H-insertion domain and H-tone insertion is not blocked by some incorporating element with an underlying H-tone. The reader should consult 5.3.4.4 (Section 6.2) for more details.

The description thus far suffices to show that stress and tone are distinct phonological categories with different distributional properties in Chácobo, despite the fact that they overlap under certain circumstances. The distribution of tones in Chácobo is highly complex and a full description is provided in Chapter 5.3.4.4 (Section 6.2).

According to Hyman (2006, 2009) stress is culminative and obligatory, whereas tone is not. Tone refers to any case where pitch functions as an indication of lexical contrast. Hyman's definitions correspond to what I refer to as "stress" and "tone" in Chácobo. However, the categorization of these two types of prominence as "stress" and "tone" is less clear from a phonetic perspective.

In order to show the phonetic distinction between stress and tone, we need to consider cases where high tone and stress do not fall on the same syllable. The distinction between stress and tone can be observed by considering the phonetics of the noun roots

 $r\acute{a}mi$ 'Rami' and rabi 'Rabi' as they are realized with spectrograms from the sentences in (2.28). Recall that in these examples rabi 'Rabi' and $r\acute{a}mi$ 'Rami' do not project an H-insertion domain because it occurs after the clause-type morpheme =ki 'declarative, past time'.

Spectrograms of tokens of the sentences presented in (2.28a) and (2.28b) are provided in Figure 2.3 and Figure 2.4 respectively. Both *rámi* 'Rami' and *rabi* 'Rabi' contain stress on the first syllable. But only *rámi* 'Rami' contains a high tone as well. The most salient phonetic difference between these words is that for *rámi* 'Rami' one can see that the pitch contour is rising on the first syllable. For *rabi* 'Rabi' this is not the case; the pitch falls throughout the stem. These examples suggest that pitch is a stronger correlate in cases with a high tone compared to those without.

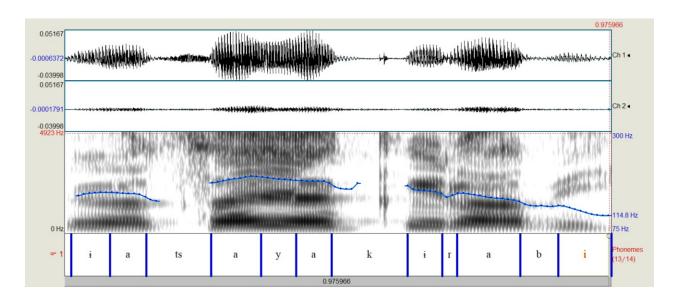


Figure 2.3. Spectrogram of the sentence in (2.28a).

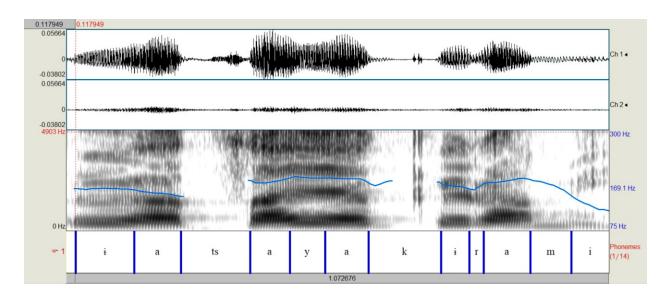


Figure 2.4. Spectrogram of the sentence in (2.28b).

The acoustic values associated with the nouns *rabi* 'Rabi' and *rámi* 'Rami' are presented in Table 2.13. The phonetic values presented in this table suggest that stressed syllables have a higher pitch than unstressed syllables regardless of whether there is a high tone on them or not. The proper noun *rabi* 'rabi' does not have a high tone on its first syllable, and a high tone is not assigned via rule. Nevertheless, the first syllable of *rabi* 'rabi' still has a higher pitch. The difference in prominence between *rabi* 'Rabi' and *rámi* 'Rami' is that the pitch differences in the syllables are more extreme for the latter. The pitch difference between /a/ and /i/ in Rami is 57 Hz, whereas for Rabi the difference is 33 Hz.

Table 2.13. Acoustic values for the subject nouns *Rabi* and *Rami* presented in Figure 2.3 and Figure 2.4.

| | Rabi [ˈrà.βì] | | Rami [ˈɾá.mì] | |
|--------------------------------|---------------|-----|---------------|-----|
| | à | ì | á | ì |
| F0 at end of the syllable (Hz) | 155 | 122 | 187 | 130 |
| Vowel duration (miliseconds) | 113 | 95 | 94 | 79 |
| Intensity (decibles) | 54 | 43 | 54 | 40 |

For comparison, consider the spectrograms for the sentences in (2.27a) and (2.27b). In these sentences, *rabi* 'Rabi' and *rámi* 'Rami' both occur with a high tone on their first syllable. As stated above, the reason is that lexical roots project H-insertion domains when they occur prior to the clause-type morpheme. The acoustic values for the vowels of *rabi* 'Rabi' and *rámi* 'Rami' presented in Table 2.14 demonstrate that the difference between these vowels is negligible in this case.

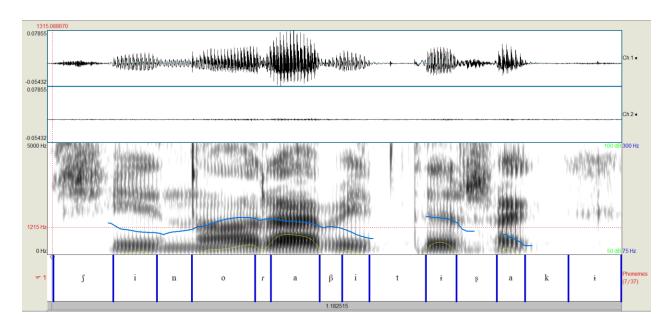


Figure 2.5. Spectrogram of the sentence in (2.27a)

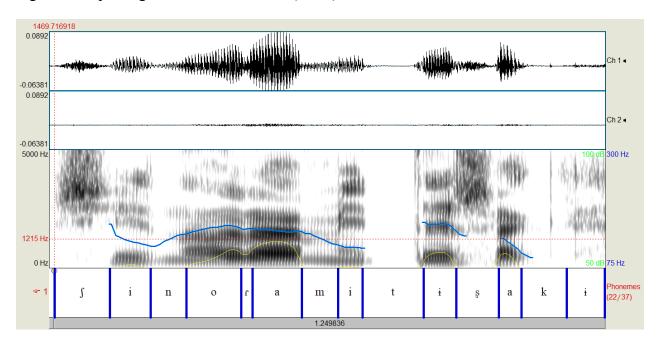


Figure 2.6. Spectrogram of the sentence in (2.27b).

Table 2.14. Acoustic values for the subject nouns *Rabi* and *Rámi* presented in Figure 2.5 and Figure 2.6.

| | Rabi [ˈrà.βì] | | Rami [ˈrá.mì] | |
|--------------------------------|---------------|-----|---------------|-----|
| | à | ì | á | ì |
| F0 at end of the syllable (Hz) | 136 | 107 | 145 | 113 |
| Vowel duration (miliseconds) | 91 | 60 | 94 | 79 |
| Intensity (decibles) | 58 | 50 | 59 | 50 |

The discussion of the phonetic difference between stress and tone thus far has been illustrative rather than systematic. Systematic phonetic studies are needed in order to determine whether the differences one can observe with the tokens chosen in the previous discussion are statistically significant.

A production study was conducted with 5 Chácobo (three men, two women) speakers in order to investigate the acoustic correlates of stress and tone. Speakers were asked to read 26 sentences three times with trisyllabic nouns in sentence medial position. The reason trisyllabic nouns were chosen is because when a high tone falls on the final syllable of such forms, stress and high tone do not overlap allowing us to measure stress and tone. For instance, in the noun *panabí* ['pà.nà.βí] 'asaí' stress will fall on the first syllable by default. The stress cannot fall on the high tone since it must fall within a two-syllable window at the left edge of the stem.

Tallman and Elias-Ulloa (2017) compared the third (high tone bearing) syllable to the first and second toneless syllables and showed that vowel duration (ms) and pitch (Hz) are strong predictors of high tone versus toneless or low/mid pitch syllables. Statistical comparison of the first and second syllables of the trisyllabic 00H/LLH forms were performed. In forms such as *panabi* 'asaí' neither the first nor second syllable are distinguished according to tone (both syllables are toneless) and, thus, a comparison between the first and second syllable should reveal the phonetic correlates of stress without the influence of tone. Statistical tests showed that stress that pitch and intensity are correlates of stress. In neither case was vowel quality (measured in F1 and F2) found to make a difference. The results are summarized qualitatively in Table 2.15 below.

Table 2.15. Acoustic correlates of prominence types in Chácobo (results of information theoretic multilevel comparison)

| | Pitch | Vowel | Intensity |
|-----------------------|----------|----------|-----------|
| | | Duration | |
| Prominence 1 "tone" | ✓ | √ | × |
| Prominence 2 "stress" | √ | × | ✓ |

More details on the statistical analysis including comparison with alternative hypotheses and a discussion of the methodology are found in Tallman & Elias-Ulloa (2017). There are a few limitations of the production study. The most obvious is that it only

compared syllables in nouns with the same prosodic shape (00H/LLH). It is possible that the correlates of the tonal and stress contrast differ according to position in the stem. The other problem is that unstressed and stressed syllables which both contain high tones were not yet compared.

Currently in linguistic science there is no agreed upon phonetic criterion or test for distinguishing stress and tone. Intuitively tone should be distinguished based on pitch and stress based on some combination of acoustic correlates. To my knowledge, however, there has been little or practically no attention paid to the statistical relationship between tone categories and other potential correlates besides pitch. For instance, is it incorrect to refer to prominence 1 as "tone" (as is done in this thesis) because vowel duration also plausibly plays a role in marking high tone bearing versus toneless syllables? Since the multivariate structure of phonological categories has not been investigated in the literature and plays no part in current "word prosodic typologies" (e.g. Hyman 2006, 2009), there is currently no way to answer this question. Based on the phonetics it is not clear whether Chácobo should be regarded as a system that distinguishes two types of stress, two types of tone, or a mixed tone stress system. In this dissertation I assume that Chácobo can be described as a mixed tone-stress system, but I emphasize that it is not motivated by the phonetics of this language.

I refer to the two types of prominence as "tone" and "stress" in this grammar because of their distributional (phonological) properties. As stated above, stress is culminative and obligatory in its domain and high tone is neither culminative nor

obligatory. This choice in terminology is influenced by Hyman (2006, 2009), even though I depart from him in one important respect. I do not see much point in referring to prosodic/phonological words in the description of Chácobo. In contrast to how prosodic systems are described in Hyman's (2006, 2009) typological work, stress is not a word prosodic property, because there are no other properties in the prosodic domain of stress apart from stress itself. I assume that for a category of prosodic word to be motivated in an individual language morphophonological processes need to *cluster* around this domain (Schiering, Bickel and Hildebrandt 2010). The morphophonological domains of Chácobo are described in more detail in 5.3.4.4.

2.4. PHONOLOGICAL ACCOMODATION OF LOAN WORDS

Chácobo has a borrowed a number of words from Spanish into its lexicon. When it does this it adapts these words to its phonology by deletion, epenthesis and replacement. A short list of words borrowed from Spanish into Chacobo are listed below.

The following replacements are typical when words are adopted into the Chácobo lexicon from Spanish; (i) /e/>[i]; (ii) /u/>[o]; (iii) /l/>[r]; (iv) /g/>[k]; (v) $/b/>[\beta]$. All non-sibilants are deleted in coda positions. Impermissible consonant clusters are sometimes split up by a vowel as in (2.29e) and (2.29j), but can also be resolved through consonant deletion as in (2.29d).

```
(2.29)
               naráha [nà.rá.hà]
                                      'orange'
                                                    (Sp. 'naranja')
         a.
                                      'frying pan' (Sp. 'sartén')
               satí
                        [sà.tí]
         b.
                                      'grape fruit' (Sp. 'toronja')
               toróha
                        [tò.ɾó.hà]
         c.
                                      'plate'
                        [rá.tò]
                                                    (Sp. 'plato')
         d.
               ráto
                        [pà.rá.tà]
                                      'money'
                                                    (Sp. 'plata')
               paráta
         e.
               ória
                        [ó.rì.à]
                                      'pot'
                                                    (Sp. 'olla')
         f.
               pirikóra [pì.cò.kó.cà] 'movie'
                                                    (Sp. pelicula)
         g.
               obíha
                        [ò.βí.hà]
                                      'sheep'
                                                    (Sp. oveja)
         h.
         i.
               tſátſo
                        [tʃá.tʃò]
                                                    (Sp. chancho)
                                      'pig'
        j.
                                      'foreigner'
                                                   (Sp. gringo)
               kiríko
                        [kì.rí.kò]
```

The accomodation of stress into Chácobo is straightforward. All stressed syllables in Spanish are re-interpreted as cases of lexical high tone.

Chapter 3. Morphosyntactic structures and relations

This chapter introduces syntactic relations and morphotactic properties. **Syntactic relations** refer to the type of structural and semantic relationship two or more elements or units of grammatical organization have when they combine (Section 3.1). Morphotactic properties are the properties that define different levels in the grammar; categories such as root, affix, clitic, stem and phrase (Section 3.2). Syntactic relations and morphotactic properties serve as background for the division of Chácobo parts of speech into separate categories (Section 3.3), which are differentially distinguished on different levels of structure, built out of morphotactic properties.

To the extent that this chapter is concerned with morphology chapter, it is concerned with the morphotactic aspect of "morphology", which refers to the principles governing the syntagmatic distribution of morphemes (Anderson 2015a). Morphophonology is treated in 5.3.4.4.

3.1. (A)SYMMETRIC SYNTACTIC RELATIONS

This section is concerned with defining the concept of a syntactic relation. Before describing syntactic relations, some definitions of more fundamental notions need to be provided. Some of these definitions are in wide use in linguistics and some of them are redefined or invented completely for the purposes of this description. It is, therefore, inadvisable to skip over this chapter on the assumption that one already knows the meaning

of some term based on its definition somewhere else. Furthermore, some terminological conventions are adopted for purely rhetorical reasons. Where such purely rhetorical terminological moves are made, I point it out.

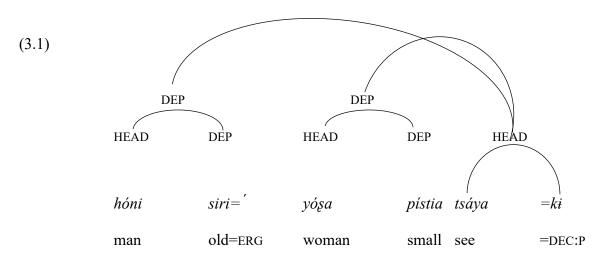
The **morpheme** is a minimally recurring sign unit once allomorphic variation is accounted for (Hockett 1947). In many cases, allomorphic variation can be factored out in more than one way. This results in analytic indeterminacies with respect to morpheme boundaries and whether multiple forms that express the same concept are multiple morphemes or one morpheme. This makes the concept of a morpheme imprecise.⁸ This problem will be ignored for now, but will be brought up again in the context of discussions of constituency in Chapter 5 and morphophonology 5.3.4.4. A **construct** refers to a combination of morphemes that are linked through structural relations (Haspelmath 2011: 70). A syntactic relation can connect elements in an **asymmetric** fashion such that one element is the **head** and the other element is a **dependent**. I will refer to such a syntactic relation as a **head-dependent** relation (Tesnière 1959; Nichols 1986; Creissels 2006).

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⁸ It is well known that the concept of a uniquely identifiable morpheme is problematic (Anderson 2015a). The analysis of words into component morphemes, for instance, results in indeterminacies, where it is not clear (i) where the boundary between morphemes is; (ii) whether a given formative should be regarded as its own morpheme or separate morphemes (Blevins 2016). Chácobo is no exception in this regard. Analytic indeterminacies will be pointed out and described throughout the grammar. In the context of the goals and scope of this chapter, these problematic cases can be overlooked.

Elements of a construct might be connected in a symmetrical fashion, where it is difficult to establish which of the elements is the head and which is the dependent (Matthews 2007). I will refer to such a syntactic relation as one of **co-dependence**. The following discussion concerns the main criteria that are used to define a syntactic relation as head-dependent or co-dependent.

I use a simple sentence from elicitation in (3.1) to illustrate the head-dependent relation. The following sentence is composed of morphemes and phrases that are in syntactic relations with one another, diagrammatically represented by connecting curved lines (DEP = dependent). Those syntactic connections that are asymmetric contain head (HEAD) and a dependent (DEP) over their elements.



'The old man saw the small woman.' ELIC

In Chácobo, the distinction between a head and a dependent in a construct can be discerned based on three criteria. The first criteria is that of **endocentricity** (Bloomfield

1933). According to this criterion, the dependent is an accessory to the head in the following sense. The head of a construct is a precondition for the occurence of the dependent in a sentential context. This criterion can also be stated in terms of distributional equivalence; the head is the distributional equivalent of the whole construct, which contains the head and the dependent. For example, in the construct yóşa pístia 'small woman' in (3.1), the omission of yóşa 'woman' makes the sentence ungrammatical. However, the omission of pístia 'small' does not result in an ungrammatical sentence. In this sentential context, therefore, yóşa 'woman' is a distributional equivalent of the construct yoşa pistia 'small woman'. But pistia 'small' is not a distributional equivalent of yoşa pistia 'small woman'. Therefore, yóşa 'woman' is the head and pistia 'small' is the dependent according to the criterion of endocentricity.

The same considerations apply to the relationship between tsaya 'see' and the constructs y ó s a p í s t i a 'small woman' and h ó n i s i r i 'old man'. Both of these noun phrases can be dropped and the sentence can remain grammatical. A sentence with only the verb tsaya and the clause-typing enclitic =k i 'declarative, past tense, anterior' can stand on its own (meaning 'He/she/it saw /him/her/it.'). Therefore, the verb complex tsaya=k i 'saw' is a distributional equivalent of the whole sentence in (3.1). The noun phrases are not distributional equivalents of the sentence. Therefore, they can be considered dependents of the verb root tsaya 'see' according to the criterion of endocentricity.

The second criterion used to distinguish a head from a dependent is subcategorization; the head implies the occurrence of, or *subcategorizes* for, its dependent. Another way of understanding this criterion, is in terms of syntactic frames. A head has a number of frames that must be filled by specific syntactic categories. The transitive verb *tsaya* 'see' is the head of the dependents *hóni síri* 'old man' and *yóṣa pístia* 'small woman' by the criterion of subcategorization. The verb root *tsáya* 'see' subcategorizes for two noun phrase arguments, one which must occur with ergative marking (a high tone in Chácobo), and another that occurs unmarked in the absolutive case. Furthermore, even where the two noun phrases are not there, their existence is presupposed in the meaning of the sentence.

Another criterion for distinguishing heads and dependents is the **type-of criterion** (Hudson 1987; Zwicky 1993). This criterion is more semantic than either the criterion of endocentricity or the criterion of subcategorization. According to this criterion the dependent specifies a subtype of the notion denoted by the head. In the context of the sentence in (3.1), this criterion again identifies the verb *tsaya* 'see' as the head and the two noun phrases *honi siri* 'old man' and *yoşa pistia* 'small woman'. The reason is that the meaning of the whole sentence can plausibly be thought of as a type of seeing event, but not as a subtype of old man or small woman. The type-of criterion might be thought as applying to the noun constructs as well. For instance, *honi siri* 'old man' is a type of 'man', but not a type of 'old'. Unfortunately, this logic does not actually work as straightforwardly

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⁹ This is a gross simplification of the alignment system of Chácobo done for illustrative purposes (see Chapter 7 and Chapter 8 for a detailed description of the alignment and valency-adjustment).

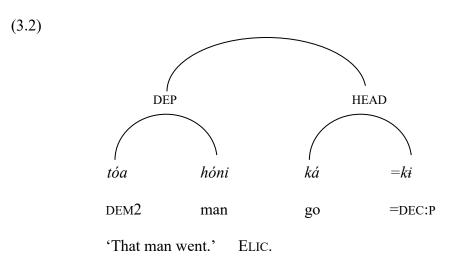
in the case of noun-adjective combinations; the adjective *siri* 'old' might be thought of as identifying an 'old entity or event'. On this definition of *siri* 'old', the construct *honi siri* 'old man' is co-dependent by the type-of criterion.

In fact, in the typological literature, all the tests for syntactic relations have been noted as problematic to varying degrees (Croft 2001; Matthews 2007). These problems can be easily illustrated in Chácobo. For instance, the criteria of head-dependent relations do not apply to the combination of the verb root tsaya 'see' and the clause-typing enclitic =ki 'declarative, past tense'. The criterion of endocentricity does not help determine which of these two elements are the head. The two morphemes are co-dependent. The verb root tsaya 'see' cannot occur without a clause-typing morpheme, the clause-typing enclitic =ki 'declarative, past tense' cannot occur without a verb root (or an auxiliary verb). The type-of-criterion does not apply to the tsaya 'see' =ki 'declarative past tense' combination either. The meaning of (3.1) can be characterized as a type of seeing event as much as it can be described as a declarative speech act or a past time event.

The criterion of subcategorization can only apply with some difficulty. The verb root tsaya 'see' is a subcategory of verb (active: transitive) that selects for a clause-type morpheme (such as =ki 'declarative, past tense, anterior') in all constructions. Not all verb roots require a clause-type morpheme. Non-active intransitive verb roots, for instance, do not require a clause-type morpheme (see Chapter 4 for details). This makes the relation between the verb root tsaya 'see' and =ki 'declarative past tense' more symmetric. While, it is still the case that the enclitic =ki 'declarative, past tense, anterior' can be seen as

subcategorizing for a verb root (by virtue of requiring it), the fact that verb roots vary in terms of whether they require a clause-type morpheme, makes the asymmetry comparatively weaker for the tsaya=ki 'saw' construct. The asymmetry is not as pronounced as it is between the verb and the noun phrases or between the noun and their adjectives.

There are other combinations where the criteria fail to make any distinction between head and dependent at all. An example of a construct which is completely co-dependent as far as the head-dependent criteria are concerned is *toa honi* 'that man' found in (3.2).



As is typical of demonstrative noun-combinations cross-linguistically (Matthews 2007; Croft 2001), the criteria of headedness do not clearly point to one or the other element being the head in the *tóa hóni* 'that man' construct. First, according to the criterion of endocentricity, neither *tóa* 'that' nor *hóni* 'man' is the head or dependent. Either *tóa* 'that' can be dropped leaving *hóni* 'man' by itself as a referential expression or *hóni* can be

dropped leaving *tóa* as the sole referential expression. Subcategorization does not discern between these cases, either; all demonstratives can combine with all noun roots. I will refer to the relationship between *tóa* and *hóni* in examples such as (3.2) as one of co-dependence. Because constructs vary in terms of how well the criteria of headedness converge, I will assume that the syntactic relations between elements across constructs in Chácobo vary on a scale from symmetrical (co-dependent) to asymmetrical (head-dependent) based on the criteria.

Complexes will be named after the syntactic category (noun, verb, adjective) of their head (see §3.3 for a definition and justification of syntactic categories). For instance, I will refer to the combination of the noun *honi* 'man' with the adjective *siri* 'old' as a **noun complex**. I will refer to the combination of the verb *tsaya* 'see' with its dependents as a **verb complex**. This means that the entire sentence in (3.2) is a verb complex in this grammar. While all verb complexes are sentences, not all sentences are verb complexes. For instance non-verbal predicate constructions (see Chapter 4 for the distinction between verbal and non-verbal predicate constructions) can be sentences without being verb complexes.

In cases where the relation between the elements of a construct is not asymmetric, I will refer to the the complex by the name of the open class lexical category in the complex (a description of lexical classes is provided in Section 3.3 below). For instance, the combination of tsaya 'see' and =ki 'declarative, past' in (3.1) will be referred to as part of the **verb complex**, because tsaya 'see' is a member of an open class of lexical verb roots

and =ki 'declarative, past tense' is not. In (3.2), the combination of toa 'that' and honi 'man' will be referred to as a noun complex. The reason for this is that honi 'man' is a member of an open class of lexical noun roots while toa is not part of an open lexical class of morphemes. The principle that a complex is named after the open class lexical root is a rhetorical convention. The reader should not attach any theoretical or descriptive significance to this terminological move. For instance, I could call toa honi 'that man' a demonstrative (or determiner) complex and it would not affect the structural analysis of noun/determiner/demonstrative complexes provided in this grammar

3.2. MORPHOTACTIC VARIABLES

This section is concerned with how the syntagmatic organization of morphemes, constructs and complexes are described in this grammar. By syntagmatic organization, I refer to the order of elements in a sequence and to their relative contiguity. **Contiguity** refers to the degree to which two or more elements must occur together or conversely the degree to which to or more elements can be separated by other elements (Croft 2001).

The study of the syntagmatic organization of elements in a grammar can be divided into morphotactics and syntax. The distinction between morphotactics and syntax is *usually* described as follows. Morphotactics refers to the distribution and organization of morphemes in a word. Syntax refers to the distribution and organization of words in a sentence (e.g. Hockett 1956; Anderson 2015a). The distinction is motivated as long as one

can discover general organizational principles that distinguish morphotactics from syntax.¹⁰ Otherwise the distinction amounts to an orthographic convention and should have no place in a descriptive grammar.

At the same time, it is commonly implied or more simply stated, that there is a continuum between morphotactics and syntax (e.g. Meira 1999: 122; Fleck 2003: 227; Valle 2017: 241). A similar claim that seems to express the same basic idea is that the precise division between morphological combination (suffixes) and syntactic combination (clitics, particles, words) is arbitrary (e.g. Epps 2008: 125), even if there are general architectural differences between the structure of words and phrases.

In this grammar I assume that the question of whether a language has two systems of syntagmatic organization (even if they overlap or display fuzziness at their boundaries) is an empirical question that should be assessed for each language (Haspelmath 2011; Tallman & Epps forthcoming). I, therefore, take it as the null hypothesis that *any* architectural division between morphotactics and syntax in a language is arbitrary, unless the distinction can be motivated empirically.

It is against this background that I define the terms morphotactics and syntax as opposing ends of a **continuum of bondedness** rather than terms that identify different

¹⁰ An example of such an organizational principle comes from Quechua. In Quechua, in syntax the language has an subject-object-verb order. Inside the verbal word, the order it verb-object-subject, where the object and subject are expressed by suffixes. Thus, the order of the expression of grammatical relations is reversed (Weber 1980).

principles of syntagmatic organization. We can say that a given construct is more or less morphotactic or syntactic compared to some other construct, but all constructs can be regarded as morphotactic or syntactic to a certain extent. In this section I describe the variables that define the morphotactic-syntactic continuum. I refer to such a variable as a **morphotactic variable**. This concept forms the basis of the terminological framework for distinguishing between constructs on the two poles of the morphosyntax continuum and the intermediate cases. Finally, I discuss the relationship between syntactic relations (discussed in §3.1) and morphotactic properties.

The first morphotactic variable is whether a given morpheme or construct is free or bound. An element is free if it passes the minimum free form test and it is bound otherwise (Bloomfield 1933; Nida 1949; Hockett 1956). A **free form** consists of a morpheme or construct that can stand on its own as a complete utterance. A **minimum free form** is a morpheme or construct that is a free form and consists of no other free forms. The following morphemes pass the minimum free form test in Chácobo, because they can occur as complete utterances in some discourse context. Furthermore, they are not decomposable into smaller free forms.

- (3.3) a. hóni 'man, male'
 - b. yósa 'woman, female'
 - c. sobo 'house, home'
 - d. bári 'day, sun'
 - e. pístia 'small, a little'

For instance, (3.3a-d) could be felicitously used in response to question such as hawi tsaya?á 'what did you see?'. (3.3e) could be used in response to to the question hawi tí?i pi?á 'how much did you eat' or hawi ní hawi tána 'what is its size?'.¹¹

The morphemes listed in (3.4) fail the minimum free form test. There is no discourse context where the elements could be used as a complete (elliptical) utterance. An example of a grammatical sentence where all of these morphemes occur appears in (3.5).

the test of pronounceability in a consistent fashion. It seems to depend heavily of the metalinguistic

knowledge of the speaker. I have not found the criterion of pronounceability defended in any published

writings. Nevertheless I mention it here, because many linguists have told me that they use this criterion,

even if it is never mentioned explicitly.

¹¹ The minimum free form test is distinct from the test of pronounceability, which refers to the capacity of a

speaker to be able to assign some meaning to a segment in an utterance. It is currently not clear how to apply

- (3.4) a. *tsi 'third position connector'
 - b. *kiá 'reportative'
 - c. *ha 'third person pronoun'
 - d. *tsáya 'see'
 - e. *=ni 'remote past'
 - f. *=ki 'declarative, past tense'
- (3.5) sóbo tsi kía ha tsáya=ní=ki
 house P5 REP 3 see=REMP=DEC:P

'(It is said that) he/she saw the/a house (in the remote past).' ELIC.

Morphemes such as those in (3.3), which pass the minimum free form test, will be referred to as **free**. Morphemes such as those in (3.4) that fail the minimum free form test, will be referred to as **bound**. Its important to point out that freedom and boundedness is not a property limited to morphemes. Boundedness is a property of constructs (combinations of morphemes or other constructs) as well. For instance, in (3.5), the entire sentence is free, but there are some subparts that are also free. For instance, a combination of tsaya 'see' and =ki 'declarative, past tense' can stand on its own as an utterance and, therefore, this verb complex is a free form.

 $(3.6) ts \acute{a}ya = ki$

see=DEC:P

'He/she/it saw him/her/it.'

Bound morphemes and constructs are associated with the morphotactic pole of the bondedness continuum. Free morphemes and constructs are associated with the syntactic pole of the bondedness continuum.

The next morphotactic variable refers to the relative contiguity or separability of the elements of a construct. It is more complex than the bound-free variable. The reason for this is that, as pointed out in the introductory paragraph, contiguity is a matter of degree (Croft 2001: 190). It refers to the degree to which the elements must occur together or are separable by other morphemes or constructs. Below I describe why it must be a matter of degree.

A classic test of contiguity is the test of interruptability (Bloomfield 1933: 180; Mugdan 1994: 2552). According to this test, uninterruptable constructs are words (morphotactic constructs). In the terminology adopted in this paper, we should be inclined to consider an uninterruptable construct as one that leans towards the morphotactic end of the continuum. The "test" is not actually so simple, however. The results of the test will vary according to which element we choose as the interrupting one (Mugdan 1994; Haspelmath 2011). One approach to this problem is to choose some property as definitional for the interrupting element. Haspelmath (2011) suggests that the interrupting element must

be a free form. But this choice is completely arbitrary. In this thesis, I will assume that the contiguity of some construct is a morphotactic variable that can vary from 0 (most morphotactic) upward to n (most syntactic), where n refers to the number of tests of interruptability that can be defined by different types of interrupting elements.

To illustrate this idea consider the verb complex in (3.7). The verb complex in (3.7a) consists of four morphemes; a verb root atf 'grab'; the three grammatical morphemes -a 'transitive'; $=m\acute{a}$ 'causative'; $=k\acute{a}$ 'declarative, past tense' all display different degrees of contiguity with the verb root atf 'grab'. The suffix -a 'transitive' is the most contiguous in that it can never be separated from the verb root by a free form. The enclitic =ma 'causative' can be separated from the verb root by the free form negative marker. This is shown in (3.7b). This morpheme is not separable from the verb root by any constructs that can contain more than one free form (e.g. a verb complex or noun complex). However, the clause-type enclitic $=k\acute{a}$ 'declarative, past tense', can be separated from the verb root by a noun complex (subject), that contains more than one free form. An example of this is provided in (3.7b).

(3.7) a.
$$atf$$
- a = $m\acute{a}$ = ki grab-TR =CAUS =DEC:P

'He/she/it made him/her/it grab him/her/it.'

b. $at \int -a \quad y \acute{a} m a = m \acute{a} = k i$ grab-TR NEG =CAUS =DEC:P

'He/she/it didn't make him/her/it grab him/her/it.'

c.
$$at \int -a = ma$$
 hóni $siri = wa = ki$ grab-TR=CAUS **man** old =ERG TR =DEC:P

'The **old man** made him/her/it grab him/her/it.' ELIC.

The sentences in (3.7) illustrate two tests of contiguity and, thus, allow for the morphotactic variable of contiguity to have at least three levels (noninterruptable = 0; interruptable by a free form ≤ 1 ; interruptable by a complex free form = 2). This shows that uninterruptability is a matter of degree, which is why I refer to it as a morphotactic variable. There are many more tests of contiguity, however, for the purposes of this chapter, two degrees of contiguity is all that is necessary.

The first test of interruptability concerns whether elements within a construct can be interrupted by *any free form*, illustrated in (3.7b) with the construct that combines atf-a 'grab (tr.)' with =ma 'causative'. The second test of interruptability concerns whether the elements can be interrupted by a construct that contains more than one free form, illustrated in (3.7c) with the construct that includes atf-a 'grab (transitive)' and =ki 'declarative, past tense'. The causative morpheme =ma receives a score of 1, because it is interruptable by a free form, but not by a complex free form. Finally, the morpheme =ki does not pass any contiguity tests and thus receives a score of 2.

Table 3.1. Contiguity-separability of forms with two constructs

| | UNINTERRUPTABLE | UNINTERRUPTABLE BY | contiguity |
|-----------|------------------|--------------------|------------|
| | BY ANY FREE FORM | COMPLEX FREE FORM | value |
| <i>-a</i> | 0 | 0 | 0 |
| =ma | 1 | 0 | 1 |
| =ki | 1 | 1 | 2 |

In Chapter 5, I describe the structure of the verb complex and noun complex in relation a larger array of morphotactic variables. The following discussion describes some basic structural categories that are based on the two criteria identified above.

An **affix** is a morpheme that is bound and maximally contiguous with the element it combines with. The transitive morpheme -a of (3.7) is an affix, because it fails the minimum free form test and because it is always perfectly contiguous with the verb root. An affix can be interrupted from the form it combines with, but only by other affixes.

Affixes can only combine with roots or stems. A **root** is a morpheme which projects a stress domain (Chapter 2) and has the potential to combine with affixes. A **stem** is either a root or a construct that consists of a root and an affix. All roots are stems, but not all stems are roots. An example of a root is *atf* 'grab' from (3.7). The stem in this example is *atf-a* 'grab (tr.)'. Stems will be named after the lexical class of their root. For instance, *atf-a* 'grab (tr.)' is a **verb stem**. A verb **stem** is a verb complex that is relatively close to the

morphotactic pole of the morphotactic-syntactic/bondedness continuum. It combines boundedness with high contiguity.

A phrase refers to a construct that consists of one or more separable free forms. By separable, I mean that the contiguity value according to Table 3.1 is at least 1. A phrase is the inverse of a stem with respect to the morphotactic variables of boundedness and contiguity. Roughly, elements of a phrase are non-contiguous and free whereas elements of a stem are contiguous and bound. Phrases will be divided into types (noun phrase, verb phrase) on the same principle that complexes are divided into types. A phrase will be named after its head. In cases where the syntactic relation between the elements of the phrase is symmetrical, the phrase will be named after the open class lexical element. An example of a verb phrase is provided in (3.8a). The verb pi 'eat' is the head of a verb phrase that contains $kama \ siri$ and $ina \ pistia$ as dependents. Each of the dependents can be separated from pi by a free form. This can be observed by comparing (3.8a) with (3.8b). In (3.8a), the noun phrase $kama \ siri$ 'old jaguar' is interrupted from its head pi 'eat' by the free form $ina \ pistia$ 'small dog'.

(3.8) a.
$$[kama \ siri]_N = [ina \ pistia]_N [pi]_V = ki$$
 $[jaguar \ old]_N = ERG [dog \ small]_N [eat]_V = DEC:P$ 'The old jaguar ate the small dog.'

b.
$$[ina \quad pistia]_N$$
 $[kama \quad siri]_N = '$ $[pi]_V = ki$ $[dog \quad small]_N$ $[jaguar \quad old]_N = ERG$ $[eat]_V = DEC:P$ 'The old jaguar ate the small dog.' ELIC.

Another property of phrases is that they allow self-similar embedding. By **self-similar embedding** I mean one phrase can be nested as a dependent of another phrase of the same type. For example, a verb phrase can be nested inside another verb phrase. The verb complex *pihi=?ai* 'it is opening' is embedded inside the noun phrase *nai pihi?aikató* 'the sky that is opening', which in turn is embedded inside the verb phrase headed by *hikó* 'enter'.

[[
$$nai$$
 [$pihi=?\acute{a}i$] $_{VP}=kato$] $_{NP}=\acute{}$ tsi $hik\acute{o}$ tsi $ki\acute{a}$ [[sky [open=NMLZ:IPV]=REL]=SPAT P5 enter P5 REP $ha=n\acute{}=ki$] $_{VP}$ 3=REMP=DEC:P]
'He entered into the sky that was opening.' TXT 001:075

Stems do not display this property of self-similar embedding. Self-similar embedding is confined to phrases, which are constructs at the extreme end of the syntactic pole of the continuum. The following table summarizes the distinction between stems and phrases in terms of three properties that define the morphotactic-syntactic continuum.

Table 3.2. Some morphotactic variables associated with stems versus phrases

| | STEM | PHRASE |
|--------------|----------------------------|------------------------------|
| Contiguity | Root/stem combines with | Phrase combines with |
| | contiguous elements | separable phrases |
| FREEDOM | Root/stem combines with | Phrase combines with free |
| | bound elements | phrases |
| SELF-SIMILAR | Stem does not embed inside | Phrase embeds inside another |
| EMBEDDING | another stem. | phrase of the same type. |

Stems and phrases define poles of a continuum. Stems are constructs on the morphotactic end and phrases are constructs on the syntactic end. There are constructs that do not fit into either category. These combine one of the properties of a stem with one of the properties of a phrase.

Such categories are in between stems and phrases on the morphotactic-syntactic continuum. How close they are to either one of the poles depends on a number of factors that will be discussed in Chapter 5. I will refer to all constructs that are not stems or phrases

as **fuzzy constructs**. Not all fuzzy constructs display the same degree of bondedness. That is, a fuzzy construct is between a stem and a phrase in terms of bondedness, *but* it can be relatively closer or further away from each compared to other fuzzy constructs. There are two broad types of fuzzy constructs; clitic constructs, compounds and reduplicative constructs.

The first type of fuzzy construct is the **clitic construct**. A clitic construct consists of a combination of a clitic and some other element. Clitics are bound and separable morphemes. They are bound in the sense that they fail the minimum free form test. They are separable in the sense that when they semantically combine with some other element, they can be separated from it by a free form. An example of a clitic construct is the combination of the verb stem atf-a 'grab (tr.)' with the clitic =ma 'causative'. The example in (3.7b) shows that the verb root and the clitic =ma can be interrupted by a free form. Since =ma is bound it is a clitic and therefore the combination of atf-a 'grab (tr.)' and =ma 'causative' is a clitic construct. Clitic constructs show different degrees of stem like or phrase like behavior.

The second type of fuzzy construct is the **noun-noun construct**. Noun-noun constructs refer to combinations of two noun stems. Noun-noun constructs have the same distribution as simplex nouns. Examples of noun-noun constructs are provided in (3.10).

(3.10) a. tá?i sóta 'stocking, sock'

b. *mɨkɨni sóta* 'glove'

c. hɨnɨ popo(ma) 'ringed teal (lin.Collonetta leucophyrs)'

d. raiti kisi 'head band (raiti 'cloth'; kisi 'cut')

Noun-noun constructs cannot be interrupted by a free form. Thus, they are stem-like in terms of contiguity. However, they are phrase-like in that they are composed of two free forms. In terms of the morphotactic variables of contiguity and boundedness, noun-noun constructs are the inverse of clitics. Noun-noun constructs are like clitic constructs in that they vary in terms of how stem or phrase like they are or their relative position on the morphotactic-syntactic continuum. For instance, some of the noun-noun constructs are more semantically opaque than others in that their meaning does not straightforwardly follow from the meaning of their parts. For example, *hini popoma* 'ringed teal' literally means 'water owl'. Furthermore, some noun-noun constructs display irregular tonal patterns that I view as a symptom of lexicalization (see 5.3.4.4, Section 6.2 for tone patterns in noun-noun constructs; Chapter 14 provides a description of a the semantics and syntax of noun-noun constructs).

Reduplication constructions are also fuzzy constructs that vary on the bondedness continuum. In Chácobo, reduplication constructions are formed by doubling a morphosyntactic constituent that is minimally a (prefix-)root combination (if a prefix is

present, otherwise, it is just the root), but can contain multiple free forms. This is illustrated in (3.11) below. For a full description of reduplication see 5.3.4.4 (Section 6.4).

(3.11) a.
$$t\acute{a}$$
- $niş$ ~ $t\acute{a}$ - $niş$ = ki

foot-tie ~ foot-tie=DEC:P

'We tied his/her feet multiple times.'

b. $tsaya\ y\acute{a}ma$ ~ $tsaya\ y\acute{a}ma$ }= ki

see NEG ~ see NEG=DEC:P

'He never looked.' ELIC.

Before moving on to a discussion of part-of-speech classes in Chácobo a clarification regarding the use of the terms as bondedness continuum, morphotactic variable, syntactic relation is in order. First, in this grammar all constructs have morphotactic variables, regardless of where they are on the bondedness continuum. For instance, morphotactic variables that define phrases are those of contiguity and boundedness. The values of these morphotactic variables are such that they make what I call phrases less morphotactic than stems.

Section 3.1 of this section described syntactic relations in terms of degrees of head-dependent (a)symmetry. A head-dependent relation is typically conceptualized as quintessentially "syntactic" since it is usually conceptualized as involving the combination of "words". Linguists are divided concerning whether syntactic relations between "words"

extend into relations between elements inside words (e.g. Anderson 1980 vs. Bauer 1990; Haspelmath 1992 vs. Croft 2001: 267). In the terminology of this thesis, the issue of whether syntactic relations extend into words is formulated as follows: given a construct consisting of two or more elements what is the correlation between the position of this construct on the bondedness continuum and the asymmetry versus symmetry in syntactic relations that these elements exhibit with each other? In the descriptive framework of this thesis, therefore, whether syntactic relations extend into the "word" is a matter of degree that could in principle vary between languages because syntactic relations and bondedness (wordhood) vary along continuous parameters in a language specific fashion.

Syntactic relations and morphotactic variables combine to divide Chácobo grammar into a number of categories. The next section discusses part-of-speech classes distinctions based on distributional properties and the types of elements they can form syntactic relations with.

3.3. PARTS OF SPEECH

Roots and stems further divide into different part-of-speech classes. These are nouns, verbs, adjectives, adverbs and other categories. Typologically parts of speech are organized around basic category prototypes, but they are language-specific categories in a few important senses (Croft 2000, 2001; Rijkhoff 2007; Schachter and Shopen 2007; *inter alia*). First, certain categories are not motivated in all languages. For instance, some languages do not have a motivated adjective class (e.g. Chafe [2012] for Northern

Iroquioan; Weber [1980: 36] for Quechua). Secondly, even where part-of-speech categories can be identified, the criteria that distinguish them vary in a language-specific fashion. This section provides the language-specific criteria that distinguish and motivate different parts of speech.

Part-of-speech classes can be broadly distinguished according to whether they are lexical or functional categories. **Lexical categories** denote things, events and properties (Sapir 1921: Ch. 4). **Functional categories** inherently denote relational and/or abstract concepts. By relational concepts I mean concepts that relate two or more things, events or properties in a temporal, spatial or aspectual frame. For instance, the ergative case marker in Chácobo found in (3.1) relates the event of seeing to a referent (the old man). The ergative is, therefore, a functional category. The noun *honi* 'man' denotes a time-stable entity and therefore it is a lexical category. The demonstrative *toa* 'that' in (3.2) is functional in that it relates some entity to a point of reference.

The distinction between lexical and functional concepts is too vague to completely operationalize, however. It is clear that there must be a continuum between lexical and functional categories for processes such as grammaticalization to occurs at all; "semantic bleaching" is a gradual process whereby a concrete (lexical) concept gradually becomes more abstract or relational (e.g. Bybee 1985; Bybee, Perkins, Pagliuca 1994). Certain semantic categories co-exist in multiple domains. For instance, the morpheme *siri* 'old' functions as a property on the one hand but it relates the concept it modifies to a temporal frame. Furthermore, the morpheme *siri* 'old' can be used as a temporal adverb meaning 'a

long time ago', where it seems to have a similar function to the remote past marker. Chácobo also has a class of associated motion markers, a class of bound clitics that relate a motion event to some main event. To illustrate the problem in assigning associated motion morphemes to either a lexical or a functional class on semantic grounds alone consider the sentences in (3.12). The example in (3.12a) combines the verb root pi with an associated motion clitic =bona 'going (transitive, plural)'. In the example in (3.12b) pi 'eat' combines with a nominalized verb ka=?ai 'going'. The sentences have similar meanings, with subtle aspectual differences that will be discussed in Chapter 11 and Chapter 12. The important point to note for now is that both=bona and ka express a motion event.

Furthermore, in the construction in (3.12) the lexical verb ka 'go' relates to the main verb, referring to a pragmatically backgrounded motion event. The difference is that =bona is **inherently relational** – it cannot stand on its own to express a motion event, it always expresses a motion event that relates to some main lexical event. In other words, the

associated motion category is inherently relational even if it contains some lexical content by referring to a motion event that can alternatively be expressed by a lexical verb. In this thesis, I will refer to categories such as associated motion enclitics as **semi-lexical functional categories** (borrowing a term from Haider [2001]). This captures the fact that they are functional in that they are inherently relational even while they encode some lexical content that is expressible by lexical categories. There are a number of other interesting semantic and pragmatic correlates to the distinction between lexical and semi-lexical functional categories. A large part of this thesis will be concerned with teasing apart the semantics of semi-lexical functional categories and lexical categories that appear to be functionally similar, such as the distinction between lexical motion verbs and associated motion clitics.

Another property that distinguishes part-of-speech classes is the open-closed class distinction (Schachter and Shopen 2007). **Open classes** are open to new members through borrowing, the lexicalization of polymorphemic forms and onomatopoeia. **Closed classes** are closed to the aforementioned processes that create new members. The boundary between open and closed is not completely discrete, however (Creissels 2006: 43). One reason for this is that an open class morpheme can become a member of a closed class through grammaticalization. I will refer to classes that span the boundary in this sense as semi-open classes (see Fleck's [2003: 221] for the similar concept he refers to as "non-prototypical open classes").

There is a strong correlation between the lexical-functional status and the openclosed status of parts of speech categories. The relationship is as follows. Lexical categories tend to be open class. Functional categories tend to be closed class. Table 3.3 below lists the part-of-speech categories in this grammar, and their lexical-functional and open-closed status.

Nouns and verbs are robustly distinguished in Chácobo; this is described in Section 3.3.1. While adjectives share some distributional properties with nouns and verbs, they constitute a distinct part of speech class; this is discussed in Section 3.3.2. Morphemes that express adverbial semantics are highly heterogeneous structurally. First, the adverb class displays a high degree of lexical flexibility with the adjective class, and adverbs are particularly prone to grammaticalization. Adverbs develop more abstract meanings and they tend to develop prosodically dependent alternants, i.e. they to grammaticalize (Bybee et al. 1994). Adverbs, which bridge the divide between lexical and functional categories, and open and closed classes, are taken in Section 3.3.3. In Section 3.3.4 I briefly discuss semi-lexical functional categories and functional categories, which are largely treated throughout the grammar.

Table 3.3. Part-of-speech classes in Chácobo

| PARTS OF SPEECH | CATEGORY | OPENNESS |
|-----------------------------------|-----------------------|-----------|
| nouns, verbs (Section 5.3.1), | Lexical | Open |
| adjectives (Section 5.3.2) | | |
| adverbs (Section 5.3.3) | Semi-lexical function | Semi-Open |
| associated motion, temporal | Semi-lexical function | Closed |
| distance, perspectival | | |
| (evidentiality, modality, | | |
| mirativity), quantifiers, | | |
| interrogative phrases | | |
| post-positions, case, participant | Functional | Closed |
| agreement, subordinators, | | |
| possessive markers, number, | | |
| tense, aspect, clause-type | | |

Before describing the part-of-speech classes in Chácobo, a terminological clarification is in order. There are some roots that can function in more than one class at a time. For instance, the root *ibo* 'owner (n.), to own (v.)' in Chácobo can function as a noun or a verb, where it refers to an 'owner (n.)' or a transitive predicate 'to own something (v.)' respectively. There are two ways of describing such a situation. One way is by referring to a process called **zero-derivation**, that derives one of the part-of-speech categories from the

others. For instance, one could consider the noun function of *ibo* 'owner' to constitute its underlying meaning. The verb function 'to own something' could be derived from the noun through zero-derivation. Another way of describing such cases is by positing that such a root is **lexically flexible** between verb and noun classes. In this grammar, I use the terminology of lexical flexibility to describe such cases. The reason is that I see this concept as capturing distinct degrees of autonomy that different part-of-speech classes exhibit visà-vis other part of speech classes. For instance, adverbs are a much less robust grammatical class because, overall, they display a high degree of lexical flexibility with a number of different part-of-speech classes. This terminological choice should not be seen as a theoretical decision, however. I am not claiming that an analysis that posits zero-derivation or perhaps differentiates it in some way from lexical flexibility is incompatible with the data in Chácobo (see the papers in Rijkhoff and van Lier [2013] on this question).

3.3.1 Nouns and verbs

Nouns and verbs in Chácobo can be distinguished on morphological, syntactic and prosodic grounds. In Chácobo, verb roots can host valency-adjusting suffixes and clitics, while nouns cannot (see Chapter 8 on valency). Examples of valency-derived intransitive and transitive verb complexes are given in (3.13) and (3.14).

(3.13) VALENCE SUFFIXES ON INTRANSITIVE ROOT

- a. habá 'run'
- b. $haba=m\acute{a}$ 'make someone run' (causative)
- c. haba-ná 'two people run in competition' (interactional adversarial)
- d. haba=biki 'run together (side by side)' (interactional)
- e. *haba-mis* 'run (habitually) ' (antipassive habitual)

(3.14) VALENCE SUFFIXES ON TRANSITIVE ROOT

- a. tsaya 'see'
- b. *tsaya=má* 'make someone see' (causative)
- c. tsaya-ná 'have a staring contest' (interactional adversarial)
- d. tsaya=biki 'see each other' (interactional)
- e. *tsaya-mis* 'see (habitually) (intr.)' (antipassive habitual)
- f. tsaya-ʔaká 'be seen' (passive)

The augmentative suffix -wa, in contrast, only combines with noun roots, and not verbs. Examples are given in (3.15).

(3.15) AUGMENTATIVE SUFFIXES ON NOUNS

- a. honí-wa 'big man'
- b. *tʃiʔi-wa* 'big fire (forest fire)'
- c. yosini-wa 'big wind (storm)'
- d. kapíŋ-wa 'big tent'
- e. no?iní-wa 'big parasite'

Verbs in Chácobo can undergo category changing nominalizations. I follow the convention in Panoan linguistics and refer to such derived forms as nominals (Fleck forthcoming; Valle & Zariquiey forthcoming), even though they often display mixed behavior with respect to the distinction between nouns, verbs and adjectives. The important point for this section is that they combine with only verbs or only verbs and adjectives and thus distinction these categories from nouns. One example is with the instrumental nominalizer =ti. Examples of verb roots derived to form noun complexes via this suffix are given in (3.16). The suffix =ti 'instrumental nominalizer' never combines with nominal roots. Note that the meanings derived from modification by =ti are only vaguely instrumental in some cases.

(3.16) Instrumental nominalization: V > N

- a. rasa=ti 'bat, hitter (lit. thing to sweep)'
- b. kasa=ti 'soccer field (lit. thing to play)'
- c. $at \int a = ti$ 'mortar (lit. thing to grab)'
- d. tsa?o=tí 'seat (thing to sit with'
- e. a(k)=yama=ti 'prohibition (lit. thing to not do.)'
- f. *oriki=ti* 'food (lit. thing to nourish with)'

Verbs in Chácobo can all undergo agentive nominalization/adverbialization with the suffix - *sini*. There are only a few cases where this suffix combines with nouns. Examples of verb roots combined with -*sini* appear in (3.17).

(3.17) AGENTIVE NOMINALIZATION/ADJECTIVALIZATION: V > N/ADJ

- a. *şiti-şini* 'smeller (n.)' (*şiti* 'smell (v.)')
- b. *tfikif-şini* 'stupid person/thing (n.)' (*tfikif* 'be lazy (v.)')
- c. ará-ṣɨni 'crier (n.)' (ara 'cry (v.)')
- d. pii-șini '(compulsive) eater (n.)' (pi'eat (v.)')
- e. osá-sini 'sleeper, sleepy (n.)' (osa 'sleep (v.)')
- f. yomá-sini 'thief, thieving (n.)' (yoma 'rob (v.)')

Verbs can syntactically combine with a large number of semi-lexical functional clitics, most of which do not occur as dependents in noun phrases. The sentence in (3.18), for example contains four clitics (in bold); the associated motion clitic =biria 'do and come', the manner adverbial clitic =tikin 'again, continuous', and the time of day clitic =ba?ina 'all day, every day'. Verbs syntactically combine with a number of functional clitics as well, absent from the noun phrase. Examples of functional clitics are underlined in (3.18) below; these are plural subject clitic =kan 'plural' and the nominalizing aspectual clitic =2ai 'imperfective nominalizer' and the clause-typing reportative marker =2ikia 'declarative, reportative'.

(3.18)
$$a(k) = biri\acute{a}$$
 tsi $bi = tik\acute{i}n = kan = (?)iki\acute{a}$

kill=DO&COME P5 come = AGAIN=PL=DEC:REP

 $ho \sim h\acute{o} = ba?ina = kan = \acute{a}i$ $ki\acute{a}$

come \sim come=ALLDAY=PL=NMLZ:IPV REP

'When they killed them, they came back again (it is said), coming all day (it is said).' TXT 007:120 & ELIC.

Noun complexes can be syntactically elaborated by demonstratives as in (3.19a), and quantifiers as in (3.19b). Verb complexes cannot; the demonstrate *naa* 'this' and the quantifier *wisti~wisti* 'each, some' do not modify the verb; they do not have adverbial functions.

(3.19) a. Demonstrative

at/-a=kihóni hiníma kiá i-a naa i 1sg-acc grab-TR=DEC:P DEM₁ man good say REP ha =ni=ki3sg =REMP=DEC:P

"This man grabbed me, and now it's good!" she said.' TXT. 006:059

b. Quantifier

wisti_wisti boi kiyo=?ikiá no-a
each yatorana finish=DEC:REP 1PL-EPEN

'We finished each of the yatorana (type of fish, lin. Brycon cephalus).'

Txt. 049:432

The sentence in (3.20) illustrates a few properties of nouns, which verbs do not share. Nouns can combine with other nouns in contiguous noun-noun constructs. Nounnoun combinations can build layered structures. The compound hini yofini 'water demon' is the dependent of ha?i 'girl' in [[hini yofini]_N ha?i]_N 'water demon girl' in (3.20). Nouns can also be modified by adjectives. Adjectives always directly follow the noun stem they modify. An example occurs in the same sentence, where the complex noun complex hini yofini ha?i 'water demon girl' takes the adjective pistia 'small' as a dependent. Furthermore, nouns can head phrases which are marked with case morphemes (in bold); kiriri 'grooved arrow head' is ergatively case marked in (3.20), by a high tone docked to

the final syllable of the noun phrase; hawi mapo 'his head' combines with the dative case marker =ki 'dative'. Nouns can also be modified by possessive pronouns. In (3.20), the possessive pronouns hawi 'third person singular genitive' modifies the noun mapo 'head'.

There are four properties that are common to noun complexes but not shared by verbs; (i) productive and (potentially) layered modification by noun roots; (ii) modification by adjectives; (iii) modification by possessives; (iv) and case modification.

Verb roots combine with noun phrase dependents that are not necessarily contiguous with them. Verb roots must function as predicates or must be derived into nouns (or noun-like categories) in order to function as arguments of other verbs. For instance, in (3.21), the verb *riso* 'be dead' is nominalized and subordinated under a relative clause. In this case it functions as an argument of the verb.

(3.21)
$$ts\acute{a}?o=ro?\acute{a}$$
 $ki\acute{a}$ [[$n\acute{a}ama$ $riso$]_{VP} =? a]_{NP}= $kato$ = sit=LIMIT REP [[already dead] =NMLZ:P] =REL=ERG

 $tf\acute{a}?a$ $mitaramit\acute{i}$ $bi=y\acute{o}=ki$

feather_dress wrist_band get=CMPL=DEC:P

'Just sitting, (those) who had already died grabbed all of their feather dresses and wrist bands (it is said).' TXT. 58: 194

The evidence above provides distributional evidence for a distinction between nouns and verbs in Chácobo. There is also a prosodic distinction between nouns and verbs. In Chácobo some noun roots drop or truncate their final syllable when the following three conditions hold; (i) the noun has a shorter apocoped allomorph (e.g. $maşáşa \sim maşáş$ 'stone'), (ii) the noun does *not* contain a high tone on its final syllable, and (iii) the noun does not occur at the right edge of a noun phrase in the final position of a clause, after the clause-typing morpheme (see Tallman [2017] and 5.3.4.4). For instance, the apocopable noun tsakaká 'agouti (erg.)' does not truncate its final syllable in (3.22a), but the same noun root appears in (3.22b) with its apocoped form because it does not occur before the verb root and because its final syllable does not bear a high tone, which the token in (3.22b) receives via ergative case marking.

- (3.22) a. $ni\dot{a}$ ka tsakaka=' ha-to bi=ma=ni=kihere REL agouti=ERG 3-PL:ACC take=CAUS=REMP=DEC:P'The agouti (erg.) made them take it.'
 - b. $tima=biri\acute{a}$ tsi $ki\acute{a}$ $ts\acute{a}ka$ $ho=n\acute{t}=ki$ ground=DO&COME:TR/PL P5 REP **agouti** arrive=REMP=DEC:P 'They ground it (the yuca) and then the agouti (abs.) came.' TXT 039:020-021

Another phonological difference between nouns and verb roots relates to the minimum number of syllables a root can have. Noun roots are never smaller than two syllables long. However, there are several monosyllabic verb roots. Some examples are listed in (3.23) below.

- (3.23) a. ho 'come'
 - b. *ka* 'go'
 - c. ko 'wander, hunt'
 - d. bo 'carry away'
 - e. bi 'bring'
 - f. his 'see'

3.3.2 Adjectives

Adjectives are a distinct part-of-speech class in Chácobo. They can be distinguished from nouns and verbs by distributional criteria. I start with the criteria that distinguish adjectives from nouns and verbs. After this I move onto a criterion that distinguishes adjectives from verbs, but not nouns, and then to a criterion that distinguishes adjectives from nouns, but not verbs.

All adjectives can be verbalized with the intransitive verbalizing suffix -na, as in (3.24) and the transitive verbalizing suffix -wa as in (3.25) (see Section 8.6.6 for a description of the syntax and semantics of these forms).

Adjectives that are not verbalized by the classes changing affixes in (3.24) and (3.25) cannot be elaborated by the valence-adjusting suffixes and clitics displayed in (3.13), or combine with verbal clitics such as those illustrated in (3.20).

(3.24) SUFFIXATION ON ADJECTIVES: ADJ > V:INTR

- a. hoso-ná 'to become white'
- b. *tʃiki-ná* 'to become black'
- c. pistia-ná 'to become small'
- d. titikaa-ná 'to lengthen'
- e. *yoi-ná* 'to become ugly'
- f. hia-ná 'to become pretty, good'

(3.25) SUFFIXATION ON ADJECTIVES: ADJ > V:TRANS

- a. hosó-wa 'to whiten something/someone'
- b. *tʃɨkɨ-wa* 'to blacken something/someone'
- c. pistiá-wa 'to make something/someone small'
- d. *titikaá-wa* 'to lengthen something/someone'
- e. yoi-wa 'to make someone/something ugly, broken'
- f. hiá-wa 'to make something pretty, good'

The verbalizing suffixes -na and -wa cannot verbalize nouns (with a few marginal exceptions; Section 8.7.5). The suffix -na cannot combine with verbs. The suffix -wa does not combine with all verb roots; only with certain change-of-state verb roots (see Section 8.7.1).

All adjectives can occur directly after the head noun. In this position they modify the head noun with an attributive function. Adjectives cannot occur before the head noun they modify (see Section 14.2.1). Nouns can modify other nouns in attributive position as well, but they occur to the left of the head noun (Section 14.1).

(3.26)
$$to\acute{a}$$
 tsi ... [$yon\acute{o}ko$ $k\acute{o}fi$]_{NP} no $bi=n\acute{i}=ki$

DEM2 P5 [work **hard**] 1PL receive=REMP=DEC:P

'There we received hard work.' TXT. 049:169

Adjectives in attributive function do not require any morphotactic or syntactic elaboration. Like verbs, adjectives can combine with the clitic = 'sini. When combined with adjectives, it refers to an inherent attribute of some referent, or functions as an intensifier of the property concept denoted by the adjective. As stated in Section 3.3.1, this suffix does not combine with nouns productively.

(3.29) Adjectives: Adj > N

- a. titikaá=şini 'very tall (keeps growing)'
- b. *hosó=sini* 'very white'
- c. t/iki=sini 'very black'
- d. pistiá=sini 'very small (does not grow)'
- e. yoi=sini 'terrible, broken, possessed'

Adjectives share the property with nouns that some of them have apocoped allomorphs. Adjectives that contain more than two morae can undergo apocope when they do not occur at the right edge of a noun phrase and after a final clause-typing morpheme. For instance, the form *titikáa* 'tall, long' appears in an apocoped form in sentence (3.30). It occurs inside a noun phrase, a position where apocoped forms surface (see Section 6.3.1 for details).

Table 3.4 summarizes the criteria discussed in this Chapter that distinguish nouns, verbs and adjectives in Chácobo. Table 3.4 also classes the criteria in terms of whether they are necessary or sufficient. This distinction is to be interpreted as follows. If a criterion is **necessary** for a given part of speech class, all roots of this class must satisfy this criterion for them to be considered members of this class. If a criterion is **sufficient** it means that *if* the root passes the criterion then it is a member of the part of speech class, but it need not. For instance, not all nouns or adjectives larger than two morae can undergo apocope and not all nouns can combine with the augmentative *-wa*. However, there are no verb roots

that undergo apocope. This means that for a given root the existence of an apocoped allomorph is sufficient criteria for the identification of this root as a noun or adjective.

Table 3.4. The distributional distinctions between open-lexical class categories in Chácobo.

| | CRITERION | VERB | Noun | ADJECTIVE | STATUS |
|--------------------|--|----------|----------|-----------|---|
| Affix combination | 1. Valence changing suffixes (-mis -na, -?aká) | √ | × | x | NECESSARY |
| Affix combination | 2.Agentive nominalization (=sini) | √ | x | √ | NECESSARY |
| Affix combination | 3. Augmentative (-wa) | x | √ | × | SUFFICIENT |
| Affix combination | 4. Verbalizing suffixes intransitive (-na) | x | × | √ | NECESSARY |
| Affix combination | 5. Verbalizing suffix transitive (-wa) | √ | × | √ | NECESSARY (FOR ADJECTIVES) SUFFICIENT (FOR VERBS) |
| Clitic combination | 6. Valence changing clitics (=má, =biki) | √ | × | × | NECESSARY |
| Clitic combination | 7. Instrumental nominalization (=ti) | √ | x | x | NECESSARY |

Table 3.4, cont.

| Clitic | 8. Verbal clitics (tense, | √ | x | × | NECESSARY |
|--------------|-----------------------------|----------|--------------|----------|------------|
| combination | aspect, modality, | | | | |
| | associated motion, | | | | |
| | number) | | | | |
| Clitic | 9. Nominal enclitics, | × | ✓ | × | NECESSARY |
| combination | quantifiers, (number, | | | | |
| | case/postpositions) | | | | |
| Phrase | 10. Attributive position | × | × | √ | NECESSARY |
| combination | occuring to the right of | | | | |
| | the head noun (N_) | | | | |
| Phrase | 11. Attributive position | × | √ | × | |
| combination | occuring to the left of the | | | | |
| | head noun (_N) | | | | |
| Phrasal | 12. Adverb/ adverbial | × | \checkmark | × | NECESSARY |
| combination | modification occuring | | | | |
| | unordered with respect to | | | | |
| | element it modifies | | | | |
| Phrasal | 13. Takes adjective | × | √ | × | NECESSARY |
| combination | modifier directly to its | | | | |
| | right (_Adj) | | | | |
| Phrasal | 14. Argument of verb | × | √ | × | NECESSARY |
| combination | without modification | | | | |
| Phonological | 15. Apocope | × | √ | √ | SUFFICIENT |
| Phonological | 16. Monosyllabic | √ | × | × | SUFFICIENT |
| | | | | | |

Table 3.4 demonstrates that adjectives share properties with verbs (criterion 2 and criterion 5) and nouns (criterion 15). In the context of typological debates on the (non)universality of adjective class across all languages (compare Dixon 2009 with Chafe 2012), we should consider whether adjectives should be analyzed as a subclass of nouns or verbs in Chácobo. Some verbs *can* occur in a distributional context very similar to the attributive position for adjectives (criterion 13); they can occur right after the head noun without any overt class-adjusting morpheme, as in the verb root o_5a 'sleep' in (3.31) below. However, the relativizer =ka(to) must occur in this construction, otherwise the sentence is ungrammatical. This shows that that verb is embedded inside a relative clause, rather than occupying the same position as the adjective by criterion 10.

The suffix -wa (criterion 5) also combines with some verbs where it serves a transitivizing or causative function. However, this derivational process only occurs on a subset of verbs. With adjectives, -wa 'transitive, verbalizer' is fully productive. Based on these differences, I assume that the adjective class should not be regarded as a subclass of the verb class in Chácobo.

We might also consider whether adjectives should be classified as a subclass of nouns in Chácobo. Adjectives categorically fail criterion 13; they cannot function as head of a noun phrase, unless they combine with the relativizer =ka(to). Furthermore, there are very few noun roots that combine with the verbalizing suffixes -na and -wa. However, all adjectives can combine with verbalizing suffixes -na and -wa (see Chapter 8, Section 8.6.6 for details on these suffixes).

3.3.3 Adverbs to adverbials

Morphemes that express adverbial semantics add locative, temporal or manner meanings to verbs. It is not clear whether adverbs should be identified as a part-of-speech class Chácobo, however. In this section, I make this point by motivating distinct classes of morphemes that express adverbial semantics. Bound morphemes that express adverbial semantics are much more likely to take on other grammatical functions such as aspectual semantics, syntactic subordination and same subject or switch reference marking than free adverbs. Free morphemes that express adverbial semantics are more likely to strictly denote manner, temporal and locative elaborations on an event without developing functional or relational meanings. Thus, within the heterogeneous class of morphemes that express adverbial semantics, I have the impression that there is covariation between the boundedness and the degree semantically bleaching or generality.

As a first pass to capture the covariation between bounded status and functional semantics, I refer to clitics that express adverbial semantics as **adverbial clitics**, while I refer to free morphemes that express adverbial semantics as **adverbs**. Free adverbs and adverbial clitics can be broadly distinguished according to distributional properties that do not follow from their status as bound or free forms, but there are some distributional overlaps across the forms (Tallman 2018). This section is primarily concerned with adverbs, while adverbials are taken up in the following section on functional categories, and throughout the grammar where grammatical functions are discussed.

There are two classes of adverbs. One class of adverb displays complete lexical flexibility with adjectives, and the other does not. An example of an adverb that falls into the latter class is *i/ima* 'slowly' which is illustrated in (3.32).

Unlike adjectives, adverbs such as *ifima* 'slowly' cannot combine with the verbalizing suffixes -na and -wa (see Section 8.6.6 for details). Unlike adjectives, the adverb *ifima* cannot occur in attributive function in a noun phrase (see Section 14.2.1 for details). For instance, the adverb *ifima* 'slowly' *cannot* combine with *hóni* 'man' in order

to mean *hóni íſima 'slow man'. Thus, the class of adverbs that iſima 'slowly' is a member of do not share any of the criteria that I have identified for classifying adjectives (see 3.3.2 above).

On the other hand, there are a large class of adverbs that display all of the defining properties of adjectives. They are adverbs because they can modify the verb. These adverbs can be considered lexically flexible between adjective and adverb classes. Examples of such lexically flexible adverbs are *pístia* 'small (adj.), a little, briefly (adv.)' and *siri* 'old (adj), a long time ago (adv.)'. In the sentences in (3.33), these morphemes funcion as adjectives while in the sentences in

(3.34) they function as adverbs.

$$obi$$
 [$k\acute{a}i$ $pistia$]_{NP} $ho=k\acute{t}$ $b\acute{t}=tsi$

there mother **little** come=PRIOR:D{A} come:PL=IMM:SG:ITR

 $=k\acute{a}n=ki$

=PL=DEC:NONP

'As that the little mother just arrives, they are coming.' TXT 061: 583

b. *síri* AS ADJECTIVE

run=COMING:SG:ITR=DEC:REP [woman old]

'The old woman came running.' TXT 050:744

(3.34) a. *pístia* as ADVERB

hakirɨkɨ tumitſúkwa ka=ni=ki \dot{t} pistia then Tumichucua 1sg go=REMP=DEC:P little ak-(?)a \dot{t} kas=i=napapi paper do=NMLZ:P want=ss=sub 1s_G 'Then, I went to Tumichucua, because I wanted to study a little.'

TXT 054:358

b. *síri* as ADVERB

siri bo=kan=ni=kikiá tres oșŧ tsi old go:PL=3PL=REMP=DEC:P three moon P5 REP kiá bo=kan=i=nago:PL=3PL=CONCUR:S=EPEN REP

'A long time ago, it had been three months since they left.' TXT 067:106

The lexical flexibility of such forms can result in structural ambiguity. This is illustrated in (3.35). The sentence in (3.35a) presents the adjectival construal of *pístia* 'small, a little', and (3.35b) presents the adverbial construal of the same morpheme, but string of morphemes is the same in each case.

(3.35) a. ADJECTIVE CONSTRUAL:

[yoşa $pistia_{ADJ}$]_{NP} honi=' tsáya=ki[woman small man=ERG see=DEC:P 'A man saw a small woman.'

b. ADVERB CONSTRUAL:

 $[yosa]_N$ pistia_{ADV} honi= tsáya=ki [woman] little man=ERG see=DEC:P

'A man glanced at a woman' ELIC.

Very few adverbs can occur between the verb root and the clause-type clitic which is =ki 'declarative, past, anterior' in the example above (see Chapter 4 and Chapter 5 (Section 5.2.3.4) on the morphosyntax of clause-type/rank morphemes). For instance, *siri* 'old' cannot occur between the verb root and the clause-type clitic. This is illustrated in the sentences in (3.36b).

(3.36) a.
$$siri$$
 $ka=ni=ki$
 $long_time_ago$ $go=REMP=DEC:P$

'He/she/it left a long time ago.' ELIC.

b. * $k\acute{a}a$ $siri$ $=ni=ki$
 go $long_time_ago$ $=REMP=DEC:P$

'He/she/it left a long time ago.'

ELIC.

There are very few adverbs that can occur in the syntactic position occupied by *siri* 'old' in (3.36b). In contrast to free adverbs, adverbial clitics can always occur between the verb root and the clause-typing morpheme. An example of an adverbial is given in (3.37); the clitic $=t\acute{a}pi$ 'punctual' (underlined) is an adverbial clitic that must always occur between the verb stem and the final clause-typing morpheme. The verb stem and the final clause-typing morpheme are in bold.

(3.37)
$$ha-2-ipa$$
 $ho=so$ $tfiraba=tápi$ $kiá$ ha

3-EPEN-father come=PRIOR:A $push=PNCT$ REP 3

 $wa=ni=ki$

TR=REMP=DEC:P

'As soon as her father arrived, he pushed (Ashina).' TXT 063:028

There are *some* adverb roots that can interrupt the verb stem and the clause-type morpheme. For instance, the adverb *pistia* 'small (adj.), a little/briefly (adv.)' can occur in between the verb root and the clause-typing morpheme. An example of this is provided in (3.38). In this example, the adverb occurs in between the verb root fina 'grow' and the clause-typing morpheme =final 2ai 'nominalizer, imperfective'.

As stated above, most adverbial clitics display a restricted distribution such that they occur in between the verb stem and the clause-typing morpheme. Some adverbial clitics *can* occur outside of this complex, but it is less common. An example of an adverbial occurring outside the verb complex is presented in (3.39). Here the adverbial $=tik\acute{t}n$ 'again' does not occur between the verb root $\acute{a}k$ 'kill' and the clause-typing morpheme $=2\acute{a}$ 'nominalization, anterior'. Rather, it occurs right-adjacent to the first element of the clause.

In Chácobo, free adverbs and bound adverbial clitics display distributional overlap. The distributional distinction between these categories is stochastic (see Tallman [2018] for additional commentary). As noted above, adverbials are more likely than adverbs to develop other functional meanings, such as aspectual ones. Adverbs and adverbials do no

unproblematically classify as lexical because they bleed into semi-lexical functional and functional categories through the acquisition of more abstract and relational meanings. Functional categories are briefly considered the in next section in the context of the organization of the grammar.

3.3.4 (Semi-lexical) functional categories

Adverbial clitics tend to be more semantically bleached compared with adverbs. For instance, the morpheme =tikin 'again' often appears to have a continuous aspectual meaning. As such this morpheme is semi-lexical in the sense that I understand this term in the dissertation. As stated in the previous section, adverbials are highly distributionally heterogeneous. The same applied to semi-lexical functional and functional categories in general. These categories are unified only in terms of not being lexical categories and displaying a strong tendency towards being closed class. Table 3.5 lists the (semi-lexical) functional categories found in Chácobo with relevant Chapters. Each of these categories display unique syntagmatic distributions. Further subclassification appears to be unmotivated. The distribution and semantics of (semi-lexical) functional morphemes is taken up case by case in the chapters indicated below.

Table 3.5. Semi-lexical functional and functional categories in Chácobo

| (Semi-lexical) functional category | Reference Chapter | |
|------------------------------------|---|--|
| Clause-type | Chapter 4, 13.4 (Desiderative/Hortative), | |
| | 13.16 (Reportative) | |
| Case | Chapter 7 | |
| Voice / Valence | Chapter 8 | |
| Tense | Chapter 9 | |
| Relative tense | Chapter 9, Chapter 10 | |
| Temporal distance | Chapter 10 | |
| Aspect (Imperfectivity) | Chapter 11, Chapter 12 (Associated Motion) | |
| Associated Motion | Chapter 12 | |
| Modality | Chapter 13, 12.6 | |
| Evidentiality | Chapter 13 | |
| Mirativity | Chapter 13 | |
| Adverbial | No dedicated chapter | |
| Possession | Chapter 14 | |
| Quantification | Chapter 15 | |
| Number | Chapter 15, 7.2.1 (Interaction with case), 7.2.2 (Pronouns) | |
| Demonstrative | Chapter 15 | |

Chapter 4.Predication and clause-type

This chapter provides a description of predicate constructions and clause-typing in Chácobo. Predicative constructions divide into verbal and non-verbal types. These types divide in turn into a number of subtypes. These categories are described in Section 4.1. The coding of predicate types is intimately related to the coding of clause-types. Section 4.2 provides an overview of clause-types.

I use clause-type to refer to conventionalized forms of encoding speech acts. Clause-type categories include declarative, imperative, interrogative and hortative. The discussion below also considers whether the reportative should be classified as a clause-type rather than an evidential.

4.1. PREDICATION

Verbal predication is described in Section 4.1.1. Non-verbal predication is described in 4.1.2. There are two constructions that share properties with verbal and non-verbal predicate constructions; (i) i-copulative constructions described in Section 4.1.3; (ii) Auxiliary verb constructions described in Section 4.1.4.

4.1.1 Verbal predication

4.1.1.1. Verbal predication – introduction

A structural definition of the verbal predicate construction in Chácobo is provided below in (4.1).

- (4.1) a. It is headed by a **verb complex** (see Section 3.1 for the definition of a complex). The verb complex encodes the **transitivity** of the clause.
 - b. The **verb complex** selects NP dependent arguments which are coded for their dependency with case morphemes, or else their dependency relation is marked through a fixed position in the relation to the verb stem and/or the **clause-type/rank morpheme** (see (c) below). Arguments of the head verb do not have to be phonologically realized (they can be zero).
 - c. A clause-type/rank morpheme obligatorily follows the verb stem. It encodes the clause or sentence type (declarative, imperative, interrogative, hortative, reportative), the clause rank (same/different subject clause, relative clause, nominalization), and certain TAME categories (tense, aspect, evidentiality, or modality).

- d. Verbal predicate complexes can be **coordinated**. In coordinate constructions, one clause-type/rank morpheme can associate with multiple verb stem or verb complexes.
- e. Verbal predicate constructions **cannot contain the non-verbal predicate morphemes** *so* 'declarative' and *ni* 'interrogative'. These morphemes are
 reserved for non-verbal predication. Declarative and interrogative clause
 types are encoded in the clause-type/rank morpheme only.

I illustrate all of these properties with the sentence in (4.2) which is headed by the transitive verb root tsaya 'see'. Since the verb root tsaya 'see' is transitive (property (4.1a) it must take two NP dependents as core arguments (see Section 4.1.1.1 on the correlates of transitivity). In this case the subject argument is the noun phrase $honi \ baki \ pistia$ 'little boy' and the object argument is the noun phrase mitfit tfitki 'black cat'. The clause type/rank morpheme is =ki 'declarative, past tense' (property (4.1b-c))

[
$$h\acute{o}ni$$
 $bak\acute{\imath}$ $p\'{i}stia$]_{NP}= $\'$ [$m\'{i}tf\ii$ $tf\'{\imath}ki$]_{NP} $ts\'{a}ya=ki$ [man child little]=ERG [black cat] see=DEC:P 'The little boy saw the black cat.' ELIC.

As stated above in (4.1d) verb complexes can be coordinated. Only one final clause-type/rank morpheme is necessary in such circumstances. An example of a coordinated

construction is provided in (4.3b). In this sentence there are three verb phrases and only one clause-type/rank morpheme. The head verb roots are wif 'scrape', tis 'take.off' and tsik 'take out'. The final clause-type/rank morpheme is =ki 'declarative, past tense'. Verbal coordinate constructions all have the same subject. In this sentence the subject is the noun phrase hiwi mabaka 'tree trunk'.

'The tree trunk scraped his (the old man's) entire back, took off his (the old man's) watch completely, and knocked out (lit. took out) all of his (the old man's) teeth.' TXT 090:039

Coordinate constructions are not problematic for the definition of verbal predicate constructions. The property described in (4.1c) should not be interpreted as meaning that *every* verb stem must uniquely combine with its own clause-type/rank morpheme, although

this is the normal state of affairs outside of coordinate constructions. Another way of understanding coordinated verb complexes is by assuming that each of the coordinated verb complexes does contain a clause-type/rank morpheme, but they are elided under coordination. Coordination is briefly discussed in in the context of a description of the constituency of the verb complex in Chácobo (see Sections 5.2.1.4 and 5.2.2.3 for more discussion on coordinate constructions).

All verbal predicate constructions take noun phrase arguments as dependents, even if they are not overtly realized. Verbal predicate constructions fall into different classes depending on transitivity and the number of NP dependents they select for. The four main classes are as follows; (i) intransitive; (ii) monotransitive; (iii) ditransitive; (iv) extended intransitive. The distinction between intransitive and transitive (monotransitive vs. ditransitive) is discussed in Section 4.1.1.2

4.1.1.2. Transitivity

Verb complexes in Chácobo are either transitive or intransitive. Verb roots can be either inherently transitive or intransitive or else unspecified for their transitivity value. Verb roots combine with affixes or clitics to derive different transitivity values. In the case of unspecified roots, they require combination with a transitivity affix to acquire a transitivity value. For instance, the verb root *atf* 'grab' must combine with either the transitive suffix -a or the intransitive suffix -i in all constructions. Verb roots which are

inherently intransitive or transitive do not require combination with affixes or clitics to function as verb stems in verbal predicate constructions, since they already have a transitivity value. For instance, the intransitive verb root *habi* 'to learn' does not require combination with a valence-adjusting affix like the unspecified verb root *atf* 'grab'. It can combine with -wa 'causative' as in *habi-wa* 'to teach' in which case it heads verb phrases of transitive verbal predicate constructions. provides a detailed discussion of valency-assigning and valency-adjusting operations.

Further semantic and morphosyntactic details on valency-assigning and valency-adjusting morphemes are found in Chapter 8. This section is concerned with defining the basic properties of transitivity at the level of the verbal predicate construction. I discuss four properties associated with the intransitive-intransitive distinction that are relevant for Chácobo; (i) transitivity harmony; (ii) transitive *wa*; (iii) case assignment; (iv) number of arguments selected by the verb.

Transitivity harmony

Transitivity harmony is a property of many Panoan languages whereby functional or relational morphemes exhibit suppletive allomorphy based on the transitivity of the verb complex with which they combine (Valenzuela 2017). Many (semi-lexical) functional morphemes in Chácobo have intransitive and transitive allomorphs. In Chácobo, associated

motion, participant agreement, same subject conjunctions, and the temporal clitic $=ts\lambda = ts\dot{a}$ 'immediate present' display transitivity harmony in this sense.

An example of transitivity harmony is provided in (4.4) below. In this sentence the transitive verb root bi 'grab' combines with three morphemes that display transitivity based allomorphy. The associated motion clitic $=kay\acute{a}\sim=bay\acute{a}$ 'do and go' is realized as its transitive allomorph $=bay\acute{a}$ rather than its intransitive allomorph $=kay\acute{a}$. The temporal clitic $=tsi\sim=tsa$ 'immediate present' surfaces in its transitive form =tsa rather than as its intransitive allomorph =tsi. Finally, the same subject morpheme $=2i\sim=ki$ 'same subject simultaneous' surfaces as =ki rather than as its intransitive allomorph =2i. All of these morphemes surface with their transitive allomorph because they agree with the transitive verb root bi 'grab'.

Intransitive allomorphs of the aforementioned morphemes are illustrated in (4.5), . In (4.5), the intransitive verb root o_sa 'sleep' combines with the intransitive allomorph of $=kay\dot{a}\sim=bay\dot{a}$ 'do and go'. In (4.6), the intransitive verb root $ar\dot{a}$ 'cry' combines with the intransitive allomorph of $=tsi\sim=tsa$ 'immediate present'. In (4.7), the intransitive verb

same subject morpheme =2i is used to encode coreferentiality with the subject of the intransitive verb ka 'go'.

There are some complications in using transitivity harmony as a diagnostic for the transitivity of the verb complex. There are two types of allomorphy that involve transitivity harmony in Chácobo (and across Pano languages). The first type is straightforward. If the verb complex is transitive, then the transitive allomorph appears, if the verb complex is is intransitive then the intransitive allomorph appears. The concurrent same subject marker $=2i\sim=ki$ displays this pattern. The second type of transitivity harmony interacts with

number and nominal type. One allomorph appears either when the verb complex is transitive or when the verb complex combines with a plural subject pronoun, regardless of transitivity. All associated motion morphemes display this pattern. This means that for certain suffixes/clitics, transitivity harmony constitutes a necessary but not a sufficient criterion; if a verb complex is transitive the transitive allomorph surfaces, but the reverse is not true. For example, the transitive allomorph of $=kay\acute{a}\sim=bay\acute{a}$, can surface when an intransitive subject is plural.

Allomorphy based on transitivity harmony is described throughout the dissertation in the chapters dedicated to the grammatical funtions that each of the transitivity harmonizing morphemes express (Section 5.2.3.4 on same subject/different subject markers; Chapter 10 on temporal distance; Chapter 12 on lexical and associated motion verbs).

Pleonastic transitive wa

Another marker of transitivity is the morpheme *wa* which surfaces in Fronted-VP constructions (see Section 5.2.3.6 and Section 7.1.1.1 for a description). Fronted-VP cosntructions display a constituent order whereby the {A,S} argument of a verb intervenes between part of the verb stem and the clause-type/rank morphemes. When the verb stem is fronted to the initial position, *wa* appears to the left of the clause-type/rank morpheme, only when the verb complex is transitive (Chapter 5 provides a detailed description).

Fronted-VP constructions are illustrated in (4.8) and (4.9). Each of the verb complexes are headed by *toka* 'do so', except in (4.8) the verb root combines with the transitiving affix -wa. Because the verbal predicate complex is transitive and fronted, wa appears in this clause. Compare this sentence with (4.9), where the verb root *toka* 'do so' is not modified by a transitivizer. In this case, because the verbal predicate construction is not transitive, the transitive marker wa does surface.

The insertion of wa only occurs in Fronted-VP constructions, but it is the most consistent property of transitivity that I have found in Chácobo grammar.

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Transitive verbs require at least two NP arguments. Intransitive verbs require at least one NP argument. Transitive verbs can overt assign case to their arguments, where intransitive verbs cannot. For now I will focus on monotransitive verbs which only select for two arguments; ditransitive verbs are discussed in 4.1.1.3. This section only focuses on intransitive verbs that are one place-predicates. Two-place predicate intransitive verbs are discussed in Section 4.1.1.4.

In Chácobo, transitive verb complexes can assign ergative case to A arguments if the argument is a full NP. The ergative case marker that appears on the A argument of a transitive construction does not appear in intransitive constructions at all and thus serves as a coding property for transitivity. The ergative case marker in Chácobo is a high tone which occurs at the right most edge of a contiguous noun complex. Ergative case marking is illustrated in (4.10), (4.11), (4.12) and (4.13).

The noun root y ó g a 'woman' surfaces with a stress and high tone on its first syllable in citation form and when it is (see Section 2.3 and Section 6.2.2). In (4.10), noun phrase y ó g a 'woman' appears is an S argument where it surfaces with the same prosodic shape as it does in the S function and as it does in the citation form.

In (4.11), yóṣa 'woman' occurs in the P function of the verb. In (4.11a) the verb root tsami 'jump' takes yóṣa as its P argument, and no case is assigned.

As stated above, verbal predicate constructions condition ergative marking on their A argument. This is illustrated in the sentences in (4.12) and (4.13). The subject noun phrase $y \acute{o} g a$ 'woman' occurs with a distinct prosodic shape from its form in either the S or the P function. In (4.12) y o g a 'woman' surfaces with a high tone on its final syllable because it is subject of the verb complex headed by a-ma 'give'. Another example is provided in (4.13) where y o g a 'woman' is the A subject of the verb complex headed by ma-to 2a 'hit on the head'.

In the examples in (4.12) and (4.13), I provide surface forms (in square brackets []) and underlying forms. The underlying form, represents the high tone marker as a clitic segment. The surface form represents the ergative high tone marker as a phonological property of the noun root *yoşa* [jòṣá] 'woman'. In the rest of this thesis I will represent functional high tones, that is high tones that uniquely encode a grammatical function as affixal or clitic segments in all of the examples. There are two reasons for this. The first is that functional tones have special tone sandhi properties (discussed in detail in Chapter 6).

The second reason is that it makes it easier for the reader to distinguish between high tones that are lexically present and those that are marking some grammatical function in the presentation of examples (see Section 1.12.3 for discussion).

To illustrate the latter point, I provide cases where arguments have an underlying high tone on the final syllable, such as fino' 'monkey' or baki' 'child'. I represent this distinctly from ergative marking lest the reader wonder whether such forms in fact have ergative case marking in S or P functions. A high tone at the end of a phrase does not automatically demonstrate that this NP is marked with ergative case. High tones can occur on the last syllable of a noun phrase because the final element of the noun phrase has a lexical high tone. For instance, the noun root fino' 'monkey' has a lexical high tone on its final syllable and the numeral wisti(ta) 'one' also has a lexical high tone on its final syllable in its apocoped form. Consequently, Both the noun root fino' 'monkey' and the numeral wisti(ta) 'one' can surface with a final high tone even when they are in S or P function. An example of fino' 'monkey' in a P argument function with a final high tone is provided in (4.14).

well (it is said).' TXT 007:260

In (4.15) we see that the entire NP fino wisti 'one monkey' surfaces with a final high tone even though it is not on the right-edge of an NP, where the ergative tone occurs. However, this is because, as stated above, wisti(ta) 'one' has a lexical high tone on its final syllable in its apocoped form. Notice also in this example that fino 'monkey' is not even on the right edge of the noun phrase (where case marking occurs) and it still contains a final high tone. This shows that its final high tone is a lexical tone, not one acquired through a functional ergative tone.

(4.15) **finó wistí**
$$a(k)=bi=ni=ki$$
monkey one kill=DO&COME=REMP=DEC:P

'He killed one monkey and brought it.' TXT061:142

One can establish a genuine grammatical high tone only by virtue of comparing the prosodic shape it has in citation form and in other grammatical functions, as was done with

yoşa 'woman' in the examples in (4.10), (4.11) and (4.12). The simple presence of a high tone at the end of a form is not an indication that ergative case is present; Chácobo marks lexical contrasts with high tones and it is permissible to have one lexical high tone at the end of a morpheme (see Section 2.3 on tone as lexically contrastive).

The relationship between ergative case assignment and transitivity requires some comment. First, in certain environments, tone sandhi rules can remove an underlying high tone, sometimes eliminating one of the exponents of ergative case (Iggesen 2007; Section 6.2.2). Secondly, ergative case assignment is a sufficient, but not a necessary criterion for classifying a verb complex as transitive in the following sense; if an argument receives ergative case, then it is an A argument, but the reverse is not true. There are constructions where A arguments of transitive verb complexes are not assigned ergative case (see Section 7.2.1).

One example of where ergative case is not assigned are pronouns. Speech-act-participant pronouns in Chácobo display an accusative alignment where only the P argument is marked for case. A and S arguments remain unmarked. For instance, in (4.16b), the pronouns i 'first person singular' is in an A function and is unmarked for case. In (4.16a) the first person singular pronoun is in P function and, therefore, combines with the accusative case marker -a.

(4.16) a.
$$nia=so$$
 i-a $mana=wi$

here=A **1sG-ACC** wait=IMPER

'Wait for me here (where you are).'

b. **i** boi $a(k)=ta=no$
1sG yatorana do/catch=Go&DO=DES

'I'm going to go an catch a yatorana.' TXT008:024

For pronouns, an argument in S function appears without any case marking, identical in form the same pronoun in A function. This shows that pronouns display an accusative alignment, because A and S pattern together morphosyntactically.

(4.17)
$$no2\acute{o}$$
 $s\acute{o}bo=k\acute{i}$ i $ho=n\acute{i}=k\acute{i}$

1SG:GEN house=DAT 1SG come=REMP=DEC:P

'I came to my house.' TXT 054:694

In Chácobo, a number of formatives index accusative case in pronouns. Plural pronominals are marked with the suffix -to -ki and the clitic $=k\acute{a}n$. Third person singular pronouns in P function have a zero realization. Furthermore, when pronouns occur after the clause-type/rank enclitic, they combine with an "epenthetic case", which refers to a formative that syntagmatically and phonologically resembles a case morpheme, but that seems to surface for phonological reasons (see Section 6.3 and Section 7.2.2.2). Accusative

case marking on preverbal pronouns can be viewed as a coding property associated with transitive constructions. But the realization of case marking on Chácobo is extremely complex.

The relationship between argument selection and transitivity is similarly complicated. Selection of at least two arguments is a necessary but not a sufficient criterion for transitive status. All transitive verb complexes select two arguments (even if they are not overt). Not all verb complexes that select two arguments are transitive, however. Intransitive constructions that have two core arguments are discussed in Section 4.1.1.4. The next section discusses the distinction between two different types of transitive constructions.

4.1.1.3. Monotransitive versus Ditransitives

Among transitive verbal predicates we can distinguish between monotransitive and ditransitive ones. A monotransitive verb only has one P argument. A ditransitive clause has two objects or object-like arguments. Across languages, a prototypical ditransitive verb denotes concepts in the semantic domain of transfer ('give'), and it is based on this that the two Ps can be distinguished on semantic grounds. Apart from an A argument, a ditransitive verb combines with a recipient-like argument (R) and a theme argument (T) (Malchukov 2010; Haspelmath 2015; Guillaume 2008; Zariquiey 2012). Cross-linguistically, constructions within languages vary in terms of whether R and T are coded distinctly or

not. This distinction is relevant for Chácobo. Another way that ditransitives can vary cross-linguistically is whether they are lexical or derived through valency-adjusting operations. The distinction between lexical ditransitive verbs and derived ditransitive verbs is similarly relevant in Chácobo.

Neutral and direct/indirect ditransitive verbs

Chácobo can be seen as distinguishing between two broad types of ditransitive constructions. The first type of ditransitive construction is akin to what is referred to as a double object construction in Panoan linguistics (Valle 2011; Zariquiey 2012, 2017a; Zariquiey & Valenzuela *forthcoming*). In such constructions T and R arguments are not coded distinctly with respect to case marking. For full noun phrases T and the R receive no case marking and when T and/or R are pronouns they are assigned accusative case. Following the typological literature, I will refer to such verbs as **neutral ditransitive verbs**.

In both cases the case marking is identical to that found on P objects in monotransitive constructions, which also receives no case marking (see Section 4.1.1.2 and Section 7.2 on absolutive case). This is illustrated in (4.18). In (4.18) the verb *táa* is ditransitive and takes an R noun phrase *hato* 'them' and a T noun phrase *yáwa*. These noun phrases are marked case marking in the latter case and with accusative case in the former.

This is how the same nominal arguments are encoded in P function in monotransitive clauses.

Another example of a ditransitive verbal predicate is provided in (4.19). The verb stem *mia* 'give' takes a R (*tʃaʔita boka yamabo* 'the great late Boca') and a T (*hini* 'chicha') as its dependents. Neither of these noun phrases receives any case marking. They are thus morphosyntactically identical to P arguments in monotransitive constructions.

Chácobo can be said to have a second type of ditransitive construction where R and T are distinguished, which I will refer to as **direct/indirect verbs**, following the typological literature on ditransitives (see citations above). The T argument is coded as the P argument or the R and T arguments of neutral ditransitive constructions. The T argument is unmarked and the R argument is marked with the dative =ki. An example of this type of construction is provided in (4.20). The R argument is *hato hina* 'their penis(es)' and this is coded with a dative postposition. The T argument is *mai* 'dirt' and it is coded without any case marker, as P arguments are in monotransitive clauses.

(4.20) ...
$$[hat\acute{o} h\acute{n}na]_R = k\acute{t}$$
 $[mi]_A$ $[mai]_T$... $3PL$ penis $= DAT$ $2SG$ dirt $ri-wi=2\acute{a}i=na$ $i=2iki\acute{a}$ HEAD-put.in=NMLZ:IPV=EPEN say=REP '[You]_A have been putting [dirt]_T in the [head of their penises]_R.' TXT $063:285$

From the typological perspective adopted in Haspelmath (2015), it makes sense to regard the direct/indirect construction as a ditransitive construction. Zariquiey and Valenzuela (forthcoming) also imply that such constructions are ditransitive in Chácobo. However, some analytic problems arise from this terminological decision, related to the fact that it is not always clear whether NP dependents marked with the dative =ki are arguments. Many intransitive verbs and certain adjectives can combine with a postpositional phrase headed by the dative =ki marker. Illustrations are provided in (4.21).

(4.21) a. Dative marked dependent in intransitive $yaka=ki \quad tsi \quad pi \quad i \quad ka=yami(t)=ki$ $town=DAT \quad P5 \quad ANX \quad 1sG \quad go=DistP=DEC:P$ 'I went to town (Riberalta).' TXT 105:206

b. DATIVE MARKED DEPENDENT OF PREDICTIVE ADJECTIVE

ha=kí noa tsi kiá mako yɨnɨ i=pao=nikɨ
3=DAT tasty P5 REP peach_palm dust be=HAB=REMPAST
'The peach palm dust was really tasty for her.' TXT 022:015

Referring to transitive constructions that encode R with a dative =ki as ditransitive seems to imply that the dative marked arguments are structurally on par with A, S and P arguments. To be consistent the dative marked dependents of the intransitive clauses should be regarded as arguments of the verb as well. This is only an analytic issue if the basic distinction between intransitive and transitive constructions is based only on the number of arguments selected for, because it would imply that the constructions in (4.21) are transitive. However, I do not define the basic transitivity distinction only in terms of the number of arguments a verb selects for (Section 4.1.1.2). Referring to a ditransitive which marks its R argument with a dative does not, therefore, result in terminological inconsistency with respect to the definition of transitivity used in this thesis.

The problem relates to the fact that it is unclear when a dependent of a verb is a core argument or an adjunct or oblique and how to determine how many arguments a verb truly selects for. From a typological perspective, Forker (2014) argues that although there are canonical arguments and canonical adjuncts, but that many NPs marked with spatial cases are intermediate between these categories. Zariquiey (2017b) has argued that there is in fact a continuum between core arguments and obliques in Kakataibo. In line with these

considerations, NP dependents marked with =ki 'dative' could be intermediate between an argument and an adjunct and the precise number of arguments a verb selects for indeterminate. The distinction between arguments and adjuncts requires future research. Nevertheless, I will continue to refer to constructions such as those in (4.20) as ditransitive. I tentatively define a ditransitive as construction as one which contains a transitive verb that encodes "transfer" semantics and selects for three arguments. Future research on the argument/adjunct distinction in Chácobo could entail revising this definition.

In naturalistic speech it is uncommon for both of the R and the T to be expressed overtly. Like P arguments, R and T have null realizations when they can be recovered from discourse context. An example of a neutrally aligned ditransitive verb complex where neither the T nor the R are overtly expressed is provided from (4.22) from the Chácobo folk myth of the moon woman. In this example the understood A argument is the witch *Tibibi*, the T argument is the witch's magical bird and the R argument refers to men who are being punished for adultery by this bird by being squished into tiny people. The verb root *tfos* 'crush' combines with the transitive suffix -a and then with the causative clitic =ma to make the ditransitive verb construct *tfoṣama* 'make someone crush something.'

(4.22)
$$b\acute{n}i$$
 ha $bo=?\acute{a}$ tsi $ki\acute{a}$ husband 3 carry=NMLZ:P P5 REP $wirir\acute{i}='$ $tf\acute{o}f-a=ma=yo=n\acute{i}=ki$ Tibibi=ERG crush-TR=CAUS=CMPL=REMP=DEC:P

'And when it (the bird) carried the husband away (it is said) that the Tibibi

sent the bird to squish him.' TXT 006:119

A detailed description of the coding and behavioral properties of ditransitive constructions is provided in Section 7.1.2 and throughout Chapter 8 in the context of valency-adjusting operations.

Lexical and derived ditransitive verbs

In Chácobo, neutral ("double-object") ditransitive verb stems classify into two different types. The first are inherently ditransitive verb roots that combine with R and T noun phrases without combination with valency-adjusting morphemes (see Chapter 8 on Valency for details). I will refer to such forms as **lexical ditransitives**. Chácobo only has four lexical ditransitives, these are *maa* 'pile on, put on top of', *ratsa* 'hang up on', *mia* 'give', *taa* 'offer', and *-osta* 'stick in hole somewhere on something/somebody'. The latter verbs roots are found in the examples in (4.18) and (4.19) above.

Ditransitive verb constructions can be derived productively by combining a transitive verb with the clitic =ma 'causative'. I will refer to such complex ditransitive verbs as **derived ditransitives**. An example of a derived ditransitive occurs in the sentence in (4.23). The transitive verb root *his* 'see' combines with the causative clitic =maa 'causative' to form a ditransitive verb construct.

[yáwa]
$$_{T}$$
 [i-á] $_{R}$ $_{his=ma}=ka(n)=wi$

white_lipped_peccary 1sG-ACC $_{See=CAUS}=PL=IMPER$

kai papa yamábo $_{i=pao=ni=ki}$

mother father late say=HAB=REMP=DEC:P

"Show me the white lipped peccary" my mother and father used to say.'

TXT051:403

Another case of a derived ditransitive is illustrated in (4.24). The transitive verb root pi 'eat' combines with the clitic =ma 'causative' to form the ditransitive verb complex pi=ma 'serve something to someone, give someone something to eat.' The clitic construct pi=ma takes the noun phrase $y\acute{a}pa$ 'sardine(s)' as its T dependent and the pronoun ma-to 'you (pl.)' as its recipient dependent.

[
$$y\acute{a}pa$$
]_T [$ma-to$]_R \acute{t} $pi=m\acute{a}=no$

sardine $2PL-ACC$ 1SG eat=CAUS=DES

 $b\acute{t}=ka(n)=w\acute{t}$

come:PL/TR=PL=IMPER

'Come so that I can invite you (pl.) to eat (make you (pl.) eat) sardines.'

OBSV

4.1.1.4. Extended intransitives

An extended intransitive refers to a construction which contains two arguments, neither of which are marked for case. They diverge from transitive constructions in that neither argument is distinguishable based on coding properties; no case is assigned. They diverge from most intransitive verbs in that they select for two arguments rather than one and neither argument is marked as oblique. Apart from this difference in argument selection, all of the other diagnostics for transitivity provided in Section 4.1.1.2 above (transitivity harmony, *wa* insertion in Fronted-VP constructions) suggest that these constructions are intransitive. Extended intransitives contain an additional nominative (for pronouns) or absolutive marked (for full noun phrases) argument, not available for other intransitive verbs.

Extended intransitive constructions divide into two types depending on the verb stem which heads them. **Lexical extended intransitive verbs** are simplex verb roots which

take two arguments but do not condition ergative or accusative case on either of them. In these sentences the A and the P can be distinguished syntactically. There are only two lexical extended intransitive verbs to my knowledge; *mani* 'transform'; *haska* 'be like'. **Derived extended intransitive verbs** are complex verb stems formed from the combination of a lexical ditransitive and the passive suffix -2aká. In, constructions headed by derived extended intransitive verbs A and P arguments are completely indistinguishable.

The sentence in (4.25) provides an example of a lexical extended intransitive verb *mani* 'transform' with two arguments, both of which appear in the unmarked absolutive case. The arguments are underlined.

The clause headed by *mani* 'transform' is structurally ambiguous. Neither, the noun phrase *tfiki* 'brazilian' nor *kaşko* 'cari cari plant'. Chácobo allows both APV and PAV word orders (see Section 7.1). In the example above, the P and the A functions are

disambiguated by context (the story describes Caco creating a number of ethnicities in this fashion).

However, A and P are still distinguishable syntactically for predicates headed by lexical extended intransitive verbs such as *mani* 'transform'. The fact that *mani* 'transform' encodes a syntactic difference between A and P, even though it makes no case marking is made clear the following examples from elicitation. Each sentence only has one interpretation is not ambiguous, because the subject occurs post-verbally. The A argument identifies the referent before transforming and the P argument describes the referent after his transformation.

(4.26) P V A

honi mani kamá =kiman transform jaguar =DEC:P

'The jaguar transformed into the man.'

(4.27) P V A $kam\acute{a} man\acute{\imath} h\acute{o}ni = k\emph{\i}$ jaguar transform man =DEC:P

*'The jaguar transformed into the man.'

*'The man transformed into the jaguar.'

'The man transformed into the jaguar.' ELIC

Derived extended intransitive verbs head are distinct from lexical ones. Like the lexical extended intransitive verb they do not assign case. Unlike the lexical extended intransitive verbs, A and P cannot be distinguished based on constituent order at all. As stated above, all derived extended intransitive verbs are combinations of lexical ditransitive verbs with the passive marker -2aká. The examples below show that A and P cannot be distinguished grammatically in these derived extended intransitive constructions.

(4.28) A/P V A/P

$$p \acute{o}t fo$$
 $m \acute{a}a - 2aka$ $y \acute{o}sa$ $= ki$

blanket put.on.top-PASS woman =DEC:P

'The woman was put on top of the blanket.'

'The blanket was put on top of the woman.'

(4.29) A/P V A/P

 $y \acute{o}sa$ $m \acute{a}a - 2aka$ $p \acute{o}t fo$ $= ki$

woman put.on.top-PASS blanket =DEC:P

'The woman was put on top of the blanket.'

Only combination of -?aka 'passive' with a lexical ditransitive verb can derive an extended intransitive. Such constructions are treated in more detail in Section 8.4.

'The blanket was put on top of the woman.' ELIC

4.1.2 Non-verbal predication

This section provides a description of non-verbal predication. Non-verbal predicate constructions are distinct from verbal-predicate constructions in allowing non-verbal categories to function as predicates and in their use of second position (Wackernagel) morphemes to encode clause-type (rather than the clause-type/rank morphemes described in Section 4.1.1.2 which occur near the end of the sentence).

4.1.2.1. Non-verbal predication – introduction

A structural description of the non-verbal predicate construction is provided in (4.30).

(4.30) NON-VERBAL PREDICATE CONSTRUCTION

a. It contains a **non-verbal predicate subject** (S_{NV}) and a **predicate phrase**. The S_{NV} is an NP (full NP, demonstrative or pronoun) that can be elided if its reference can be reconstructed from discourse. The predicate can be a variety of different categories; adjectives, quantifiers, cardinal numerals, postpositional phrases, demonstratives, locative adverbials, nominalized clauses and a small class of verb roots.

- b. Non-verbal predicate constructions divide into two types. A zero-marked non-verbal predicate construction and an overtly marked non-verbal predicate construction.
- c. Zero-marked constructions consist of simple juxtaposition of S and the predicate in a fixed predicate-S order. Zero-marked constructions can occur in subordinate clauses.
- d. Overtly-marked constructions contain the clause-type morphemes go 'declarative' or ni 'interrogative' which occur after the noun phrase or the predicate construct. Those overtly-marked constructions that contain go 'declarative', ni 'interrogative', and kia 'reportative' allow S_{NV} and the predicate to variably order (predicate-S order appears to be the default). A non-verbal predicate construction marked with ki 'declarative, posterior' only allows for the predicate- S_{NV} order.
- e. The clause-type/rank morphemes of verbal predicate constructions (e.g. =ki 'declarative, past'; =wi 'imperative') cannot occur in non-verbal predicate constructions.¹²

 $^{^{12}}$ For some clause-type/rank morphemes an analysis might be available that understands them as occurring in either the verbal predicate construction or in the non-verbal predicate construction. For instance, the form $ki\acute{a}$ which encodes reportative occurs in the non-verbal predicate construction as a clause-type/rank morpheme and the verbal predicate construction as a morpheme encoding modal semantics. The form ki which encodes declarative semantics encodes future or posterior in non-verbal predicate constructions and

The "non-verbal" portion of non-verbal predicate constructions should be interpreted positively as stating that non-verbal constructs can function as the predicate rather than negatively as stating that verb roots cannot function as predicates in such constructions. The reason for this is that there is a class of intransitive verb roots (non-agentive verbs) that can function as predicates in non-verbal predicate constructions, discussed in Section 4.1.2.2. Furthermore, nominalized verbal predicate constructions can also function as the predicate in non-verbal predicate constructions, discussed in Section 4.1.2.3.

In zero-marked non-verbal predicate constructions, there is no morphosyntactic marking of clause-type. The $S_{\rm NV}$ and the predicate are juxtaposed without any additional morphosyntactic marking. In the zero-marked construction, the order of the subject and the predicate is fixed in a $S_{\rm NV}$ -predicate order. All zero-marked non-verbal predicate constructions are declarative. Examples of non-verbal predicate constructions from elicitation are provided below in (4.31). The examples demonstrate that a variety of different categories can occur in the predicate position as stated in (4.30a.)

-

non-past in verbal predicate constructions. In both of these cases the semantics are different in each construction. It is not clear whether these should be regarded as distinct morphemes or not because it is not clear the extent to which the semantic differences associated with these forms across the two constructions should be attributed to homophony, polysemy, or differences in the meaning of the constructions.

(4.31) a. ADJECTIVE

pístia yóşa

small woman

'The woman is small'

b. NOUN

yóbi(ka) yóşa

witch woman

'The woman is a witch.'

c. QUANTIFIER

wistima yóşa bo

many woman PL

'There are many women.' (lit. 'The women are many')

d. POSTPOSITIONAL PHRASE

baki=yá yósa

child=PROP woman

'The woman is pregnant' (lit. 'The woman is with child')'

e. DEMONSTRATIVE

nɨbiá yóṣa

DEIC1:ADV woman

'The woman is here.' ELIC

In **overtly-marked non-verbal predicate constructions**, the S_{NV} and the predicate phrase is separated by a clause-type morpheme. The non-verbal predicate clause-type morphemes are go 'declarative', ki 'declarative, future', ni 'interrogative'. The reportative morpheme $ki\acute{a}$ 'reportative' occurs in the same syntactic position and is mutually exclusive with the clause-type morphemes in non-verbal predicate constructions. It could, thus, also be analyzed as a clause-type morpheme along side the declarative and interrogative morphemes (see Section 4.2.5 for more details). In overtly-marked constructions the predicate and the S_{NV} can be variably ordered.

The default order for non-verbal predicate constructions marked with go 'declarative', $ki\acute{a}$ seems to be predicate- S_{NV} with S_{NV} -predicate order as a possibility. Non-verbal predicate constructions marked with ki 'declarative, future' display an obligatory predicate- S_{NV} order. S_{NV} -predicate order is ungrammatical with non-verbal predicate constructions marked with ki 'declarative, future'. Interrogative non-verbal predicate constructions marked with ni display default S_{NV} -predicate order; predicate- S_{NV} order seems to be the marked option with interrogative non-verbal predicate constructions.

while subject-predicate order seems to encode that the S_{NV} is in focus. The precise type of focus for the subject-predicate ordering requires future research (see Valle [2017] for a discussion of the different types of focus in Kakataibo). Examples of subject-predicate order with the declarative marker are provided below.

(4.32) a. yósa *so* pístia woman DEC small '(It's) the WOMAN (that) is small' b. yósa *so* yóbɨka woman DEC witch '(It's) the WOMAN (that) is a witch.' ELIC

In naturalistic speech overtly-marked predicate constructions are more common than zero-marked predicate constructions. Some text examples of overtly marked constructions are provided in (4.33) and (4.34) below. These both display predicate- $S_{\rm NV}$ order.

(4.33)kóko pistiá=ma=ria hána tsi mi ŞO uncle small=NEG=AUG Р5 2sg:gen tongue DEC TXT 031:615 'Uncle, your mouth is too/very big now.' (4.34)nɨbí mi-ʔ-íwa рį so here ANX DEC 2-EPEN-mother

'But (hurry up and) look your mother is right here!'

(4.35) provides an example of an interrogative non-verbal predicate construction.

TXT061:668

The reportative morpheme $ki\acute{a}$ displays a contrastive distribution with the clause-type morphemes go and $n\acute{a}$. An example of the reporative is provided in (4.36).

A text example that shows the variable ordering of subject and predicate in overtly-marked non-verbal predicate constructions is provided in (4.37) below.

quiet, you were the anaconda, YOU were the anaconda.'

TXT 013:440

The subject-predicate order is the default order with interrogatives. An example is provided in (4.38).

Non-verbal predicate constructions marked with ki 'declarative, future' are rare in naturalistic speech. Examples of ki 'declarative, future' from elicitation are provided in (4.39) and (4.40).

'He is going to have work (lit. be with work).' ELIC

An example of ki 'declarative, future' from naturalistic speech is provided in (4.41) below.

'He (the jaguar) had already thrown the woman's thigh up over here (points to shoulder) (when he said) "You are going to be my wife". TXT 032:056

In non-verbal predication the S_{NV} does not have to be overtly expressed. A null subject identifies a referent which is understood or recoverable from discourse context. A text example that illustrates such a situation is provided in (4.42b), where water is the recoverable subject as can be seen from the discourse context in (4.42a).

'It (the water) was dark/black (it is said).' TXT 068:054

In the example in (4.43b) the understood subject is *tʃákobo* 'Chácobo', which is recoverable from the discourse context provided in (4.43a).

be_born=REMP=DEC:P

'On the edge of the really big large (it is said) the Chacobo were born.'

'There were many (of them).' TXT 040:007-010

Subjectless non-verbal predicate constructions are typical for descriptions of the weather as in (4.44).

Non-verbal predicates are never overtly marked with *so* 'declarative' nor *ni* 'interrogative' nor *kiá* 'reportative' in subordinate clauses. Non-verbal predicate constructions are always zero-marked in subordinate clauses. In Chácobo there is a class of intransitive verb roots that can occur as predicates in non-verbal predicate constructions. These are discussed in the following section.

4.1.2.2. Agentive and non-agentive verbs

Intransitive verb stems in Chácobo divide into two classes; agentive and non-agentive. **Agentive** verb stems can only function as predicates of verbal predicate constructions (see Section 4.1.1.1 for the definition of a verbal predicate construction).. **Non-agentive** verb stems can function as predicates of verbal predicate constructions and non-verbal predicate constructions. Transitive verbs and agentive verbs can never function as predicates of non-verbal predicate constructions.

Examples of non-agentive verbs in non-verbal predicate constructions are provided in (4.45).

(4.45) a. *atf-i* tsi so baki grab-ITR P5 DEC child

'The child is being held (lit. the child is grabbed).'

b. bána tsi go bímiharvest P5 DEC fruit

'The fruit are harvested.'

c. *afi* tsi şo yóşa

bathe P5 DEC woman

'The woman is bathed.'

- d. yişkiki tsi şo şikiground P5 DEC corn'The corn is grounded.'
- e. *óşa tsi şo hóni* **sleep** P5 DEC man

'The man is asleep.'

- f. tsá?o tsi so hóni sit P5 DEC man
 - 'The man is seated.'

Text examples of non-agentive verb roots in non-verbal predicate constructions are provided in (4.46), (4.47) and (4.48) with the non-agentive verbs riami 'be filled' and raka 'lie down' and pasna 'be hungry'.

(4.46) tápo ria-mí so yáwa
container fill-MID DEC white_lipped_peccary

'The white lipped peccary filled the container.'

'And the next day, when they saw him, (it is said) the man was lying down with his throat cut.'

(4.49) provides an example of a non-verbal predicate construction with a non-agentive verbal root with an elided subject.

The following example shows another case of a verb root functioning as the predicate in a non-verbal predicate construction. In this construction the S_{NV} is also elided. The non-agentive verb root osa 'sleep' functions as the predicate in a non-verbal predicate

construction where the subject is dropped. The subject in this sentence is a captive Maina woman who had been arguing with her Chácobo captor, as expressed in (4.50a), until she fell asleep described in (4.50b).

sleep

probably

'Probably she was asleep (now).' TXT007:342

P5

Non-agentive verb roots share with adjectives the property of being able to function as predicates in non-verbal predicate constructions. However, I do not regard them as a subclass of adjectives, or as roots which are lexically flexible between the verb and adjective class. The reason for this is that non-agentive verbs cannot occur in attributive position in the verb complex and cannot combine with verbalizing morphology (see Section 3.3.2). Furthermore, they do not necessarily combine with the verbalizing suffixes -na 'intransitivizer' and -wa 'transitivizer' which I identified as definitional for adjectives (see Section 8.7 for examples of verbs which combine with -wa).

For non-agentive verb stems to modify noun phrases attributively they must occur subordinated under the relativizer =ka(to). For instance, (4.51a) is ungrammatical because

a non-agentive verb root occurs in an attributive adjective position. (4.51b) is not ungrammatical because the non-agentive verb root occurs in a non-verbal predicate construction embedded in a relative clause.

As noted above, transitive verb roots and agentive intransitive verb roots cannot occur in constructions in attributive position. They can only occur as predicates in *verbal* predicate constructions. Non-agentive verb roots can be derived from agentive verb roots through valence-adjustment. For instance the middle suffix -*mi* and the passive suffix -*2aka* derives a non-agentive verb root (see Chapter 8).

4.1.2.3. Nominalized verb complexes in non-verbal predicate constructions

There are two verbal nominalizers in Chácobo; $=2\acute{a}$ 'anterior nominalization' and $=2\acute{a}i$ 'imperfective nominalization'. The interpretation of the constructs built from these clitics

in non-verbal predicate constructions depends on clause-type morpheme. Below I discuss clausal nominalization in overtly marked and zero marked non-verbal predicate constructions.

Overtly marked (so, ní, kiá, ki)

Only verb complexes nominalized (or marked) with $=2\acute{a}i$ can occur in overtly marked non-verbal predicate constructions. These nominalized predicates are ambiguous between verbal (event) and nominal (referential) interpretations. These distinct interpretations are illustrated in (4.52) and (4.53) below.

(4.53)
$$hatsi hawi rais tsi kiá moro$$
 then $3sg:gen in_law p5$ REP tunic $map-a=?ái=na$

cover-TR=NMLZ:IPV=EPEN

'So his mother in law covered him with a tunic / His mother in law was the one who covered him with tunics.' TXT 015:060

Ergative case assigned in constructs nominalized with $=2\acute{a}i$ is not compatible with an event interpretation in overtly marked non-verbal predicate constructions. If an $=2\acute{a}i$ construct assigns case a referential interpretation is obligatory. Another way of stating the same generalization is that predicates nominalized with $=2\acute{a}i$ in these constructions do not have internal {A,S} arguments. The {A,S} argument must occur as the S_{NV} of the non-verbal predicate construction as in awa 'tapir' in (4.54a). It cannot occur as the A,S argument of the $=2\acute{a}i(na)$ regardless of whether case is assigned or not. A sentence such as (4.54b) is therefore, ungrammatical.

- (4.54) a. awa so honi tsaya=?ái=na
 tapir DEC man see=NMLZ:IPV=EPEN
 'The tapir is watching the man / the tapir is the man watcher.'
 - b. *honi şo awa(ra=') tsaya=?ai=naman DEC tapir(=ERG) see=NMLZ:IPV=EPEN

Intended reading: 'The tapir is watching the man / The man is being watched by the tapir.' ELIC

In overtly marked constructions, a construct nominalized with $=2\dot{a}i(na)$ can assign case. However, it seems more appropriate to consider this to be genitive case, since when case is assigned the interpretation of the $=2\dot{a}i$ construct is obligatorily referential. For instance, (4.55) is grammatical but only if $awar\dot{a}$ $tsaya2\dot{a}ina$ refers to 'the tapir's gaze'

rather than 'the tapir is watching X' (compare (4.55) with (4.54b)). Due to the obligatory referential interpretation, I will refer to case marking in this construction as genitive marking rather than ergative.

'The gaze of the tapir's is that of a man's.' ELIC

That these are genitive constructions can be seen by the fact that case can be assigned even when the verb complex is underlyingly intransitive.

Such constructions are rare in my corpus, however. Predicates nominalized with $=2\dot{a}$ 'anterior, nominalization' cannot function as the predicate in overtly marked non-verbal predicate constructions.

Further examples of nominalized clauses in non-verbal predicate constructions are provided below. Two consecutive text examples of such constructions are found in (4.57).

The first construct in both examples is ti si 'others', and the predicate clause is a nominalized verb complex, o sa = 2ai 'sleeping'. Notice that both of these examples contain the non-verbal predicate clause-typing marker so 'declarative'.

(4.57) a.
$$mai='$$
 $tisi$ tsi so $mai='$

earth=SPAT other P5 **DEC** earth=SPAT

 $osa=?ai=na$

sleep=NMLZ:IPV=EPEN

'On the floor, the others slept on the floor.'

b. $tisi$ tsi so $watsi$ $osa=?ai=na$

other P5 **DEC** waracha sleep=NMLZ:IMPFV

 $biro=no$

view/eye=SPAT

'The others slept on the huaracha out in the open.' TXT117:201-202

Nominalized clauses are not limited to non-agentive verb roots such as *oṣa* 'sleep'. Any nominalized verb can function as the predicate of a non-verbal predicate construction. This is illustrated with the examples below. Neither *kiyo* 'finish', nor *yoba* 'counsel' are non-agentive verbs. None of these verbs can occur as predicates in the non-verbal predicate construction unless they are nominalized.

TXT 117:081

'This is how I counseled my children.'

Structurally clausal nominalizations such as those in (4.58) and (4.59) are non-verbal predicates for the following reasons; (i) they can be overtly marked for the non-verbal predicate clause-type morphemes go 'declarative' and ni 'interrogative'; (ii) preverbal A arguments are not ergative case marked showing that they occur outside of the verbal predicate clause. The latter point is illustrated with the example in (4.58). In this example the A argument $t\acute{o}a\ kafi$ 'this vampire' is not assigned ergative case even though it precedes the clause-type/rank morpheme of the verbal predicate headed by kiyo 'finish'. This can be explained by noticing that $toa\ kafi$ is not the A argument of the verbal predicate structure, but rather is in the S_{NV} of a non-verbal predicate construction (see Section 7.2 for details).

Zero marked

Zero marked non-verbal predicate constructions can also contain constructs nominalized with $=2\acute{a}$ or $=2\acute{a}i$. It is not clear whether such constructions should still be regarded as non-verbal predicate constructions. The only reason one might structurally identify them as non-verbal predicate constructions is because nominalized =2ai(na) and $=2\acute{a}$ constructs function as the predicates. Otherwise they have all of the properties of non-verbal predicate constructions. $=2\acute{a}i(na)$ constructs can assign ergative case as in (4.60), (4.61) and (4.62) (see Chapter 7 for details).

'It is said that the woman became angry because surely the woman say the white lipped peccary (that her husband did not kill because he was vegetarian).'

TXT 050:918

(4.62)
$$toa$$
 $kako=$ $pi=?\acute{a}=na$

DEM2 $Caco=ERG$ $eat=NMLZ:P=EPEN$

'That (the grandmother) is the one that Caco ate.' TXT 028:017

4.1.3 *i*-copulative construction

The verb root *i* in Chácobo has a wide range of functions. It can function as a copula verb in equative or existential meanings. Constructions with *i*-predication display a mixed behavior, not classifying either as verbal nor as non-verbal predicates. These constructions display the following properties in common with non-verbal predicate constructions; (i) they do not assign case; (ii) they involve the juxtaposition of a noun phrase or demonstrative with another category. However, *i*-copulative constructions have the following properties in common with verbal predicate constructions; (i) they require the clause-type/rank morphemes of verbal predicate constructions; (ii) they cannot occur with the non-verbal predicate clause-typing morphemes such as *so* 'declarative' or *ni* 'interrogative'. They can receive all tense, aspect and other modifications that verbal predicate constructions can except associated motion and a few (semi)-functional categories to be specified below. They display a more fixed constituent order compared to verbal predicate constructions. They do not allow *any* arguments to occur after the verb root (*i* in this case).

i-copulative constructions can take maximally two NPs neither of which is marked for case. When such constructions take two NPs they have an equative interpretation. Alternatively, if the *i*-copula construction occurs with one NP and a locative position, the construction can refer to the stative position of the referent denoted by the NP. If the construction occurs with a comitative and an NP, the interpretation is proprietive. With only one NP, the interpretation of the sentence is existential. Thus, the *i*-copulative construction can express different types of stative situations.

A text example of a copulative equative construction is provided in the example below in (4.63).

(4.63) a.
$$ha\dot{a}$$
 tsi $ki\dot{a}$ $nia=ro2\dot{a}$

3 P5 REP HERE=LIM

'He was just here (it is said)'

Another example, but with a past perfect interpretation in (4.64).

(4.64)
$$mi-2-ipa=y\acute{a}$$
 $mi-a=r\acute{i}$ $i=yam\acute{i}t=ki$

2-EPEN-father =COM 2SG-ACC=TOO be=DISTP=DEC:P

 $h\acute{a}ma$ $mi-2-ipa$ tsi $riso=n\acute{i}=ki$

BUT 2-EPEN-father P5 die=REMP=DEC:P

'You had your father as well, but he died.' TXT 117:036

The *i*-copulative construction can also express existential semantics as in the following sentences, both encoded in the recent past with the temporal distance clitic $=it\acute{a}$ 'recent past time'.

The copula i can combine with non-agentive verbs. An example is provided in (4.67) below. These seem to have a similar meaning to cases where non-agentive verbs are the predicate in non-verbal predicate constructions.

(4.67)
$$ts\dot{a}$$
 $ts\dot{a}$ $ts\dot$

'He was seated, for three months it is said the child was seated.'

TXT 015:120

There are a number of semi-lexical functional clitics that allow i to drop, or that can occur by themselves without i as the verbal head. For some speakers, the recent past morpheme = $2it\acute{a}$ displays this behavior, occuring in a i-predicate construction without i.

$$(4.68) \hspace{1cm} y\acute{a}ma \hspace{1cm} bii \hspace{1cm} = (?)it\acute{a} = ki \hspace{1cm} i \hspace{1cm} ki\acute{a}$$

$$NEG \hspace{1cm} mosquito \hspace{1cm} = RECP = DEC:P \hspace{1cm} say \hspace{1cm} REP$$

$$tf\acute{a}kobo$$

Chácobo

"Yesterday there were no mosquitos." said the Chácobo.' TXT081:029

The other semi-lexical function that I have recorded heading this type of construction without i are =kia 'counterfactual'; and =gi 'remote future'. These are discussed in the sections/chapters dedicated to discussion of these morphemes (see Section 13.3 for =kia and Sections 10.6 and 13.2 for =gi). The verb root i is also used as the head of auxiliary verb constructions, which I discuss in the next section.

4.1.4 Auxiliary verb constructions

In this section I provide a definition of the auxiliary verb construction in Chácobo. I classify auxiliary verb constructions into three different types depending on which element functions as the auxiliary head. I then consider some constructions where the definition of the auxiliary verb construction is only partially met, and then consider the structural similarities between the auxiliary verb construction and other construction types in Chácobo. The purpose of this section is to illustrate the definition of the auxiliaries as they are used in this thesis. But the semantics of auxiliary verb constructions will be discussed throughout this thesis in the sections dedicated to the functional domains that these auxiliary constructions encode.

An auxiliary verb construction in Chácobo is defined by the properties listed in (4.69).

(4.69) AUXILIARY VERB PROPERTIES

- A lexical verb combines with an auxiliary verb in the order lexical verb –
 auxiliary. Auxiliary verb constructions can be either
- b. The lexical verb which precedes the auxiliary verb in the clause occurs with some marking of subordination, adjectivization or nominalization.
- c. The semantics of the auxiliary verb construction does not clearly follow from the semantics of its parts.

The auxiliary verbs in Chácobo are as follows; i 'intransitive' and mitsama 'impossibilitative'. The marking of subordination of the main lexical verb is either the same subject enclitic =2i, a nominalizing negation morpheme =ma, or the purpose clause/nominalizer =ti.

There is a total of four auxiliary verb constructions. The most frequent is the imperfective *i*-auxiliary verb construction (see Section 11.1 for a description of the semantics of this construction). In this construction the main lexical verb occurs with the same subject morpheme =2i. An example is provided in (4.70).

(4.70)
$$hatsi$$
 $ki\acute{a}$ toa $ka?i=y\acute{a}ma=(?)i$ then REP DEM2 $know=NEG=CONCUR:S$ $ki\acute{a}$ ha $i=ka(n)=pao=n\acute{i}=k\acute{i}$ REP 3 $AUX=PL=HAB=REMP=DEC:P$

TXT 061:022

In the sentence (4.70) above, a subject pronoun intervenes between the lexical verb and the auxiliary verb. This is not a syntactic requirement of the imperfective *i*-auxiliary construction. For example, in (4.71), where the subject pronominal *i* 'first person singular' precedes the entire auxiliary verb construction (see Sections 7.1.1.2 and 7.2.1.3 for the alignment properties of this construction).

| (4.71) | tſani | siri | yoa=?ai=ka | |
|--------|---|-----------------|---------------------|--|
| | story | old | tell=NMLZ:IMPFV=REL | |
| | \dot{t} | nika= ?i | i=pao=ni=ki | |
| | 1sg | listen=ss | AUX=HAB=REMP=DEC:P | |
| | 'I was always listening to the the old story that she (my grand mother) was | | | |
| | telling' TXT022:027 | | | |

^{&#}x27;They were never aware (lit. they weren't knowing) (it is said).'

The next auxiliary verb construction is the **regretative** *i*-auxiliary verb construction. In this construction the auxiliary is *i* 'intransitive', the negative/antonymic =ma combines with the main lexical verb, and the modal enclitic =ri 'regretative' occurs directly after the clause type/rank morpheme =ki 'declarative, past time' (see Section 13.14). This construction type refers to a counterfactual event that the speaker regrets or laments not performing. In Spanish, it is often translated as a question that a speaker poses to oneself. An example of this auxiliary construction is provided in (4.72a) with some of the discourse contact in (4.72a).

(4.72)haatia yáwa haská-ria kiá a. tsi EXPL:EPIS white lipped peccary similar-SIMIL Р5 REP tsaya=?ái=na no-kí ha 1PL-ACC 3 look=nmlz:ipv=epen 'I don't know, it seems as if the white lipped peccary were watching us.' papa=' b. pía wistí bɨ-ma \dot{t} father=GEN bring-NMLZ:NEG 1s_G arrow one *i=?ita=ki=ri* yáwa wistí AUX=RECP=DEC:P=LAMENT white lipped peccary one $a(k)=s\dot{i}=na$

kill=remf=epen

'Why didn't I bring one of my father's arrows to kill one white lipped peccary?' (lit. I regret not bringing one of my father's arrows so that I could have killed a white lipped peccary.') TXT007:333-334

The marker of verbal and clausal negation is $=y\acute{a}ma$ 'negation' in all other construction types. The morpheme -ma expresses negation or antonymity when it combines with adjectives and certain nominalized verbs. Based on the fact that -ma combines with nominalized verbs and adjectives, I interpret the -ma in the lamentative i-auxiliary construction as a nominalizer. Since nominalization is a form of subordination it is on this basis that I classify the lamentative construction as an auxiliary construction.

The third construction is the (im)possibilative mitsa(ma)-auxiliary verb construction (see Section 13.7). In this construction the lexical verb takes the purposive/nominalizing clitic =ti. The (im)possibilative morpheme mitsa(ma) never occurs with clause-type/rank morphemes. Rather it occurs as the predicate inside a non-verbal predicate construction. In the sentence in (4.72), the subject of the non-verbal predicate is the first person singular i-a 'first person singular'. The non-verbal predicate declarative morpheme \mathfrak{so} encodes that the clause is declarative. The morpheme mitsa(ma) is the head of the predicate, and the lexical verb ka-nia 'shoot in the back' is the lexical verb subordinated under the nominalizer =ti.

| (4.73) | mi-a | ka-nia= tí back-shoot=PURP/NMLZ | | mitsa-ma POSS 2- NEG |
|--------|-----------------|--|----------|--------------------------------|
| | 2sg-acc | | | |
| | tsi | şo | i-a | |
| | Р5 | DEC | 1sg-epen | |
| | 'Now I cannot s | кт062:056 | | |

4.2. CLAUSE TYPES – AN OVERVIEW

This section provides an overview of the clause types in Chácobo. The clause-type refers to the structurally coded communicative function of the sentence (also referred to as "sentence-type"). The declarative, the interrogative and the imperative are distinct clause-types in Chácobo, as they are with the vast majority of the languages of the world (Sadock & Zwicky 1985; König & Siemund 2007; Bruil 2015). Verbal and non-verbal predicate constructions mark clause-types in distinct ways. Imperative clause-types are not possible with non-verbal predicates. Declaratives are described in Section 4.2.1, interrogatives are described in Section 4.2.3.

Apart from declarative, interrogative and imperative, I discuss the possibility that there are two other clause-types in Chácobo. Chácobo contains a number of hortative functional morphemes that are mutually exclusive with other clause-typing morphemes. In Section 4.2.4, I thus consider whether constructions with such morphemes should be considered a hortative clause-type, distinct from the declarative, imperative and

interrogative. A similar situation applies to the reportative. As was pointed out in the previous section, the reportative patterns morphosyntactically with clause-typing morphemes in non-verbal predicate constructions. I discuss whether the reportative should be considered its own clause-type in Section 4.2.5. Chácobo allows for the elision of core arguments with some restrictions. The licensing and interpretation of arguments with no phonetic realization interacts with clause-typing. This issue is discussed throughout this section.

4.2.1 Declaratives

A declarative refers to a sentence which has a default meaning of assertion. Much of the morphosyntax of declaratives has already been indirectly described in the context of the discussion of the structural differences between verbal and non-verbal predication provided in Section 4.1.1. In non-verbal predicate constructions the declarative is either zero-marked or coded with the morpheme $\wp o$, as noted in Section 4.1.2. This is illustrated with the following example. Here the morpheme $\wp o$ can be dropped and the clause is still declarative.

In verbal predicate constructions, the declarative is coded through clause-type/rank morphemes that also encode tense (Section 4.1.1). These are the morpheme =ki'declarative, past tense' and =ki 'declarative, non-past tense' (Chapter 9 for a description of the semantics of these morphemes). The clause-type/rank morpheme has a dedicated position in the verb complex. Examples of declaratives with the clause-type/rank morphemes =ki 'declarative, past tense' and =ki 'declarative, non-past tense' are provided in (4.75) and (4.76).

(4.75)
$$\acute{a}wi$$
 $ha=k\acute{i}$ $ara=n\acute{i}=k\acute{i}$ wife 3=DAT cry=REMP=DEC:P

'His wife cried for him.' TXT 068:103

(4.76) $mi-a$ $p\acute{i}=k\acute{i}$ $ya?\acute{a}n\acute{i}$

2SG-ACC eat=DEC:NONP tick

'The ticks are eating me.' TXT 061:528

The reportative morpheme *kiá* was already described as a clause-type morpheme in the context of the description of non-verbal predicate constructions (Section 4.1.2.1). In non-verbal predicate constructions kiá occurs in the same syntactic slot as and is mutually contrastive with the declarative so and the interrogative ni morphemes. The reportative morpheme = $(?)iki\acute{a}$ is similarly in paradigmatic opposition with clause-type morphemes. For verbal predicate constructions, the reportative morpheme =(?)ikiá 'reportative'

TXT061:528

similarly occurs in the same syntactic slot as the declarative, interrogative and imperative clause-type morphemes. It is also mutually contrastive with these morphemes. This morpheme seems to have a default non-past interpretation, however, sentences marked with this morpheme receive their temporal reference from discourse context. This is illustrated in (4.77c) below, with the relevant discourse context provided.

(4.77) a.
$$ha-2-\acute{a}$$
 tsi $ki\acute{a}$ $tfitfa$ ha $a(k)=ka(n)=n\acute{i}=ki$ 3-EPEN-SPAT P5 REP basket 3 make=3PL=REMP=DEC:P 'From there (it is said that) they made containers....'

b.
$$habi$$
 $tfitfa$ $a(k)=y\acute{a}ma$ tsi $ki\acute{a}$ SURELY basket make=NEG P5 REP $bini=y\acute{a}ma=?\acute{a}i=na$

have husband=NEG=NMLZ:IPV=EPEN

'(It is said), those that who do not know how to make basket, will not have a husband.'

It is too simplistic to claim that reportative is a clause-type across all of Chácobo grammar, however. For verbal predicate constructions, the the declarative morpheme =ki

'declarative, past' can co-occur with a distinct reportative morpheme $ki\acute{a}$, which occurs in a different syntactic position In these constructions, the reportative morpheme patterns with conjectural and other perspectival modifications syntactically (see Chapter 5 for details). This is illustrated in the examples in . In declarative =ki 'declarative, past' clauses, the reportative is mutually exclusive with (4.78) and (4.79) the conjectural rather than the clause-typing morpheme.¹³

Non-past declarative clauses marked with =ki cannot co-occur with the reportative $ki\acute{a}$. The only way to express non-past reportatives is by using the reportative morpheme $=(?)iki\acute{a}$.

¹³ This should not be taken to mean that they clearly occur in the exact same syntactic position, rather they simply co-occur (see Section 5.2 for a description of the syntagmatic distribution of morpheme sin the verb complex).

(4.80) Riberalta=ki ka=?ikiá habokí
Riberalta=DAT go=REP now

'(He/someone sais) he is going to Riberalta now'

I have discussed the morpheme $=(?)iki\acute{a}$ in this section because it could be regarded as a type of declarative marker that also encodes reportative i the same way that =ki encodes declarative and past tense. In Section 4.2.5 I consider whether it should be regarded as its own clause-type (see 13.16 for more relevant details on the semantics of this morpheme).

4.2.2 Interrogatives

4.2.2.1. Interrogatives - Introduction

An interrogative refers to a grammatical structure which encodes typically that a speaker is requesting information from a hearer (Sadock & Zwicky 1985: 178). In Chácobo, the interrogative clause-type has a number of other functions apart from requesting information, such as exhortation, greetings and expressions of regret. Typologically, two types of interrogative constructions are typically recognized; polar and constituent interrogatives. Polar interrogatives elicit a yes or no answer and constituent interrogatives question some particular part of a sentence (König & Siemund 2007: 291). There is a structural distinction between polar and constituent interrogatives in Chácobo. Crossclassifying the distinction between polar and constituent interrogatives is the distinction

between interrogative verbal predicate and interrogative non-verbal predicate constructions.

First, I illustrate the distinction between interrogative marking in verbal and non-verbal predicate constructions with the examples in (4.81) and (4.82). As stated above, in non-verbal predicate constructions, interrogative clauses are marked with the morpheme ni which occurs between the predicate phrase and the subject as in (4.81). In verbal-predicate constructions, interrogativity is coded in the clause-type/rank morpheme. This is illustrated in (4.82). Interrogative clauses are never marked through intonation to my knowledge.

The verbal predicate interrogative clause-type/rank morphemes are =2ini 'interrogative non-past' =2i 'interrogative past' =2ai 'interrogative non-past, second person singular' and =ni 'interrogative, remote past'.

The second person singular present has a special marker disallows an overt second person singular pronoun illustrated in (4.83) and (4.84). (4.83) is in the context of a

discussion about how to make chive (a Chácobo spice that is made by drying yuca or corn in the sun). Miguel Chávez asked the speaker the following question found in (4.83)

(4.84) provides another example of a second person singular subject morpheme. This sentence occurred in the context of a fishing expedition, where my video camera fell off its tripod. Paë Yaquë asked me the following.

Notice that in these examples there is no overt second person singular morpheme. In fact speakers judge clauses that combine a second person singular subject pronoun with =2ai to be ungrammatical. The clitic =2ai is only used for the present tense. The =2ai form only occurs for non-verbal predicate constructions. If there is a second person singular in a non-verbal predicate then the interrogative morpheme is ni as in (4.92).

The morpheme =2ini is used for all other subjects in the non-past, including the second person plural. This is illustrated in (4.85), (4.86), (4.86), (4.87), (4.88), and (4.89).

(4.85) FIRST PERSON SINGULAR

hia=ka no náama=ki tsi hawi a(k)=si=2ini

good=rel 1pl be_late=ds:a p5 what do=remf=inter:nonp

í-a haw*i* fìna=**?iní** *í-a* tóka=ka

1SG-EPEN what plan=INTER:NONP 1SG-EPEN like so=REL

náama <u>mi</u> naama=yáma=yamɨt<u>=á</u>

dream <u>2sg</u> dream=NEG=RECP<u>=INTER:P</u>

'A good example (thing) when one is late [and thinks] what will I do, what will I plan, have you dreamt a dream such as this (in the past month or so)?'

TXT 101:128

(4.86) FIRST PERSON PLURAL

 $os\acute{a}$ ~ $os\acute{a}$ =tsa= $in\acute{i}$ no-a

laugh_at ~ laugh_at=now:tr=inter:nonp 1pl-epen

'Are we laughing at him?' TXT 095:133

(4.87) SECOND PERSON PLURAL

yonoko=**?iní** ma-to

work=inter:nonp 2pl-epen

'Are you (pl.) working?' OBSV

(4.88)THIRD PERSON SINGULAR wai=' mató tsi oto=?iní farm plot=SPAT Р5 2PL:GEN spy=INTER:NONP 'He waits (spies on you) in your farm plot?' TXT 105:009 (4.89)THIRD PERSON PLURAL tɨṣɨ=bo=kí yonokó maní tóa hóni DEM2 other=PL=DAT work CONJEC man

ma-to=kí

ma = no

say 2PL =CONCUR 2PL-EPEN=DAT angry=NEG=PL=INTER:NONP
'And when you (pl) tell those other men 'Perhaps you should work?' do

kaşa=yáma=ká(n)**=?iní**

they not become annoyed (angry) with you (pl.)?' txt. 51:87

In past tense interrogative non-verbal predicate constructions, the morpheme = $2\dot{a}$ is used. This morpheme occurs across all persons and numbers. An example with a second person singular subject is provided in (4.85) above (the subject and the clause-type morpheme are underlined). An example with a a third person S/A is provided in (4.90)

(4.90) hawi tana nailo tis-i=(?)ita=?á

what distance fishing_line let_loose-ITR=RECP=INTER:P

'How many meters did the fishing line go loose?' TXT 109:190

The interrogative morpheme can combine with temporal distance morphemes =2ita and =yamit. That = $2\acute{a}$ 'declarative, past' combines with the recent past is illustrated in (4.90). An example of the morpheme = $2\acute{a}$ combining with the distant past is provided in (4.85). However, there is a gap in the temporal distance-past tense/interrogative paradigm. For remote past interrogatives, only the morpheme = $n\acute{i}$ is used. When one asks a question using remote past semantics, the interrogative = $2\acute{a}$ does not occur. This is illustrated with two examples in (4.91) below.

'A jaguar onto you maybe, or maybe an anaconda, or maybe uncontacted tribes (lit. those who wander collectively) or a spirit, have you ever heard that?' TXT 101:60

The incompatibility of =ni and =2i can be interpreted in two ways. Either =ni conditions the dropping of the interrogative morpheme =2i or the morpheme =ni encodes the interrogative and remote past. In my glossing practices I assume the latter analysis.

4.2.2.2. Constituent interrogatives

In both verbal and non-verbal predicate constructions, constituent interrogatives are coded with a constituent interrogative morpheme occurring in the first position of the clause. A non-verbal predicate construction with a constituent interrogative is illustrated in (4.92). A non-verbal predicate construction with a constituent interrogative is illustrated in (4.93).

A list of the constituent interrogative expressions is provided in Table 4.1 divided according to whether they are simplex or complex and according to part-of-speech category, the semantic category and its basic translation. I illustrate some of the interrogative expressions below.

Table 4.1. Constituent interrogative expressions in Chácobo

| | Form | Translation/ | Part-of-speech | Semantic |
|---------|---------------------|--------------|------------------|-------------------|
| | | Gloss | category | category |
| simplex | hawi | 'what, who' | noun | inanimate |
| | tsowi | 'who' | noun | animate |
| | hɨni | 'how, what' | adjective/adverb | property/manner |
| | hɨnawa | 'do how' | verb | manner |
| | hawinia | 'where, to | postpositional | location, goal |
| | | where' | | |
| complex | hawi tana | 'how far, | quantifier | distance |
| | | how long' | | |
| | hawɨ tiʔi | 'how much, | quantifier | amount |
| | | how many' | | |
| | hawɨ şobá | 'with what, | postpositional | comitative, |
| | | with who' | | instrumental |
| | hawi(no) | ʻthrough | postpositional | spatial |
| | | where' | | ('through') |
| | haw i kí | 'to where' | postpositional | dative, goal |
| | hawɨniá ka | 'from where' | postpositional | ablative ('from') |
| | hawinia ?aş/şo | 'from where' | postpositional | ablative ('from') |
| | | | | relates to S/A |

The verbal interrogative expression *hinawa* 'do how' is illustrated in (4.94) and (4.95). This expression is morphosyntactically a verb; semantically it questions the manner in which some event was performed.

The morpheme *soba* occurs on the interrogative expression *hawi* 'what' and indicates a comitative or instrumental relation as is shown in (4.96).

The morpheme ti ?i is a conjunction that coordinates noun complexes (Section 15.4.3). It combines with the interrogative expression hawi 'what, who' to make a quantifier interrogative expression. This is illustrated in (4.97).

The ablative and locative are expressed either through *hawinia* combined with a participant agreement morpheme = $2a_{\xi}$ 'S' or = ξo 'A' or the relativizer ka(to). The participant agreement version is illustrated in (4.98) and (4.99). Such expressions always encode an ablative type relation.

An example of the relativized expression is provided in (4.100).

us?' TXT 063:207

The relativized and the participant agreement expressions both express an ablative relation. I do not know whether there are any differences between them.

4.2.2.3. Other functions of the interrogative

In Chácobo, interrogative clause-types have a number of related functions apart from asking for information. As noted in Erikson (2010), questions are used as a form of greeting and for other social conventions in Chácobo (and Matis). Such expressions diverge from the prototypical use of an interrogative as inquiring about information because the answer to the question is always obvious from context. For instance, (4.101) is typically uttered when someone is done eating and it is obvious. The sentence in (4.102) is always uttered as a greeting at the beginning of the day. The sentence in (4.103) is uttered when the speaker can clearly see that her interlocutor has arrived.

(4.101)
$$biso=2\acute{a}$$
 $mi-a$
 $awake=INTER:P$ $2SG-EPEN$

'Are you awake?' OBSV

(4.102) mi $pi=2\acute{a}$
 $2SG$ $eat=INTER:P$

'Did you finish eating?' OBSV

(4.103) $ho=2\acute{a}$ $mi-a$
 $arrive=INTER:P$ $2SG-EPEN$

'Have you arrived?'

OBSV

2sg-epen

Interrogatives are also used for exclamative expressions in Chácobo. This is illustrated in (4.104). The exclamative expression typically combines an interrogative expression such as *hawi* 'what, who' with an adjective as in *tio-ria* 'very big'.

Conjectural questions are also a way in which interrogative constructions can diverge from their prototypical function. The Chácobo frequently use interrogative clause-type for rhetorical effect as is illustrated in (4.105).

Related to the issue of rhetorical quesitons, negation and interrogativity combine in Chácobo to communicate a conjectural modality.

Chácobo also contains an assertive marker $=r\acute{a}$. In declarative contexts, this assertive marks epistemic authority on the part of the speaker. In interrogative contexts, the morpheme implies epistemic authority on the part of the addressee (see Bruil 2014, 2015 for the relevant typological issues). This is illustrated in (4.106).

(4.106) i-a pi=2ini hini yofini =rá i tsi kiá 1SG-ACC eat=INTER:NONP water demon =AUTH say P3 REP 'Is the water demon going to eat me (because you would know)? he said (it is said).' TXT068:198

Perspectival morphemes (those morphemes whose primary function it is to code evidentiality, modality or mirativity) combine with interrogative constructions to express a wide variety of different communicative functions.

4.2.3 Imperatives

The typical function of the imperative is to command (Sadock and Zwicky 1985; König and Siemund 2007; Aikhenvald 2012). There are five imperative morphemes in Chácobo; =wi 'imperative'; $=p\acute{a}$ 'mirative imperative'; $=t\acute{a}$ 'prior andative imperative'; ='wi 'frustrative imperative'; =iki ?ari 'opportunitive imperative'. These are all in paradigmatic opposition with the declarative and interrogative morphemes described in Section 4.2.1

and 4.2.2. Non-verbal predicate constructions do not have imperative forms. Like many languages, imperatives in Chácobo are also distinguished by having no overt subject {S, A} argument. Some of the imperative markers are illustrated in (4.107-(4.110).

(4.107)kopi=w**i** patiári chicken buy=IMPER 'Buy a/the chicken (right now)' OBSV (4.108)patiári kopi=**pá** chicken buy=IMPER:MIR 'Buy a/the chicken (I'm surprised that chickens are available to buy at the moment).' OBSV (4.109)patiári kopi=**tá** chicken buy=IMPER:GO&DO 'Go (away) and buy a/the chicken.'OBSV kópi=w**i** (4.110)patiári chicken buy=IMPER:FRUST 'Buy the chicken! (before someone else does).' ELIC

The text examples above provide examples with the imperative $=w\hat{t}$ which is by far the most common imperative morpheme in my texts. The imperative forms $=t\hat{a}$ and $=p\hat{a}$ are less common in my texts but they are not infrequent. The morpheme =ta expresses

an associated motion meaning. It is therefore treated in more detail in Chapter 12 (Section 12.5). The imperative morpheme $=p\acute{a}$ expresses a mirative meaning. It is described in more detail in context of perspectival meanings in general (Section 13.13). The semantics of the morphemes ='wi=iki ari which encode imperative with frustrative meanings (see Overall [forthcoming] for the notion of frustrative) are not frequent and require more research.

Apart from the clause-type morphemes and the fact that a second person subject is not overtly expressed, the imperative in Chácobo can be distinguished from the other clause-types by the interpretation of the plural number clitic =kan. In declarative and interrogative contexts the plural morpheme =kan is a discontinuous piece of a third person plural pronoun. However, the clitic =kan modifies the second person subject in imperative constructions. This can be seen from the consecutive sentences in discourse found in (4.111). In (4.111a), $=k\acute{a}n$ is used to indicate that the speaker is referring to an audience. That the subject is plural can be seen from (4.111b) where overt reference is made to the interlocutor through ma-to 'second person plural'.

According to Zingg (1998), the imperative morphemes in Chácobo express different degrees of politeness. Based on my own experience in the field and a review of my text data it is not clear to me that this is correct. For instance, Zingg (1998) consider the $=w\hat{i}$ form to be the strongest imperative. However, in the following example it cooccurs with the noun $t \int a \partial t da$ 'grandfather, sir' which is a honorific term in Chácobo indicating deference or respect for the addressee.

Furthermore, sometimes Chácobo speakers translate the $=w\hat{i}$, 'imperative' in the subjunctive mood in Spanish, suggesting that the form can actually correspond to a fairly weak request. The only possible candidate for an *impolite* imperative is the frustrative

imperative = wi, which was not reported by Zingg (1998). An example of this morpheme is provided in (4.113) below. This example is from when Paë Yaquë called me internationally and asked me to phone him back, because he had no credit on his cell phone.

This type of imperative is rare in my texts, but it can be observed frequently in domestic contexts with children who are asked multiple times to listen to their parents. It is possible that the distinction between $=w\hat{i}$ and $='w\hat{i}$ involves something like politeness. However, $='w\hat{i}$ was not identified by Zingg (1998). I understand the imperative morphemes $=t\hat{a}$ and $=p\hat{a}$ which Zingg describes as indicating different degrees of politeness, as encoding associated motion and mirative semantics respectively.

There are a few complex imperative forms that appear involve the stacking up of imperative forms, if not synchronically at least diachronically. These are the forms $=tap\acute{a}$ and $=t\acute{a}wi$. An example of the tapa imperative is provided in (4.114).

(4.114)
$$bi = tap\acute{a}$$
 naa $tfay\acute{o} = na$ $bring = IMPER:DO&GO:MIR$ $DEM1$ Chayo = POSS $okit\acute{a}$ tsi $ki\acute{a}$ $haw\acute{t} = na$ $more$ P5 REP 3SG:GEN = POSS

"Go and get it (I am surprised!)" (he said), this one was like the child of Chayo, that's what his was like; a little bigger (it is said).'

TXT 054:835

Another example of the construct $=tap\acute{a}$ is provided in (4.115).

While it is unclear because there are few text examples and I have not investigated the $=tap\acute{a}$ form in detail in elicitation, my impression is that this form is a mirative imperative, marking something counter to the expectations of the speaker as in (4.113) or marking an anticipated counter expectation of the listener as in (4.114). The associated motion meaning appears to be present in (4.113), but it is not clear from context whether a motion event is encoded in (4.114).

The other complex imperative form is $=t\acute{a}wi$ 'which appears to combine the prior motion imperative =ta with the imperative =wi. To my knowledge, this form only occurs with the lexical verb ka as in (4.116) below. It is universally used in farewells. My impression is that it expressed deference towards the speaker compared with other imperative forms.

(4.116)
$$ka = t\acute{a}w\acute{i}$$
 papa

go=IMPER:DO&GO father

'You may go now father.' (lit. go! father) TXT006:838

4.2.4 Hortative = no

The clause-type/rank formative = *no* indexes a wide variety of functions in Chácobo. It is unclear whether all of these functions should be subsumed under one polyfunctional morpheme or whether it is better to analyze some of these associated meanings as arising from distinct but homophonous morphemes. The morpheme is very often used to express exhortative or cohortative (let's (do something)) meanings (see [Aikhenvald 2010: 153]) in Chácobo, but it would be problematic to consider it a dedicated (co)hortative marker. The morpheme cannot be classified as a type of imperative marker in the same sense as those described in Section 4.2.3 because it allows overt expression of subject arguments. This will be illustrated below.

Hortative = no constructions have two meanings depending on the argument markers that are expressed. I summarize these two functions in (4.117).

- (4.117) a. **Exhortative**: Expresses the speaker's wish that the hearer performs some action.
 - b. **Cohortative**: Expresses the speaker's wish that the speaker and the hearer perform some action.

The exhortative meaning arises when the nominative second person plural subject *ma* precedes the verb. The exhortative meaning is illustrated in (4.118) and (4.119). The example in (4.118) is in the context of providing instructions on how to construct a bow and arrow. The speaker is advising the addressee on what to do when one is done using the bow and arrow.

The example in (4.119) comes from the folkstory of Ashina. Ashina creates mosquitos by enchanting her own menstrual blood. She then exhorts the mosquitos to suck the blood of the Chacobo using the imperative = $\stackrel{'}{no}$ construction.

Cohortative meanings arise when the hortative construction combines with a discontinuous pronoun $no \dots = kan$. An example of this is provided in (4.20).

The cohortative meaning in = no constructions also arises without the plural =ka(n) clitic, which is illustrated in (4.121) and (4.122).

Typically, in such cases the construction occurs with the conjectural marker =mani as illustrated in (4.123).

(4.123)
$$ni\dot{a}=pari$$
 $osa=no=mani$ $no?\dot{o}$ $tfa?ita$

here=FIRST sleep=HORT=CONJEC 1SG:GEN gra_fa

'Let's sleep here first, grand father.' TXT 061:768

The morpheme = no also combines with the negative morpheme = ma to form a prohibitive. This is illustrated in (4.124).

$$(4.124) sawi=y\acute{a}=ka sita=y\acute{a}=ka aw\acute{a}so$$

$$pi=no=ma$$
 rono

'One cannot eat anything with bones or with teeth, nor the wolf fish, (because) it is a snake.'

TXT049:410

The differences between the normal imperative construction discussed in Section 4.2.3 and the imperative-horative are summarized in Table 4.2.

As stated above, the formative = 'no is also associated with other semantic functions. For instance, the morpheme expresses spatial case, different subject subordinate clauses, desiderative, and counterfactuals. Thus the formative = 'no is also discussed in the context of perspectival semantics where it is described as a desiderative (Section 13.4).

Table 4.2. The difference between imperative and hortative clauses.

| | IMPERATIVE | ='NO IMPERATIVE- |
|---------------------|----------------|------------------|
| | | HORTATIVE |
| OVERT SUBJECT | no | With pronominals |
| | | ma, no (=kan) |
| COMMAND DIRECTED AT | optional | obligatory |
| FIRST PERSON | | |
| COMMAND DIRECTED AT | obligatory | obligatory |
| FIRST PERSON | | |
| PROHIBITIVE | =yáma | =ma |
| | (e.g. yama=wi) | (e.g. = no = ma) |

4.2.5 Reportative kiá and =?i(tsi)kiá

As an evidential, the reportative records that the source of information is from a third person. As a marker of illocutionary force, the reportative marks that the speaker is shifting epistemic authority for a statement to a third person (Bruil 2014). The semantic distinction between the evidential and illocutionary meaning of the evidential (to the extent that they are distinct meanings at all), is subtle (see Section 13.16 for a detailed review of the similarities and differences). This section is concerned with the morphosyntactic distribution of reportative morphemes across verbal and non-verbal predicates.

There are two reportative morphemes in Chácobo. The reportative $ki\acute{a}$ occurs in non-verbal predicate constructions and in verbal predicate constructions. In non-verbal predicate constructions this morpheme is mutually contrastive with the clause-typing morphemes (see Section 4.2.5). In verbal predicate constructions, the morpheme is restricted to declarative past tense clauses marked the clause-type clitic =ki.

The other reportative morpheme is $=2i(tsi)ki\dot{a}$. This morpheme only occurs in verbal predicate constructions. In these constructions it is in paradigmatic opposition with clause-type morphemes. Thus in terms of the morphosyntax the reportatives have a split distribution with respect to clause-typing morphemes. Reportative morphemes are in paradigmatic opposition with clause-typing morphemes in non-verbal predicate constructions and verbal predicate morphemes. The different reportative constructions are illustrated in the sentences in (4.125) from the story of the southern wind woman. This piece of discourse describes the southern wind woman giving her grandson a magical bunch of her public hair which he will use to kill hunt tapirs.

The reportative in non-verbal predicates is illustrated in (4.125c). The reportative marker $ki\acute{a}$ in this construction is in paradigmatic opposition to other clause-typing morphemes in non-verbal predicates. For instance, a declarative version using the morpheme \mathfrak{so} 'declarative' of nearly the same sentence is found in the utterance of the southern wind woman in (4.125a).

The reportative in verbal predicates is illustrated in (4.125b) and (4.125d). The reportative marker $=(?)iki\acute{a}$ found in (4.125b) is in paradigmatic opposition to the clause-

typing morphemes in verbal predicate constructions such as the declarative past tense morpheme =ki exemplified in (4.125d). In constructions with $=(?)iki\acute{a}$ no other reportative can occur.

- (4.125) a. nɨa so no?ó sani

 here DEC 1SG:GEN pubic.hair
 - "And this here is my pubic hair!" she (his grandmother) said."
 - b. hawi gani tsi ha=ki tis-a=**?ikiá**3SG:GEN pubic_hair P5 3=DAT pull_out-TR=**REP** awa a(k)=ti

tapir kill=NMLZ:PURP

'She pulled her pubic hair out towards him for him to kill tapir.'

- c. nia=bo tsi $ki\acute{a}$ $haw\acute{t}$ ganihere=PL/COLL P5 REP 3SG:GEN pubic_hair
 - 'And here was her pubic hair in mass.'
- d. náa hawí piaṣi= =kato hátsi **kiá**

DEM1 3SG:GEN vagina=SPAT=REL then REP

nika tis-a=ni=ki

like so pull out-TR=REMP=DEC:P

'And she pulled it out from this here her vagina (it is said) in this way.'

TXT 083:047-050

In verbal predicates with =ki 'declarative, past tense', the reportative $ki\acute{a}$ occurs in a distinct syntactic position from the clause-typing morpheme. This can be seen in (4.125d). In =ki constructions the reportative occurs in paradigmatic opposition with epistemic modal modifiers such as $kar\acute{a}$ as in (4.126).

Thus, reportative morphemes partially pattern with clause-typing morphemes and partially pattern with other types of markers of perspective. There are some subtle semantic differences between the meaning of the reportative depending on whether it occurs in the clause-type position. The reportative construction could be regarded as a subtype of declarative on the grounds that all the other morphosyntactic properties are the same (cf. Bruil 2014, 2015). Whether there is semantic/pragmatic evidence that the reportative should be considered its own clause-type is another matter. I do not think that the data provide a clear answer in this regard (see Section 13.16 for a complete overview of the tests).

Chapter 5. Constituency: stem, phrase and clause

This Chapter describes the syntagmatics of noun and verb complexes. Here I am concerned with providing a detailed overview of the combinatorial possibilities and the position classes of these complexes. I divide the verb and noun complexes into a number of layers based on constituency tests. Each layer is associated with a template that contains positions where one or more morphemes can occur. In Section 5.1, I develop the terminology used for the description of the morphosyntactic distributions and combinatorial possibilities at each layer.

Section 5.2 describes the verb complex, beginning with the smallest constituents inside the stem up to the clause, ignoring the internal structure of noun phrases. Section 5.3 describes the internal structure of noun phrases.

There are a number of morphemes in Chácobo that change the part-of-speech class of the element they combine with. The vast majority of these are deverbalizing and/or nominalizing. The resulting structures display similarities with the verb complex and the noun complex described in this section. They are dealt with in more detail in Chapter 15 which deals with complex nouns.

5.1. TEMPLATES, POSITIONS, SLOTS, ZONES, LAYERS AND CONSTITUENCY

The following structural concepts will be used to describe the combinatorial properties of constituents in Chácobo.

(5.1) STRUCTURAL CONCEPTS FOR SYNTAGMTIC STRUCTURE

- a. **Template:** A template contains a number of positions, each with corresponding numbers that refer to their relative order within the context of the template. For instance, an element (morpheme, stem, phrase, clitic, clitic construct) which occurs in position 1 will occur before an element that occurs in position 2. A template can correspond to a stem, a phrase, or a clitic construct.
- b. **Position:** Each position occurs in a specific template. Each position in a template has a number that is used to account for relative ordering within its template. Each position is either a slot or a zone.
- c. **Slot:** A type of position where only one element can occur at time. If elements are listed as potentially occupying a slot, they are mutually exclusive.
- d. **Zone:** A type of position where more than one element can occur and the elements can be variably ordered.

- e. **Element:** A formative, morpheme, affix, clitic, root, stem, phrase, clitic construct, or compound.
- f. **Layer:** A span of positions that is identified by one or more constituency tests. For instance, the span of positions that cannot be interrupted by a free form.

In order to understand these concepts consider the tutorial template in Table 5.1 which is an abstract template with various elements designated by numbers in the alphabet.

Table 5.1. A tutorial template for syntagmatic structure

| POSITION | 1 | 2 | 3 |
|----------------------|---------|---------|---------|
| STRUCTURAL TYPE | SLOT | SLOT | ZONE |
| ELEMENTS (MORPHEMES, | A, B, C | D, E, F | G, H, I |
| STEMS, PHRASES) | | | |

Assume for the moment that the elements A, B, C, D, E, F, G, H and I are morphemes. Since position 1 is a slot A, B or C can occur in this position, but never more than one at a time. Position 2 is also a slot, where the elements D, E or F can occur, but never more than one at a time. The ordering of position 1 with respect to position 2 means that D will always follow A, B or C, E will always follow A, B, or C, etc.... Since position 3 is a zone, G, H and I can occur in this position either one at a time, or in any combination

and in any order (G-H-I, G-I-H, I-G-H, I-H-G, H-I-G, H-G-I, H-G, G-H, etc....). The elements of position 2 will always precede the elements of position 3. The elements of position 1 will always precede the elements of position 3.

Particular positions might be obligatorily or optionally filled. Slots that are obligatorily filled will be in bold, as in slot 2 in Table 5.1. An obligatorily position cannot be empty. The situation might be complicated by the fact that a slot is only obligatorily filled in the context of the presence of another element. For instance, slot 2 could be an obligatory slot but only in the context where it appears in position 3. In such cases, the template underdetermines the distributional facts, and additional constraints and requirements will be stated in prose.

The template could be more complicated if one of these elements is a constituent. For instance, H could be a constituent composed of A-B. In this case, A could precede D, E, or F as long as it is embedded in the constituent H. Furthermore, placing a given morpheme in a position does not imply that this morpheme is fully productive and without selectional constraints. For instance, there could be a constraint such that H only occurs if D is present. The terminology for the description of the syntagmatic facts in Chácobo is highly flexible. I primarily view it as a tool for stating generalizations concerning combinatoric, syntagmatic, collocational and constituency facts in the language. It should not be interpreted as an unequivocal adherence to item and arrangement view of language structure. In fact deviations from biuniqueness and other phenomena that justify process views of certain Chácobo structures will be discussed throughout and do not in any way

contradict or undermine the usefulness of the descriptive and terminological framework described above. The terminological framework for syntagmatic description adopted here has been applied to the description of other languages and provides important comparative concepts for cross-linguistic comparison (Tallman *et al.* 2018).

5.2. THE VERB COMPLEX

This section describes the syntagmatic and paradigmatic structure of the verb complex in Chácobo. I am not concerned with the describing the semantics of the categories of the verb complex in this section. The semantics of each category will be dealt with throughout the dissertation in the Chapters dedicated of the grammatical encoding of functional domains (Chapter 7 through Chapter 16).

The verb complex is divided into three layers. Verb stratum 1 is the **verb stem** which consists of one open class verb root and affixes (Section 5.2.1). The verb stem can also consist of a verb derived from an adjective with some verbal affixes. Verb stratum 2 is the $\bar{\mathbf{V}}$ -constituent (Section 5.2.2). It consists of the verb stem and any number of verbal clitics which cannot be interrupted by a full noun phrase. Verb stratum 3 corresponds to the clause or the sentence (Section 5.2.3). It consists of the $\bar{\mathbf{V}}$ -constituent all of the verbal dependents (noun phrase arguments, adjuncts, postpositional phrases) and all clitics that can be interrupted from the verb stem by an entire complex noun phrase.

Every layer corresponds to a constituent according to the certain types of criteria of contiguity and boundedness. Within the layers there are other constituents, defined by different morphotactic variables. For instance, within the layer of the clause, there is an OV (object-verb) constituent that can be identified according to at least one constituency test. The sections below not only describe the elements within each position in the different layers, but also the constituents within each layer which correspond to contiguous subgroupings of positions within a layer.

5.2.1 Verb stratum 1 (verb stem)

A template for verb stratum 1, the verb stem, is provided in Table 5.2 listing 5 positions. The verb stem consists only of the verb root and affixes. The affixes in the verb stem can be divided into different types according to their productivity. I make a distinction between affixes that subdivide verbs into **derivational classes** and affixes that are **fully productive**. One usually cannot predict which of the derivational class defining affixes a verb root can combine with, although there are some predictable combinatorial restrictions between affixes, which will be described below. However, fully productive affixes can combine with any verb stem. To the extent that there are exceptions to this it is based on the transitivity of the verb stem (e.g. the passive suffix does not combine with intransitive stems), reflects combinatorial restrictions based on the presence of another affix or phonological requirements of the affix, or reflects dialect differences in the productivity of

a given affix. The distinction between derivational class defining affixes and productive affixes is essentially that between affixes which would need to be listed beside their root in a dictionary entry (as lexemes) and those that would not.

I have placed an asterisk beside some affixes which cannot be described as part of the stem because they are not maximally contiguous in the sense that this concept was defined in Section 3.2. However, they interrupt other affixes within the verb stem, implying that a description of the syntagmatics of the verb stem cannot be completely cut off from non-contiguous elements. This problem simply indicates that the division into layers based on contiguity and boundedness as I have done here does not result in perfectly nested constituents.

In what follows, I present an overview of the verb stem, starting from the root and those affixes that are closest to it (Section 5.2.1.1). I then describe the suffixes in position 4 (Section 5.2.1.2) and position 4 (Section 5.2.1.3). The final section (Section 5.2.1.4) describes the constituency of the verb stem and the constituents within it. This section is primarily concerned with the syntagmatic distribution of affixes inside the verb stem. All of the affixes in the stem are related to valence and voice in some way. A description of the semantic and syntactic relations associated with these affixes is provided in Chapter 8 on valence and voice marking.

Table 5.2. Verb stratum 1 – the verb stem

| POSITION | MORPHEMES/FORMATIVES | STRUCTURE |
|----------|------------------------------------|-----------|
| 1 | PREFIX (13 PREFIXES) | SLOT |
| 2 | ROOT (INTRANSITIVE, TRANSITIVES, | SLOT |
| | UNSPECIFIED) | |
| 3 | INTRANSITIVE - i , - i , - o | SLOT |
| | TRANSITIVE - $a\sim$ - \dot{a} | |
| | TRANSITIVE -ia | |
| | INTRANSITIVE VERBALIZER - $nlpha$ | |
| | TRANSITIVE VERBALIZER -wa | |
| 4 | REFLEXIVE -m í | SLOT |
| | INTRANSITIVE -kí | |
| | RESULTATIVE PASSIVE -ki | |
| | TRANSITIVE/CAUSATIVE -wa | |
| | *TRANSITIVE/CAUSATIVE -ma | |
| | APPLICATIVE -?ák | |
| | ANTIPASSIVE -mís | |
| | INTERACTIONAL-ADVERSATIVE -ná | |
| 5 | PASSIVE -?aká | ZONE |
| | *TRANSITIVE/CAUSATIVE =ma | |

5.2.1.1. Verb stratum 1 - Positions 1 through 3

The prefixes of position 1 and and the suffixes of position 3 interact with one another in such a way that that it makes sense to treat them in the same section. Affixes of positions 1 and 3 can be divided into derivational class defining affixes (lexeme) or productive affixes. (5.2) provides an overview of the derivational class defining affixes and the productive affixes of the positions 1 and 3.

- (5.2) a. **Derivational class defining:** all body-part prefixes; $-i \sim -i$ $\sim (C)o$ 'intransitive', -a, 'transitive'
 - b. **Productive affixes:** -ná 'intransitive verbalizing'; -wa 'transitive verbalizing'

Verb roots need to specified or listed according to whether they can combine with affixes of position 1 or 3. Position 1 consists of 13 body-part prefixes (see Section 8.2 for a detailed description) and position 3 consists of suffixes that encode a transitivity value on the verb stem. There are two senses in which suffixes *encode* a transitivity value. They could add a transitivity value to a root which is unspecified with respect to transitivity or they can change the transitivity value of the root. A given affix could have one or the other function depending on the root it combines with. For instance, when the formative *-i* combines with the verb root *tfif* 'break' to form the intransitive stem *tfif-i* 'break oneself,

be broken', it can be viewed as assigning a transitivity value. The reason for this is that *tfif* never appears without an affix that could be analyzed as an exponent of transitivity. On the other hand, the formative *-i* combines with the verb root *mátoş* 'slice' to form the intransitive stem *matoṣ-i* 'to slice oneself, to be sliced'. The verb root can be analyzed as underlyingly transitive since it can function as the head of a verbal predicate construction without any added exponents of transitivity. In the context of the stem *matoṣ-i*, therefore, *-i* could be understood as intransitivizing a transitive verb root, rather than assigning a transitivity value to an unspecified root.¹⁴

In verb stratum 1 all the productive affixes are verbalizing suffixes that combine with adjectives. The derivational class defining affixes will be described first, followed by the verbalizing suffixes.

Verb roots in Chácobo fall into three classes in terms of transitivity; (i) inherently intransitive, (ii) inherently transitive or (i) unspecified. Examples of inherently intransitive verb roots are provided in (5.3) and examples of inherently transitive verb roots are

 $^{^{14}}$ Of course, a more consistent analysis of -i could be proposed if we were to propose that $m\acute{a}tos$ 'slice' were in fact underlyingly unspecified for transitivity, but this would involve positing a null transitiving suffix. We could turn around and say that t/if 'break' was in fact underlyingly transitivite. But then we would have to posit that it combined with a semantically empty suffix -a in its transitive form; a suffix which otherwise encodes transitivity. The patterns of the formatives spanning positions 1-3 do not lend themselves to a unique analysis in this regard (see Section 5.2.1.4 and Blevins[2016] for this problem generally).

provided in (5.4). None of these morphemes combine with any of the affixes of position 1 or 3.

- (5.3) a. *ka* 'go'
 - b. hó 'come'
 - c. tsá?o 'sit'
- (5.4) a. *tsaya* 'see'
 - b. *tipas* 'murder'
 - c. pi 'eat'

Unspecified roots require a suffix from position 3 in order to surface at all. These roots can be understood as underlyingly unspecified with respect to transitivity. Rather, they become transitive in combination with the suffix -a and become intransitive in combination with the suffix $-i \sim i \sim i$. The intransitive formatives -i, -i -i are mutually exclusive. A root that combines with -i in order to become transitive, cannot alternatively combine with -i or -o. The difference is not conditioned by phonological factors, rather an unspecific root forms a lexeme in combination with one of these suffixes in the sense that one cannot predict which formative combines with which root. In Zingg's (1998) dictionary, roots are listed with which of the position 3 suffixes they occur with.

Examples of the -i:-a alternation are provided in (5.5) and (5.6). Examples of a -i:-a alternation is provided in (5.7) and (5.8). Examples of the -o:-a alternation is provided in (5.9) and (5.10).

- (5.5) a. t/ii-i 'break oneself, get crushed'
 - b. *t/î/-á* 'break something'
- (5.6) a. $k \neq i$ 'cut oneself'
 - b. *kiis-a* 'cut other'
- (5.7) a. tik-i 'break one's arm'
 - b. *tik-á* 'break someone else's arm'
- (5.8) a. nis-i 'tie oneself'
 - b. *nis-a* 'tie other'
- (5.9) a. mif-o 'burn (oneself), burn up'
 - b. mi/-a 'burn other'
- (5.10) a. sok-o 'scratch oneself'
 - b. sok-a 'scratch other'

Apart from roots such as those in (5.4) that cannot combine with any position 3 suffixes, there are another class of verb roots are inherently transitive, in the sense that without modification by any affix they are transitive. They combine with -i to become intransitive. Examples are provided in (5.11) and (5.12). I will refer to such verb roots as

i:0 roots. Note that these verb roots are distinct from those listed in (5.4) that *cannot* combine with any of the suffixes of position 3.

- (5.11) a. potas-i 'shatter'
 - b. pótas 'shatter something'
- (5.12) a. *matos-i* 'slice'
 - b. *matós* 'slice another person'

Another class of inherently transitive verbs combine with a suffix that has a -Co phonological shape where C refers to a nonsibilant consonant. Some examples are provided in (5.11) and (5.12) below. I will refer to such roots as the Co:0 roots.

- (5.13) a. tiro-nó 'ascend'
 - b. *tɨro* 'lift
- (5.14) a. *nobo-kó* 'inflate by oneself'
 - b. *nobó* 'inflate other'
- (5.15) a. yabo-ko 'ge tied'
 - b. *yabo* 'tie something'

For Co:0 verb roots it is possible the analyze the consonant of the -Co suffixes as underlyingly part of the verb root. Recall from Chapter 2 that Chácobo disallows non-

sibilant consonants in coda positions. The verb root *tiro* 'ascend' could be analyzed as underlying *tiron* with the final consonant dropping if no vowel combines with it.

Finally there are some formatives associated with the intransitive-transitive distinction that are only found with one verb root. Examples of these are provided (5.15) and (5.16) below.

- (5.16) a. *yon-o-kó* 'work'
 - b. yon-á 'use thing (for work)'
- (5.17) a. rat-i 'be scared'
 - b. rat-i-a 'scare off someone or something.'

There are 13 body-part prefixes in Chácobo (see Chapter 8 for the full list). Verb roots either oblige, permit or completely disallow combination with body-part prefixes. The verb roots *haba* 'run', *tsaya* 'see', and *yono-ko* 'work', for instance, cannot combine with body-part prefixes at all. The verb roots *-rako* 'hit' and *-tsois* 'secure' require combination with a body-part prefix. The verb root *niş* 'tie' (see (5.8) above) optionally combines with a body-part prefix.

An example of roots which obligatorily combine with prefixes are provided in (5.18) and (5.19) below. These roots are ungrammatical without a prefix. They fall into the i:0 verb class, illustrated in (5.11) and (5.12) above.

- (5.18) a. $b\acute{a}$ -rako- \acute{i} 'hit one's own arm'
 - b. *bá-rakó* 'cover one's own arm'
- (5.19) a. *bá-tsois-í* 'secure one's own arm'
 - b. *bá-tsois* 'secure someone else's arm'

Most cases of verb roots that obligatorily combine with a prefix fall into the 0:i class as the examples above do. There are some that do not combine with position 3 sufixes. For instance -mos 'squeeze part of body of someone' must combine with a body-part prefix to surface, but does not combine with either -i, -i, -o or -a. Verb roots such as these that obligatorily combine with prefixes but that do not combine with the transitivity suffixes are rare. 15

With respect to those verbs that optionally combine with body-part prefixes there are three classes; (i) inherently (in)transitive roots that never take position 3 suffixes; (ii) unspecified roots that take the same position three suffixes regardless of whether they combine with a prefix; (iii) roots that change their suffix class from i:a or i:a to i:0 or i:0 when they combine with a prefix. These three classes will be illustrated below.

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¹⁵ Zingg (1998) lists *tfakaş*- 'pierce' as a root that obligatorily takes a prefix but falls into a *i:a* class. However, my consultants accept *tfakaş* without any prefixes. I have yet to find any examples of roots that require a prefix and a position 3 suffix simultaneously.

Examples of roots that can optionally take a body-part prefix but that do not combine with position 3 suffixes are provided below. Examples of inherently intransitive verb roots are in (5.20), and examples of inherently transitive roots are in (5.21).

- (5.20) a. $b\acute{a}$ -mimi 'shake one's arm'
 - b. *bá-poro* 'have one's arm rot'
- (5.21) a. *bá-wiko* 'shake someone's arm with force'
 - b. *bá-mipi* 'guide someone with one's hand'

The verb roots nis 'tie up' and tsos 'put an arrow through' combine with -i and -i suffixes to form intransitive verbs and combine with -a to form transitive verbs. However, if they take a prefix they do not combine with transitive verb suffix -a. This is illustrated in the examples in (5.22) and (5.23).

- (5.22) a. ba-niş-i 'tie one's own arm'
 - b. *bá-niş* 'tie someone else's arm'

(compare with *nis-a* 'to tie someone')

- (5.23) a. ba-tsos-i 'put an arrow in one's own arm.'
 - b. *bá-tsos* 'put an arrow through someone else's arm'

(see *tsos-a* 'to shoot someone')

The data above suggest that the body-part prefix is the exponent of transitivity. The roots below require the transitivity suffix -a when they do not combine with a body-part prefix. For transitive stems built out of these roots there is mutual exclusivity between body-part prefixes and the transitivity suffix. This mutual exclusivity could be explained by positing that combination with a body-part prefix derives a transitive stem, thus blocking the combination with the transitivizing suffix -a (see Chapter 8 for a full description of valency adjustments in Chácobo).

This analysis would not explain the examples in (5.20), however. Furthermore, there are some verb roots that retain the exact same transitivity suffixes regardless of whether they combine with a body-part prefix. Such forms are illustrated in (5.24) and (5.25) below.

- (5.24) a. $b\acute{a}$ -pik- \acute{i} 'open one's arm.'
 - b. *bá-pɨk-á* 'open another's arms'
- (5.25) a. *bá-tsois-í* 'pierce one's own arm'
 - b. *bá-tsois-á* 'pierce another's arm'

In this section I have described verb root prefix and suffix combinations as if there is no regularity to their patterns of combination. It is likely that there are probabilistic tendencies associated with the phonological form and semantics of roots and their

combinatorial possibilities with respect to positions 1 and 3. This issue requires future research.¹⁶

As described in Chapter 3, all adjective roots combine with the verbalizers -na and -wa to become verb stems. I will refer to verb roots composed of adjective and one of the verbalizing suffixes as **derived verb roots**. Like verbs, adjectives themselves fall into three derivational classes according to whether they oblige, permit or disallow combination with body-part prefixes. This means that the statements regarding prefix combination for verbs unproblematically apply to derived verb roots as well. Neither adjective roots nor adjectives that have been derived into verbs with -ná and -wa ever combine with position 3 suffixes. There are no affixes or clitics in Chácobo that derive verbs from nouns.

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¹⁶ I cannot confidently say at this point which pattern of combination with respect to position 3 suffixes is the most common, because I have not conducted a statistical analysis of the lexicon. It is my impression that the most common pattern is that roots do not combine these suffixes. The roots that require transitivity suffixes appear to be the oldest in the sense that my experience suggests one is more likely to find cognates between these roots another verb roots of other Pano languages. This question requires future research.

5.2.1.2. Verb stratum 1 - Position 4

Verbal suffixes of position 4 are all mutually exclusive. Like, affixes of position 1 and position 3 they divide into derivational class defining suffixes and productive suffixes. The suffixes of this position are listed in (5.26). By productive I mean I that I have not found any restrictions with respect to which verb roots they can combine with. I do not not mean that Chácobo use them frequently in naturalistic speech.

- (5.26) a. **Derivational class defining suffixes:** -mi 'middle';
 -wa 'transitive/causative'; -ki '(intransitive) resultative'; -ki '(dual)
 intransitive'; -2ak 'causative/applicative'.
 - b. **Productive suffixes:** -mis 'antipassive'; *-na 'competitive-comitative'

There are one to two fully productive suffixes from position 4. The suffix -na is fully productive in some dialects of Chácobo. In others it is a derivational class defining suffix. The antipassive suffix -mis is fully productive in the sense that it can combine with all verb stem classes. It only seems to display one phonologically based restriction on its combinatorial potential. It cannot combine with monosyllabic roots (*ho-mis 'always)

come' is not a possible form in Chácobo). ¹⁷ Examples of *-mis* combining with intransitive and transitive roots are provided in (5.27) and (5.28).

- (5.27) INHERENTLY INTRANSITIVE
 - a. *soto-mis* 'constantly blow'
 - b. *tfani-mis* 'always speaking'
- (5.28) INHERENTLY TRANSITIVE
 - a. *yoma-mis* 'compulsively steal'
 - b. tsaya-mis 'compulsively stare'

The suffix -mis also combines with stems formed with position 1 and position 3 affixes (see Section 8.5 for a complete description). These combinatorial possibilities are illustrated in the examples in (5.29), (5.30), (5.31), (5.32) and (5.33).

¹⁷ I have no explanation for why this is the case. One of my consulants, Miguel Chavez, accepts monosyllabic root-*mis* combinations, but none of the others do. Other forms combined with -*mis* are sometimes rejected by speakers, but not consistently. It seems that some combinations with -*mis* are considered odd. My preliminary hypothesis concerning such cases is that they are rejected for semantic reasons. This is discussed in Chapter 8.

- (5.29) PREFIX-ROOT
 - a. ta-nis-mis 'always tying someone's feet'
 - b. ta-tis-mis 'always biting someone's feet'
- (5.30) ROOT- a^{18}
 - a. tis-a-mis 'always biting'
 - b. *atf-a-mis* 'always grabbing'
- (5.31) ROOT-i
 - a. *nof-i-mis* 'always tearing (e.g. clothes that aren't of good quality)
 - b. potas-i-mis 'always shattering'
- (5.32) ROOT-i
 - a. tis-i-mis 'bite oneself all the time (e.g. of a dog)'
 - b. *niṣ-i-mis* 'tie oneself all the time.'
- (5.33) ROOT-(C)-o
 - a. yabo-ko-mis 'constantly tie oneself up'
 - b. *mif-o-mis* 'constantly burn up'

The suffix -*mis* cannot be variably ordered with any of the position 3 suffixes. The comitative-competitive suffix -*na* is fully productive in some dialects. In Paë Yaquë Roca's

¹⁸ Such forms are occasionally rejected by Caco Moreno, but accepted by other Chácobo (see Section 8.5 for details).

dialect (Cachuelita) the suffix is fully productive. For my other consultants, -na is derivational class defining because it cannot combine with all verb roots/stems (see Section 8.9). Examples which are acceptable for all speakers are provided in (5.34). Sometimes the meaning of the root and suffix combination is not completely semantically compositional as in (5.34c) and (5.34d).

- (5.34) a. *haba-ná* 'race' (lit. run competitively)
 - b. tsaya-ná 'stare' (lit. look competitively)
 - c. *nia-ná* 'fight' (lit. throw competitively)
 - d. tſani-ná 'converse, argue' (lit. speak competitively)

For speakers where -*na* is fully productive one can show that it follows the position 3 suffixes. This is illustrated in (5.35). For the major dialect it is possible that -*na* simply does not combine with verb roots that combine with position 3 suffixes.

- (5.35) a. nɨṣ-i-ná 'to tie competitively'
 - b. *nɨṣ-a-ná* 'to tie others up competitively (e.g. tying chickens)'

Out of the derivational class-defining suffixes of position 4, the applicative/causative -2ak and the causative -wa are the most productive. Examples of verb roots in combination with the suffix -2ak 'applicative' are provided below. As one can see

from the examples in (5.36), (5.37) and (5.38), the combinations are sometimes low in semantic compositionality. The example in (5.39) shows the suffix -2ak in combination with the position 3 suffix -a. Such cases are rare, however. I do not have any examples of -2ak combining with a verb stem that contains the intransitive suffixes -i, i, -Co.

- (5.36) a. *firi* 'boil'
 - b. *firi-?ak* 'boil something'
- (5.37) a. *yona* 'use something (for work)'
 - b. yono-ko 'work'
 - c. *yono-ko-?ak* 'work on something'
- (5.38) a. ta2i 'meet'
 - b. ta?i-?ak 'kick someone'
- (5.39) a. *nis-a* 'tie something/someone'
 - b. *niṣ-a-ʔak* 'tie vines into a funnel.'

Examples of the causative suffix -wa are provided in (5.40), (5.41) and (5.42).

- (5.40) a. *minó* 'wrinkle'
 - b. *minó-wa* 'cause someone to become wrinkled'
- (5.41) a. *hasá* 'choke on water'
 - b. *hasá-wa* 'cause someone to choke on water'

- (5.42) a. *pini* 'blossom (of flowers)'
 - b. *pini-wa* 'cause a flower to blossom'

A very small number of roots combine with both -wa and -2ak. Some of these are illustrated below in (5.43) and (5.44). No roots can combine with both -wa and -2ak simultaneously.

- (5.43) a. *kofo* 'spit'
 - b. *kofo-wa* 'cause someone to spit'
 - c. ko/o-?ak 'spit something'
- (5.44) a. *soto* 'blow, be windy'
 - b. *soto-wa* 'cause it to be windy (using witchcraft)'
 - c. soto-?ak 'use something as a fan'

The suffix -mi 'intransitive, reflexive' combines with a relatively small number of verb roots (a dozen in my data base) compared to the markers of transitivity described above. All roots that combine with -mi end in /a/. Examples are illustrated in (5.45), (5.46), and (5.47). There are a few cases in my database where the root that -mi combines with is analyzable into more than one morpheme. The example in (5.47) is such a case and shows that -mi occurs after position 3 suffixes. In the other cases, the -a is not synchronically

segmentable. For instance, ri from the verb root ria is not a reccurring verb root in the language. The reason that all the forms end in -a is likely historical, therefore.

(5.45)a. ría 'fill something' rɨa-mɨ 'fill up' b. (5.46)'go around (an object)' a. tía b. tɨa-mɨ 'go in a circle.' (5.47)a. nís-a 'tie' 'tie vines into a funnel' b. nɨṣ-a-mɨ

The least productive suffixes of position 4 are the inchoative suffixes -ki and ki. These morphemes only combine with intransitive stems modified by -i and -i respectively. Based on the data I have gathered they could be considered allomorphs of the morpheme - kV being identical to that of the previous morpheme. Examples of the -ki allomorph are provided in (5.48), (5.49), (5.50) and (5.51). Examples of the -ki allomorph is provided in (5.52) and (5.53).

(5.48) a. matoṣ-i 'be sliced'
b. matoṣ-i-ki 'split open (on its own)'
(5.49) a. potas-i 'be shattered'
b. potas-i-ki 'shatter (on its own)'

(5.50)a. tʃaʃ-i 'snap (e.g. a twig that someone breaks)' 'snap (on its own) (e.g. a bridge)' b. tʃaʃ-i-kí (5.51)'break oneself, be broken' t/o/-i a. b. tʃoʃ-i-kí 'break together; they both break' (5.52)tɨs-í 'loosen' a. tɨs-ɨ-kɨ 'loosen on its own' b. (5.53)hask-í 'rip (of clothes)' a. b. hask-i-ki 'rip on its own (clothes that rip)'

In most of the -Co suffixes of position 3 surface with /k/ are their consonant. Furthermore, the intransitive -Co suffix only combines with roots that end in o. Thus, rather than considering this suffix a position 3 suffix, one could consider it an allomorph of -kV along side -ki and -ki. This analysis suffers from the following problems; (i) there is no evidence for a position 3 suffix occurring before -Co; (ii) the consonant of -Co does not surface as /k/ in every case.

5.2.1.3. *Verb stratum 1 - Position 5*

The only suffix that belongs in position 5 is the passive suffix -2aka. The passive suffix is fully productive on the following verb complexes; (i) inherently transitive verb roots as in (5.54); (ii) verb roots with the position 3 suffix -a 'transitive' as in (5.55); (iii)

verb roots with the position 4 suffix -wa 'causative' as in (5.56); (iv) verb roots with the causative clitic =ma 'causative' as in (5.57). The passive suffix cannot combine with any intransitive verb stems, nor with the verb complexes that contain the interactional suffix of position 4 suffix -na, regardless of transitivity.

- (5.54) ROOT-?aká
 - a. tsaya-?aká 'be seen'
 - b. *yopa-ʔaká* 'be unfindable'
 - c. yona-?aka' 'be used, conducted'
- (5.55) ROOT-*a*
 - a. at/-a-?aká 'get grabbed (by someone)'
 - b. nof-a-?aká 'get ripped (by someone)'
- (5.56) ROOT-*wa*
 - a. *piní-wa-ʔaká* 'be made to bloom (by someone/something)'
 - b. kiní-wa-?aká 'be made to have holes (by someone/something'
 - c. tsapa-wa-?aka 'be put up (by someone/something)'
- (5.57) ROOT-*má*
 - a. $at \int -a = m \acute{a} 2ak \acute{a}$ 'be made to grab something / be made to be grabbed (by someone)'
 - b. $tsaka = m\acute{a} 2ak\acute{a}$ 'be made to pierce something / be made to be pierced (by someone)'

The example in (5.57) demonstrates that the definition of the stem I have used does not result in perfect nesting between the layers. As is shown in §5.1.1.4 =ma 'causative' is a clitic. It can be interrupted by the free form negation morpheme $y\acute{a}ma$. However, the suffix - $2ak\acute{a}$ 'passive' cannot be interrupted by the negation morpheme $y\acute{a}ma$ or any other clitic apart from the causative clitic = $m\acute{a}$. Thus, a layer 2 clitic can interrupt a position 5 suffix. I do not attribute any special theoretical or descriptive significance to this, since it only shows that the division into stratum is arbitrary and done for organization purposes.

5.2.1.4. Verb stratum 1 - Constituency

The cut-off point between verb stratum 1 and verb stratum 2 made in this thesis is arbitrary.

There are a number of other cut-off points that one could apply. The verb stem can be divided into three constituents according to different morphosyntactic variables to be discussed below.

The verb stem corresponds to the largest of these constituents spanning all of the positions provided above. The first morphotactic property associated with the verb stem is that it cannot be interrupted by a free form element (a verb stem is maximally contiguous in the terminology of Chapter 3). For instance, the negation morpheme *yáma* cannot interrupt any of the morphemes. This follows from the definition of a stem provided in Chapter 3.

Table 5.3. Constituents and their morphotactic properties in verb stratum 1

| Layer | Constituent | Morphotactic property |
|-------|---------------|---|
| | position span | |
| 3 | 1-5 | i. Noninterruptability by <i>yáma</i> |
| | | ii. Coordinability with same subject conjunct |
| 2 | 1-4 | i. Fixed ordering / non-interruptability by $=ma$ |
| | | ii. Derivational class defining |
| 1 | 1-3 | i. Systematic deviations from biuniqueness |

The span of positions of the verb stem can also be identified through a a type of coordinability test. Chácobo can coordinate parts of the verb complex through same subject constructions. A **same subject construction** is a syndetic coordination construction where the conjunct is a same subject marker that also encodes the transitivity of the right-most clause (see Haspelmath [2004] for a typological overview). The coordinated constituents in such constructions corresponds exactly to the verb stem.

Elements that are not in positions 1 through 5 can be removed in this construction and have scope over both of the verb constituents. This is illustrated with the causative clitic =ma in (5.58). The clitic =ma can be omitted on the same subject clause as in (5.58b)

and still have scope over both of the coordinated verb complexes, having the same meaning as if it were in both as in (5.58a).¹⁹

(5.58) a.
$$w\acute{a}ka$$
 $h\acute{o}ni$ $\{atf-a=ma\}$ = $\S\acute{o}$ $\{nig-a=ma\}$ cow man $\{grab-TR=CAUS\}$ =CONJ:A $\{tie-TR=CAUS\}$ $yoga='$ $wa=ki$ woman=ERG $TR=DEC:P$

^{&#}x27;The woman made the man grab and tie the cow.'

¹⁹ The use of the strikethrough on =ma in (5.58b) and (5.59b) should not be interpreted as adherence to an ellipsis based analysis of the relevant construction. I currently do not understand the semantics of these constructions well enough to be able to tell whether such constructions should be regarded as constituent coordination or ellipsis under coordination according to how these concepts are understood in certain formal approaches (e.g. Beavers & Sag 2004). However, Regardless of whether (5.58b) is interpreted as ellipsis under coordination (non-constituent coordination) or constituent coordination, the patterns are still used as a diagnostic for constituency (layers) in this thesis. The reason is that a constituent (layer) is understood as any contiguous string of categories that is consistently identified as a constituent by a constituency diagnostic, regardless of whether it converges with other such diagnostics or supports a fixed repertoire of universal constituent categories (see Croft 2001). The claim here is not that phenomena distinguished in the literature as constituent coordination versus non-constituent coordination (ellipsis) are the same thing, but rather, that they identify or can identify different language-specific constituents (layer), i.e. they are distinct typological variables for constituency that may or may not converge in a given language.

b.
$$w\acute{a}ka$$
 $h\acute{o}ni$ {atf-a } = $s\acute{o}$ {ni s -a} = ma cow man {grab-TR} =CONJ:A {tie-TR} = $CAUS$ $yosa='$ $wa =ki$ woman=ERG TR =DEC:P

'The woman made the man grab and tie the cow.' ELIC

However, the maintenance of scope over both of the verb complexes can never be achieved with an affix of the verb stem. This is illustrated with the examples in (5.59) which shows that the passive suffix $-2ak\dot{a}$, for instance, cannot be omitted and have scope over both verb complexes. This is true of all affixes in the verb stem, and not true of any of the clitics outside of the verb stem which all behave like the causative =ma above.

(5.59) a.
$$\{atf\text{-}a\text{-}\mathbf{?}a\mathbf{k}\hat{a}\} = ?as \quad \{nis\text{-}a\text{-}\mathbf{?}a\mathbf{k}\hat{a}\} \quad y \acute{o}sa = ki$$
 grab-TR-PASS =CONJ:S tie-TR-PASS woman =DEC:P 'The woman was grabbed and tied.'

'The woman was grabbed and tied.' ELIC

b.
$$*\{at \int -a - 2aka\}$$
 = $2ak$ $\{nis-a-2aka\}$ $yosa$ = ki $\{grab-TR-PASS\}$ = CONJ:S $\{tie-TR-PASS\}$ woman = DEC:P

One can define a subconstituent of the verb stem spanning positions 1 through 4 based on the morphotactic property of **fixed ordering**. Only morphemes of positions 1

through 4 display completely fixed order. The position 5 morpheme can variably order with the causative clitic $=m\acute{a}$ as shown in (5.57). The affixes of position 1, position 3 and position 4 cannot be variably ordered with one another and cannot be interrupted by the clitic =ma 'causative'. There are no counterexamples in texts, and this distributional restriction was robustly tested in elicitation. That the causative morpheme cannot be variably ordered with position 3 nor position 4 morphemes. The morpheme -i 'intransitive' is a position 3 suffix and the morpheme -mis 'antipassive' is a position 4 suffix. Unlike the position 5 morpheme -biki 'comitative-cooperative' neither of these can be freely ordered with the morpheme =ma 'causative' as is illustrated by the unacceptability of (5.60b) and (5.61b).

(5.60) a.
$$ta$$
- ni g- i = $m\acute{a}$ = ki foot-tie-ITR =CAUS =DEC:P

'He made him tie his own foot.'

b. *
$$ta$$
- ni s = ma - i = ki

foot-tie =CAUS -ITR =DEC:P

'He made him tie his own foot.' ELIC

(5.61) a.
$$baki$$
 taa - mis = ma = ki $hóni$ boy give-ANTIPASS =CAUS =DEC:NONP man

'The man always sends the boy to give (out gifts or chicha, etc...).'

There is some variable ordering in the verb stem, however, between the causative clitic =ma and the passive suffix $-2ak\dot{a}$. Note that the passive suffix $-2ak\dot{a}$ and the causative =ma can variably order. When they do so they condition an obligatory difference in scope. This is illustrated by comparing the examples in (5.57) with the following forms in (5.62) where the causative has scope over the passive morpheme. Thus in the verb stem in the one position where there is variable ordering, there is an obligatory difference in scope.

- (5.62) $?aka=m\acute{a}$
 - a. at/-a-2aka=ma 'to make someone get grabbed'
 - b. tsak-a-?aka=ma 'to make someone get pierced.'

A smaller subconstituent of the verb stem can be defined deviations from biuniqueness. A **deviation from biuniqueness** refers to cases where formatives do not display a one-to-one relation with meanings. This property is considered a marker of morphological patterns. To the extent that it patterns in systematically around a span of positions I consider to be a morphotactic variable. The formatives in positions 1 through position 3 display such deviations from biuniqueness. For instance, the intransitive suffix

varies between -*i*, -*i* and -*ó*. This is a deviation from biuniqueness because it involves one meaning corresponding to three forms (Blevins 2016: 53).

Another example of a deviation from bi-uniqueness involves the relationship between the body-part prefix and the transitivity suffix -a. Transitivity is marked by the suffix -a but does not surface in some cases where a body-part prefix combines with the root. There are two ways of understanding the deviation from bi-uniqueness. On one analysis the -a transitivity suffix has a zero exponent that surfaces when the root combines with a prefix This would imply a deviation from bi-uniqueness in that a lack of form would correspond to one meaning. On another analysis, the body-part prefix assigns transitivity to a verb root which has no inherent transitivity value, but has no effect on transitivity otherwise. This would constittue a deviation from bi-uniqueness because there would be one form corresponding to multiple meanings. I opt for the latter analysis in this thesis and, thus, assume that body-part prefixes do in fact assign transitivity to unspecified verb roots (Chapter 8 for more on their semantics). Systematic deviations from biuniqueness of the type I have just described identify a span from position 1 to position 3 of the first verb stratum. After position 3, such deviations stop. While there are other deviations across Chácobo grammar, from what I can tell, they do not operate over a specific span of structure in any systematic fashion, and thus do not identify a constituent.

5.2.2 The verb stratum 2 (V-constituent)

A template for the verb stratum 2 is provided in Table 5.4. All elements can be interrupted by the free form *yáma* 'negative'. To my knowledge, the negation morpheme *yáma* is the only free form element in this verb complex.

Table 5.4. Verb stratum 2 - V-constituent

| POSITION | STEMS/CLITICS | STRUCTURE |
|----------|--|-----------|
| 1 | VERB LAYER I (STEM) | SLOT |
| 2 | COMITATIVE-RECIPROCAL = $biki$ TRANSITIVE/CAUSATIVE = $m\acute{a}$ | ZONE |
| | NEGATION yáma | |
| 3 | TELIC/ALL = $y\dot{o}$ | SLOT |
| 4 | ASSOCIATED MOTION | SLOT |
| 5 | PUNCTUAL =tápi | ZONE |
| | (=tɨkɨn AGAIN) | |

In general, the second verb stratum consists of the verb stem-clitic and verb stemnegator $(y\dot{a}ma)$ combinations that cannot be interrupted by a complex free form; specifically a noun phrase. There is one caveat to this generalization. Some associated

motion morphemes can be interrupted by complex free form noun phrases. This issue will be discussed below.

5.2.2.1. *Verb stratum 2 – Position 2*

Position 2 of verb stratum 2 is a zone that consists of three morphemes that can be variably ordered. The variable ordering of these morphemes also induced a difference in sense or scope. In a sequence of position 2 morphemes, the rightmost element has scope over the element to its left. This means that position 2 can build "layered structures" (in the sense of Rice [2011]). This is illustrated with examples from elicitation in (5.63), where =ma 'causative' and =biki 'comitative' are variably ordered, in (5.64) where =ma 'causative' and =yama 'negative' are variably ordered and in (5.65) where =yama 'negation' and =biki 'comitative' are variably ordered.

(5.63) a. haba=ma=biki=ki

run=CAUS=INTRC1=DEC:P

'They made each other run'

b. $haba=biki=m\acute{a}=ki$

run=INTRC1=CAUS=DEC:P

'He made them run (together).' ELIC

(5.65) a. *tfani=biki yáma=ki*speak=INTRC1 NEG=DEC:P

haba=**ma**

yáma=kɨ

(5.64) a.

'They do not speak together.'20

(They do not speak at the same time; they cooperate such that they do not interrupt one another)

²⁰ These data and judgements are tentative since they were only confirmed with one consultant. More research needs to be conducted on the semantics of interactionals in general in order to understand precisely their interaction with other clitics that they can variably order with.

Layering of position 2 suffixes are fairly rare in texts. The most common examples involve the negative morpheme $y\acute{a}ma$ with the causative clitic $=m\acute{a}$. The variable ordering of these two morphemes is illustrated in the examples (5.66) and (5.67) from naturalistic speech.

The reason that there are no examples of layered structures with =biki in texts can be attributed to the fact that =biki is extremely rare in general (Section 8.9). However, all of my consultants accepted elicited examples such as those in (5.63) and (5.65) where biki combines with another position 2 (verb stratum 2) morpheme

The clitic =biki cannot be variably ordered with any morphemes in the verb stem (verb stratum 1). The causative morpheme $=m\acute{a}$ is an exception in this regard. My consultants also reject sentences where the negation morpheme intervenes between the verb root and the passive suffix $-2ak\acute{a}$. This is captured in the current description by the fact that the negation morpheme does not appear in the verb stem (verb stratum 1). However, I have some text examples that contradict this descriptive statement (Chapter 8). I have not systematically investigated cases where all three of the position morphemes can appear. It is possible that future research will reveal that the obligatory scopal behavior is limited to two-way combinations of morphemes and does not straightforwardly apply to layered structures with three morphemes. This requires future research.

5.2.2.2. Verb stratum 2 – Positions 3 through 5

Position 3 of verb stratum 2 is a slot that can be occupied by $=y\delta$ 'completive' (see 11.8.) It also functions as a universal quantifier over the subject of the verb. That $=y\delta$ 'completive' occurs after position 2 morphemes of the V-constituent is illustrated in (5.68) and (5.69).

The clitic =yo 'completive' cannot variably order with any of the position 2 morphemes of the \bar{V} -constituent. Additional constraints are required that do not follow from the template provided in Table 5.4. The template in Table 5.4 suggests that the negative morpheme = $y\acute{a}ma$ can occur before the completive. However, it cannot. The order = $y\acute{a}ma$ = $y\acute{o}$ seems to be banned in Chácobo. Speakers reject examples with this order in elicitation and it is not found in texts. This statement could be revised in light of studies that investigate ordering when more than two clitics are present.

Position 4 is a slot that can be occupied by one of a number of associated motion (AM) morphemes ((see Chapter 12 for a description). If the position 3 morpheme $=y\acute{o}$ is present, AM morphemes *must* follow it as illustrated in (5.70).

'He was going along breaking all the sticks.'

'He was going along breaking all the sticks.'

If the position 5 morpheme $=t\acute{a}pi$ 'punctual' is present, AM morphemes *must* precede it. This is illustrated with examples (5.71). As far as I know, these distributional facts generalize across all AM morphemes. However, a subset of associated motion clitics (concurrent) also occur in position 11 of verb stratum 3 (the clause) (see Section 5.2.3.10 below).

The position 5 morpheme = $t\acute{a}pi$ 'punctual' occurs directly after AM morphemes and cannot be variably ordered with them as is shown in (5.71).

fart=DO&GO:ITR:SG=PNCT=DEC:NONP

'He farts and then goes quickly.'

fart=PNCT=DO&GO:ITR:SG=DEC:P

'He farts and then goes quickly.'

The punctual morpheme =tapi cannot be variably ordered with the position 3 morpheme $=y\acute{o}$ 'completive'. The clitic =yo always precedes $=t\acute{a}pi$ as illustrated in (5.72) below.

5.2.2.3. Verb stratum 2 - Constituency

The constituents at the second verb stratum are summarized in Table 5.5. below.

Table 5.5. Constituents of the verb stratum 2

| Layer | Constituent position span | Morphotactic property |
|-------|---------------------------|---|
| 5 | 1-5 | i. Noninterruptability by complex free form |
| 4 | 1-3 | i. Fixed scopal ordering |
| | | ii. Asyndetic coordination |

As stated above, the entire \bar{V} -constituent (verb stratum 2) is not interruptable by a noun phrase constituent. This is illustrated with the sentences below. While the NPs *honi titikáa* 'tall man' and *ina tſiki* 'black dog' can interrupt the V-constituent and the clause-type/rank morpheme as illustrated in (5.73a) and (5.73b), these NPs cannot interrupt any portion of the V-constituent as illustrated in (5.74). NPs cannot break up the second verb stratum.

b. [
$$\bar{V}$$
]

*hába [ína t ʃɨkɨ]_{NP} =tápi =kɨ

run [dog black] =PNCT=DEC:P

'The black dog ran suddenly.' ELIC

There are two morphotactic variables that define a smaller subconstituent (layer 4) of the second verb stratum. These properties are independent of each other and thus constitute an interesting convergence around the second verb stratum. The relevant constituency tests are defined below.

- (5.75) CONSTITUENCY TESTS THAT IDENTIFY POSITION SPAN 1-3 AS A LAYER IN VERB STRATUM 2
 - a. FIXED SCOPAL ORDERING: A span of elements must occur in a fixed order *or* can be variably ordered with an obligatory difference in scope (based on Anderson [2005: 9]).
 - b. ASYNDETIC COORDINATION: In a span of coordinated elements X and Y none of the elements can be removed and have scope over the whole coordinate construction (based on Zwicky and Pullum [1983]; Bickel et al. [2007]).

All elements of the verb stem (verb stratum 1) occur either in a fixed order or else condition an obligatory scope difference as was shown with the variable ordering of the

causative and the passive above. The obligatory scopal ordering continues into the second verb stratum until position 3.

As shown in Section 5.2.2.1 morphemes in position 2 of the second verb stratum variably order with one another producing an obligatory scope difference. Thus, the criterion of fixed scopal ordering spans at least from position 1 to 2. The telic-quantifier $=y\acute{o}$ occurs directly after the position 2 zone. This morpheme cannot be variably ordered with any other morpheme. This is illustrated in (5.76), which shows that the $=y\acute{o}$ and $=y\acute{a}ma$ are in a fixed order with respect to each other.

(5.76) a.
$$ka=y\acute{o}=y\acute{a}ma=ki$$

go=CMPL=NEG=DEC:P

'All of them did not go.'

b. * $ka=y\acute{a}ma=y\acute{o}=ki$

go=NEG=CMPL=DEC:P

'All of them did not go.'

Since $=y\acute{o}$ is in a fixed position with respect to other elements of the clause, no issue of scope-based ordering arises. The criterion of fixed scopal ordering, thus, identifies a span from position 1 to 3 in verb stratum 2.

In contrast to $=y\acute{o}$ 'completive', the negation morpheme $=y\acute{a}ma$ can be variably ordered with morphemes of position 4 (associated motion morphemes) and morphemes of

position 5 (the punctual morpheme $=t\acute{a}pi$). This variable ordering is illustrated in (5.77) and (5.78).

- b. bana =bona =yáma =ki
- harvest =GOING:TR/PL =NEG =DEC:NONP
 - 'S/he does not harvest while going.'
 - 'S/he goes but doesn't harvest.'
 - 'S/he harvests but doesn't go.'
 - 'S/he doesn't harvest and he doesn't go.'
- (5.78) a. ka $y\acute{a}ma$ $=t\acute{a}pi$ =ki go NEG =PNCT =DEC:P
 - 'S/he did not go immediately.'
 - 'S/he did not go and did not go quickly.'
 - 'S/he went but did not go quickly'

b. ka=tápi yáma =ki
go=PNCT NEG =DEC:P
'S/he did not go immediately.'
'S/he did not go and did not go quickly.'
'S/he went but did not go quickly'

There are two points concerning this variable ordering that require discussion in relation to the issue of fixed scopal ordering. The points concern the position of $y \dot{a} m a$ in the verb complex, and how this morpheme can variably order with a position 4 or position 5. The reason is that $= y \dot{a} m a$ can occur outside of the \bar{V} -constituent (this is not true of other position 2 morphemes). In cases where it occurs *after* an associated motion morpheme or = tapi, I analyze it as occupying a position outside of the second verb stratum rather than occurring within the second verb stratum.

Recall, that when $=y\acute{a}ma$ variably orders with morphemes of position 2 it produces an obligatory difference in scope. However, when it variably orders with morphemes outside of this complex no scope difference is produced. This can be seen from the fact that each of the variably ordering $=y\acute{a}ma$ in (5.77) and (5.78) does not produce a difference in sense.

I conclude that the morphotactic property of fixed scopal ordering identifies a constituent spanning positions 1 to 3 of the second verb stratum. Past position 3, where variable ordering occurs, it does not condition an obligatory difference in sense.

Another morphotactic property is based on coordinability. Syndetic same subject coordination was already discussed in Section 5.1.1.4, where it was shown that syndetic (same subject) coordination identified a constituent contiguous with the verb stem. Chácobo also has an asyndetic coordinate construction that operates over a distinct span of the verb complex compared with syndetic (same subject) coordination.

Asyndetic coordination seems to identify a constituent of the second verb stratum spanning positions 1 through 3. This is illustrated in (5.79). These examples show that the morpheme $=y\dot{o}$ cannot have scope over a coordinated verb complex. It only modifies the verb stem it combines with.

(5.79) a.
$$\{ha-2-ipa \ his\} \{ha-2-iwa \ tsaya\} \ tsi \ honi='$$

$$3-\text{EPEN-father see} \ 3-\text{EPEN-mother look_at P5} \ \text{man=ERG}$$

$$wa=ni=ki$$

TR=REMP=DEC:P

'The man saw his father and looked at / visited his mother.'

b.
$$\{ha-2-ipa \ his=yó\}$$
 $\{ha-2-iwa \ tsáya=yó\}$ tsi

3-EPEN-father see=CMPL 3-EPEN-mother look_at=CMPL P5

 $honi=' \ wa=ni=ki$

man=ERG TR=REMP=DEC:P

'The man saw all of his father and looked at all of his mother.'

'The man saw his father and looked at his whole mother.'

*'The man saw all of his father and looked at all of his mother.'

However, after the position 3 morpheme, we find that associated motion morphemes can have scope over a coordinated verb complex.

'The man went telling his father and on the way visited his mother.'ELIC

The layer identified by asyndetic coordination, therefore, spans positions 1 through 3 of the second verb stratum.

5.2.3 The verb stratum 3 (the sentence)

Verb stratum 3 consists of the entire sentence in a verbal predicate construction. A template for this layer of structure is provided in Table 5.6. The third verb layer is characterized by the lowest degree of contiguity in relation to the V-constituent (the second verb stratum). All elements in the sentence can be interrupted from the \bar{V} -constituent by a full complex free form (NP). This section is concerned with describing and motivating the positions in the sentence. Unlike for the other verb strata, the description of the positions will not be done in a completely sequential fashion. The reason for this at this level of structure many elements can occur in more than one position. For instance the subject $\{A,S\}$ noun phrase occurs in position 2, 7 and 16.

Table 5.6. Verb stratum 3 – the sentence in a verbal predicate construction

| Position | Phrase/Morpheme/Constituent | Туре |
|----------|---|------|
| 1 | SENTENTIAL CONJUNCTIONS | Slot |
| 2 | NOUN PHRASE (A,S,O) / POSTPOSITIONAL PHRASE, | Zone |
| | SAME/DIFFERENT SUBJECT CLAUSE, RELATIVE CLAUSE, | |
| | ADVERBIAL | |
| 3 | V-constituent | Slot |
| 4 | MIRATIVE/FRUSTRATIVE | Slot |
| | pi | |
| 5 | tsi , pa | Slot |
| 6 | EVIDENTIAL/MODAL | Slot |
| | kiá, kará, pi | |
| 7 | NOUN PHRASE (A/S/O) / POSTPOSITIONAL PHRASE | Zone |
| 8 | V-constituent | Slot |
| 9 | ASPECT (DURATIVE), ADVERBIAL, MODAL | Zone |
| | | |
| 10 | wa (TRANSITIVE) | Slot |
| 11 | ASPECT (DURATIVE) / ASSOCIATED MOTION / ADVERBIAL | Zone |
| 12 | =kán (THIRD PERSON PLURAL) | Slot |
| 13 | TEMPORAL DISTANCE | Slot |
| 14 | CLAUSE TYPE AND RANK | Slot |
| 12 | =kán (THIRD PERSON PLURAL) TEMPORAL DISTANCE | Slot |

Table 5.6, cont.

| 15 | EVIDENTIAL / MODAL | Slot |
|----|--|------|
| 16 | NOUN PHRASE (S/A) | Slot |
| 17 | AFFECTIVE / MODAL | Slot |
| 18 | SAME/DIFFERENT SUJECT CLAUSE / RELATIVE CLAUSE / POSTPOSITIONAL PHRASE | Zone |

The fact that a given element is represented in multiple positions should not be interpreted as meaning that multiple instances of that element can necessarily occur. For instance, multiple $\{A,S\}$ arguments can never occur in the same sentence. The restrictions apply to most functional morphemes as well. For instance, the evidential morpheme $ki\dot{a}$ can only occur once in the sentence, although it can occur in positions 6 or 15. Furthermore, there are a number of interdependencies between elements. For instance, the pleonastic morpheme wa of position 10 can only surface when the \bar{V} -constituent occurs in position 3 and the verb complex is transitive. Below I provide a detailed discussion of the syntax of the sentence by providing an overview of the positions and the elements that occur within them (Sections 5.2.3.1 through 5.2.3.14), followed by a discussion of constituency at the level of the sentence (Section 5.2.3.15).

5.2.3.1. *Verb stratum 3 - Position 1*

The first position of the sentence can be occupied by sentential conjunctions. Sentential conjunctions are elements which encode information about the relation of one sentence to the preceding discourse. The most common sentential conjunctions of Chácobo are listed in (5.81).

- (5.81) a. hariaparí 'first'
 - b. *hátsi* 'and so... that's why...'
 - c. háma 'but'
 - d. hakiriki 'firstly, follow this'

Examples of clausal conjunctions are illustrated in (5.82) and (5.83). The relevant discourse context is provided.

$$(5.82)$$
 a. $his=i$ $ka=wi$

see=CONCUR:SS go=IMPER

'Let's go and see!'

b. $h\acute{a}tsi$ $ki\acute{a}$ ha $bo=ka(n)=n\acute{i}=ki$

then REP 3 go:PL/TR=PL=REMP=DEC:P

'And so they went (it is said).'

(5.83) a. oa kaka hana=
$$?\acute{a}=ka$$
 $i=kan=(?)\acute{a}i=ka$

DEM3 basket put=NMLZ:P=REL say=3PL=NMLZ:IPV=REL timisko fit \acute{a} ~ fit $\acute{a}=tik\acute{a}(n)=ki$ tio=bo-ria=ka island cross ~ cross=AGAIN=DEC:NONP big=PL-AUG=REL fifa ki \acute{a}
badger REP

'They said they put on the baskets on over there and on an island there was a huge number of large badgers crossing (it is said).'

5.2.3.2. *Verb stratum 3 – Positions 2, 4 and 5*

Positions 2 and 3 play an important role in information flow in Chácobo. Position 5 is occupied by the morpheme *tsi*. When there is a fronted stem or constituent in position 2 or 3, *tsi* optionally occurs in position 5. The morpheme *tsi* is semantically opaque (or possibly vacuous), and its main function is to mark off positions 2 and 3 from the rest of the clause. This section describes the elements that occur in position 2. Position 3 is described in Section 5.2.3.6 since it exhibits special dependencies with other positions in the sentence.

Position 2 is associated with **givenness** in the sense of Chafe (1994). It consists of either of a noun phrase, a postpositional phrase, an adverb, or a same/different subject clause or a relative clause. One of the the most prolific realizations of this function is tail-head linkage. Tail-head linkage refers to cases where the head verb or verb complex of a preceding sentence is repeated at the beginning of a new sentence (cf. Guillaume [2011] for tail-head linkage in Cavineña). Tail-head linkage clauses typically contain same/different subject clauses and relative clauses in position 2 of the clause. Examples of tail-head linkage where same subject clauses occur in position 2 are provided in (5.84) which consists of consecutive sentences in discourse. The tail head linkage clauses are in bold and the clauses from previous discourse which they are repetitions of are underlined.

(5.84)hawi bakɨ paki=kí tsi kiá 3sg:gen child fall=PRIOR:DS/A P5 REP afina=' ni=ma=ni=kipa?ití Ashina=ERG container stop=CAUS=REMP=DEC:P 'As his child was being born (i.e. falling out), Ashina stood them (him and his child) over a bucket (container).'

b.
$$pa?iti$$
 $ni=ma=?ás$ tsi $kiá$ $afiná$ $container$ $stop=CAUS=PRIOR:S$ P5 REP Ashina $\underline{ki-tfa}=ni=ki$ $\underline{leg-open}=REMP=DEC:P$

'When he stood (himself and his child) over the container, he opened his legs.'

come=REMP=DEC:P

'When he opened his legs, his blood of his (Ashina's) child (aborted feotus) came out.'

TXT 083:002-005

Noun phrases and postpositional phrases can also occur in position 2. In such cases fronting the noun phrase or the postpositional phrase to position 2 has a similar function as tail-head linkage with respect to information flow; the fronted constituent refers back to previously mentioned information. This is illustrated with the noun phrase in position 2 in (5.85) below from consecutive sentence in a narrative. In (5.85b) we see that the fronted noun phrase *hawi ibaba ṣama* 'her grand daughter's placenta' is in a part-whole relationship to the referent of an NP in the previous sentence; *hawi baki* 'his child'.

TXT 063:005-006

One difference between the use of noun phrases in position 2 compared with same/different subject clauses is that noun phrases can have a contrastive focus function in this position. This is illustrated in (5.86) below which contain consecutive sentences in a narrative. In (5.86c), the subject *hawi ro?á* 'type of vulture' occurs in position 2 in {A,S} function. The referent of the NP was previously mentioned in discourse; however, it was mentioned in the context where two different types of vultures were listed in (5.86a) the *ro?a* and the *siyabi*. Its appearance in position 2 serves to contrast the behavior of one vulture to that of the other.

b.
$$hawi$$
 pif - $kini$ $=ka$ naa $poho$ $tsama \sim tsama$ $3sg:gen$ shoulder-hole $=$ REL DEM1 almond hold \sim hold tsi $ka=(?)iki\acute{a}$ P5 $go=$ REP

'In his (Mabocorihua's) armpit, he was holding the almond (paste).'

Adverbs can also occur in position 2 for the purposes of emphasis or when the constituent refers to the new information in the clause. In the following example *ifima* is produced with an elongated vowel on its stressed syllable in order to provide emphasis. Such prosodically marked instances of adverbs only seem to occur in position 2.

- (5.87) a. *hakiriki* tsi adan witi bi=?itá=ki

 after P5 Adam fish_hook get=RECP=DEC:P

 'Then Adam got the fish hook.'
 - b. *ifima* tsi noti adan=' wafa=boná=?itá=ki

 slow P5 canoe Adam=ERG paddle =GOING:TR/PL=RECP=DEC:P

 'Adam paddled the canoe SLOWLY.' TXT021:014-015

There are some further distributional constraints related to positions 4 and 5 that require comment. The counter-expectational clitic *pa* 'mirative' is mutually exclusive with the position 5 *tsi*. This is illustrated in (5.88) below. Notice that unlike the examples above, *tsi* does not occur in the following sentences.

(5.88)
$$ho=?\acute{a}$$
 $p\acute{a}$ awi $k\acute{i}$ $n\acute{i}a$ $h\acute{a}$ wa $=?\acute{a}=ka$ $y\acute{o}$ ç a arrive=NMLZ:P MIR wife DAT throw 3 TR =NMLZ:P=REL woman $tsa?o-t\acute{i}$ $tsa?o$ $p\acute{a}$ $ki\acute{a}$ ha $i=n\acute{i}=k\emph{i}$ sit-NMLZ sit MIR REP 3 AUX:ITR=REMP=DEC:P 'When he arrived he threw (the feathers) towards his wife, on the woman's seat, where she was sitting. (surprisingly).' TXT 037:046

It is not completely clear to me whether the mutual exclusivity of tsi and $p\acute{a}$ is related to the semantics of these morphemes. The morpheme tsi seems to be semantically

vacuous. For instance, the clitic pa 'mirative' is also incompatible with the frustrative clitic pi 'anxietive', however, these morphemes display distinct distributions, and thus the lack of compatibility could be due to semantics. When the frustrative morpheme pi 'anxietive' occurs in a preverbal position, it always directly precedes the position 5 tsi. This is illustrated in (5.89) below.

5.2.3.3. Verb stratum 3 – Positions 6 and 15

Evidential and modal morphemes occur in position 6 and position 15. These morphemes are listed in Table 5.7. All position 6 morphemes are also position 15 morphemes, except for the conditional morpheme =pi. Not all position 15 morphemes are position 6 morphemes. As can be seen below all morphemes in these positions encode evidential or modal categories (Chapter 13 for a description of the semantics of such morphemes).

Table 5.7. Position 6 and 15 morphemes

| | | Position 6 | Position 15 |
|----------|-------------------------|------------|-------------|
| pi | 'conditional' | ✓ | × |
| kiá | 'reportative' | ✓ | ✓ |
| raká(na) | 'certitudinal' | ✓ | ✓ |
| kará | 'epistemic (inference)' | ✓ | ✓ |
| toniá | 'epistemic (belief)' | ✓ | ✓ |
| tiá | 'incertitudinal' | × | ✓ |
| maní | 'conjectural' | × | ✓ |
| rá | 'assertive' | × | ✓ |
| rŧ | 'regretative' | × | ✓ |

The examples in (5.90) and (5.91) illustrates that these morphemes can occur in two distinct positions. In (5.90) $ki\acute{a}$ 'reportative' occurs in position 6, directly after the position 5 tsi.

In (5.91) *kiá* 'reportative' occcurs in position 15 directly after the clause-type/rank morpheme of position 14 (see Section 5.2.3.4 below).

The certitudinal morpheme $=r\acute{a}kana$ is distinct from the other morphemes in that it requires that the verb complex be nominalized in verbal predicate constructions. This is illustrated in (5.92) below.

All of the morphemes described in this section can modify non-verbal predicate constructions.

5.2.3.4. Verb stratum 3 – Position 14 (clause-type/rank)

Position 14 is the clause-type/rank morpheme slot, which is discussed in the context of verbal predication and clause-types (Chapter 4 above). The clause-type/rank morpheme plays an important role in terms of the structure and the function of the clause as a whole. Morphemes in this position encode clause-rank (main, nominalized, same/different subject), the clause-type (declarative, interrogative, imperative, hortative, reportative), and tense, aspect, evidential, modal and associated motion distinctions. Cutting across these distinctions, the clause-type/rank morphemes can be further subdivided into types according to a number of other syntactic properties; (i) distributional freedom/rigidity of the subject noun phrases in the clause; (ii) whether they allow the V-constituent to occur fronted in position 3.

Constituent-flexible (C-flexible) clause-type/rank morphemes allow subjects (S/A) to occur in more than one syntactic position (not simultaneously); positions 2, 7 and 16. Alternatively, constituent-rigid (C-rigid) clause-type/rank morphemes force the subject to only occur in one posisition; position 16. Effectively, the C-rigid morphemes force a OVA/VS word order, while the former allow free constituent ordering. All C-

flexible clause-type/rank morphemes also allow the \bar{V} -constituent to occur in position 8 or "fronted" in position 3, while C-rigid clause-type/rank morphemes force the \bar{V} -constituent to remain in position 8.

Subordinate clauses are either C-flexible or C-rigid as well. However, subordinate clauses differ from main clauses in not containing positions after position 14. Thus the subject (S/A) can never occur in position 16 in a subordinate clause, because this position does not exist for such clauses. All same-subject clauses and imperative clauses are C-rigid, whereas all other types of subordinate clauses are C-flexible. C-flexible clauses vary somewhat in how flexible their constituent order is. I will refer to clauses with C-rigid clause-type/rank morphemes as C-rigid clauses, and I will refer to clauses with C-flexible clause-type/rank morphemes as C-flexible clauses. Table 5.9 provides a list of a all of the clause-type/rank morphemes in Chácobo classified according to their clause type, clause rank, additional functional categories they might encode and whether they allow flexible or rigid ordering of the S/A subject. Clause-type/rank morphemes that are not main clauses do not encode a clause-type. No information, therefore, occurs for clause-type for non-main clause morphemes.

Table 5.8 Clause-type/rank morphemes according to the sentence-type, clause-rank, functional category they encode, and whether they are subject-flexible or subject-rigid.

| MORPHEME | CLAUSE TYPE | CLAUSE RANK | FUNCTIONAL | CONSTITUENT |
|----------------------|---------------|-------------|--------------|-------------|
| | | | CATEGORY | FLEXIBILITY |
| =ki | DECLARATIVE | MAIN | PAST | FLEXIBLE |
| =ki | DECLARATIVE | MAIN | NONPAST | RIGID |
| =ikiá | DECLARATIVE | MAIN | REPORTED | RIGID |
| =?iní~=?aí | INTERROGATIVE | MAIN | NONPAST | RIGID |
| =?á | INTERROGATIVE | MAIN | PAST | FLEXIBLE |
| $=_{\mathcal{W}i}$ | IMPERATIVE | MAIN | _ | RIGID |
| $=$ $\dot{w}i$ | IMPERATIVE | MAIN | FRUSTRATIVE | RIGID |
| $=t\dot{a}$ | IMPERATIVE | MAIN | PRIOR | RIGID |
| | | | ANDATIVE | |
| =pá | IMPERATIVE | MAIN | MIRATIVE | RIGID |
| =i?i?ar í | IMPERATIVE | MAIN | PERMISSION | RIGID |
| =no | HORTATIVE | MAIN | _ | FLEXIBLE |
| =?á | _ | NOMINALIZED | PAST | FLEXIBLE |
| | | CLAUSE | | |
| =?ai | _ | NOMINALIZED | IMPERFECTIVE | FLEXIBLE |
| | | CLAUSE | | |

Table 5.8, cont.

| =no | - | NOMINALIZED | SIMULTANEOUS | FLEXIBLE |
|-----------------|---|----------------|--------------|----------|
| | | CLAUSE | | |
| =nospari | - | SUBORDINATE | PRIOR | RIGID |
| | | (SAME SUBJECT) | | |
| =nosparino | - | SUBORDINATE | SUBSEQUENT | RIGID? |
| | | (DIFFERENT | | |
| | | SUBJECT) | | |
| =k í | _ | SUBORDINATE | PRIOR | FLEXIBLE |
| =?i | _ | SUBORDINATE | SIMULTANEOUS | RIGID |
| | | (SAME SUBJECT) | | |
| =kí | _ | SUBORDINATE | SIMULTANEOUS | RIGID |
| | | (SAME SUBJECT) | | |
| =§ó | - | SUBORDINATE | PRIOR EVENT | RIGID |
| | | (SAME SUBJECT | | |
| | | A) | | |
| =?ás | - | SUBORDINATE | PRIOR EVENT | RIGID |
| | | (SAME SUBJECT | | |
| | | S) | | |

Table 5.8, cont.

| =рата | _ | SUBORDINATE | SIMULTANEOUS | RIGID |
|--------|---|----------------|--------------|----------|
| | | (SAME SUBJECT | | |
| | | S/A) | | |
| =páima | - | NOMINALIZATION | IMPENDING | FLEXIBLE |
| =norí | - | SUBORDINATE | "INSTEAD OF" | FLEXIBLE |
| =marí | - | SUBORDINATE | "AS IF" | FLEXIBLE |

The main clause C-rigid clause-type/rank morphemes are =2ini 'interrogative, non-past', =ki 'declarative non-past', and =(?)ikia 'reportative'. C-rigid clause-type morphemes are illustrated in the examples in (5.93), (5.94), (5.95), (5.96), (5.97), and (5.98). In each of the examples, it can be observed that the {A,S} subject occurs after the clause-type/rank morpheme in position 16. When an A argument occurs in position 16 it is not assigned ergative case (as in (5.93) and (5.95). This case neutralization occurs regardless of whether it appears in a C-rigid or C-flexible construction (see Chapter 7 for details).

(5.94)ha?arí rɨso =yáma **=ki** no-a still die =NEG =DEC:NONP 1PL-EPEN 'We still aren't dead yet.' TxT036:033 (5.95)hawi risa kí tsi *kiis-a=(?)ikiá* káſi 3SG:GEN nose DAT Р5 cut-TR=REP bat 'The vampire (bat) cut him on his nose.' TXT063:181 (5.96)nɨka =*kato*=' tsi kiokí ~ kiokí=(?)ikiá hasiní-wa Р5 like this =REL=SPAT $sing \sim sing = REP$ curassow-AUG 'This is how the big curassows were singing.' TXT 063:199 (5.97)hawinia barí=no ho=?iní mi bɨnɨ what day = SPATarrive/come=INTER:NONP 2sG:GEN husband 'At what time is your husband coming?' TXT061:530 (5.98)hiwi=' a=yáma **=?iní** tsi rito yóşa stick= Р5 kill=neg=inter:nonp nose woman 'Did the woman (mentioned by interlocutor) not hit them (white lipped peccarry) on the nose with a stick?' / 'Perhaps the woman hit his nose with

The examples above all contain {A,S} subjects in position 16. For the C-rigid clause-type/rank morphemes found in these sentences, this is the only constituent order allowed for subjects. In other words Chácobo displays obligatory VS/A constituent order

Txt 050:913

a stick.'

for C-rigid clauses. The different positions of the {A,S} subject in C-flexible constructions are illustrated in the next section.

5.2.3.5. Verb stratum 3 – Positions 2, 7 and 16 (Subjects)

C-flexible morphemes license the subject to appear in position 2, 7 or 16. In subordinate clauses only positions 2 and 7 are available. The most common position for $\{A,S\}$ subjects is position 7. An example of an A argument in position 7 is provided in (5.99). An example of an S argument in position 7 is provided in (5.100). In each case we know that these noun phrase constituents are in position 7 because they are in between the position 5 morpheme and the \bar{V} -constituent of position 8.

(5.99) [1] [5] [7]

$$mai \ ha = ki$$
 $tsi \ hawi \ gao \ kamano='$
 $earth 3 = D\{A,S\}$ P5 3SG:GEN bone jaguar=ERG

[8] [13][14]

 $kiyo = ni = ki$
 $finish=REMP=DEC:P$

'When he dug a hole, **the jaguar** finished his bones.' TXT 011:010

Subjects can also occur in position 16. An example of an S argument is provided in (5.101) and an example of an A argument is provided in (5.102). In position 16, ergative case is not assigned. In general, case distinctions are neutralized for subjects occurring in position 16 (Chapter 7).

{A,S} subjects can also occur in position 2. As is stated above (Section 5.2.3.2), NPs in this positions are focused n this position they are focused. S subjects are illustrated in (4.114) and (4.115).

In naturalistic speech, it is rare for A arguments to occur in position 2. Some examples are illustrated in (5.105 and (5.106) below.

[8][13][14]

bi=ni=ki

bring=REMP=DEC:P

"... but THAT MAN brought it to his mother." TXT 006:063

There is an important caveat to the claim that subjects have distributional freedom in C-flexible clauses. The V-constituent can occur in two positions in the sentence; position 8 and position 3. When the V-constituent occurs in position 3, the noun phrase $\{A,S\}$ subject is fixed in position 5. Thus C-flexible constructions allow the subject to occur in three syntactic positions, but only when the \bar{V} -constituent occurs in position 8.

5.2.3.6. Verb stratum 3 – Positions 3, 8 and 10 (\bar{V} -constituent and pleonastic wa)

C-flexible constructions allow the \bar{V} -constituent to occur in positions 3 or 8. C-rigid constructions only permit the \bar{V} -constituent to occur in position 8. I will refer to cases where the \bar{V} -constituent occurs in position 3 as "fronted-VP constructions". I refer to them as fronted-VP constructions, and not fronted- \bar{V} -constructions, because if they contain an $\{P,T,R\}$ object, this object must occur in position 2. In other words, the \bar{V} -constituent and the object front together (see Section 5.2.3.15). Recall from Section 5.2.3.2 that phrases or clauses in position 2 tend to refer to information that is given in the discourse context. In

conformity with this function fronted-VPs are primarily used in cases where the main verb of the sentence refers back to an event denoted by a previously uttered verb phrase. The thing denoted in this case can be a literal restatement of the event (as in "as stated above") or refer to an action that is repeated by the subject. Consider the narrative sequence in (5.107), from the folk story of Isha, the man with the frog-like tongue. In this story Isha leaves his wife (a Chácobo), after his in-laws mock him for the way he eats. (5.107a) references his first departure. In this construction the \bar{V} -constituent is in position 8, before the position 5 clitic tsi. In (5.107b), the narrator describes Isha coming back to his wife after a few days. In (5.107c), the narrator describes how Isha did not come back again. Here the \bar{V} -constituent is fronted to position 3, before the position 5 clitic tsi. The S subject Isha occurs in position 8, after the verb but before the clause-type/rank morpheme =ki 'declarative, past tense'.

(5.107) a. hátsi toa nika=?á tsi kiá ifa yoi
then DEM2 hear=NMLZ:P P5 REP Isha poor
$$rabi=?áş tsi ho=yáma=ni=ki$$
embarrass=S P5 come/arrive=NEG=REM=DEC:P

'When the poor Isha listened to them he became embarrassed, and didn't return (from hunting/from going to his chaco).'

b. wistí bari dos bari tsi ha?arí day day P5 still one two ho=ni=kiawi=kí ha come/arrive=REMP=DEC:P woman=DAT 3

'But after one or two days he came anyway (still) to his wife.'

hakirikí ho=yáma iſa c. tsi kiá =ni=kiafter come/arrive=NEG P5 REP Isha =REMP=DEC:P awini ha-?-ɨwa osa=ki=nowife 3-EPEN-mother $laugh=D\{A,S\}=CONCUR$

'After this he didn't come back (again), after her (his wife's) mother mocked (him).' TXT 008:092

An important aspect of the fronted-VP construction is that it conditions the insertion of the morpheme wa when the \bar{V} -constituent is transitive. This was already illustrated in Section 4.1.2.2 with the example in (4.8). The example in (5.108) provides another illustration of the discourse informational status of fronted-VP constructions, but with a transitive clause. In (5.108b) the fronted-VP (in bold) repeats the event denoted by nimos 'mix' from the previous sentence in (5.108a), albeit aspectually modifying it through reduplication. Notice that in this case, the verb is transitive and, therefore, wa is inserted in position 11, directly after the subject $afin\acute{a}$ 'Ashina (erg.)' which occurs in position 8. The

morpheme *wa* is obligatory in transitive fronted-VP constructions and contributes no semantic information.

b. $nimos \sim nimos \sim nimos - a(k)$ tsi kia afina= $mix \sim mix \sim mix - TR$ P5 REP Ashina=ERG wa=ni=ki

TR=REMP=DEC:P

which had came out.'

'Ashina was stirring (mixing) it (the blood in the bucket) for some time.'

TXT081:007-008

As stated above when the \bar{V} -constituent is fronted to position 3 the object must occur directly to its left in position 2. The $\{P,T,R\}$ object cannot intervene between the verb stem and the clause-type/rank morpheme as the subject does in position 8 (see Section

7.1 for details on the ordering of arguments). Examples of overt objects in fronted-VP constructions are provided in (5.109) and (5.110). The VP constituents are underlined.

One way of describing the fronted-VP construction would be to consider it an auxiliary verb construction and analyze *wa* as an auxiliary verb. Similar constructions are considered auxiliary verb constructions in Takanan languages for example (Guillaume *forthcoming*). There are three reasons I do not consider the fronted-VP construction an auxiliary verb construction in this Chácobo; (i) There is no marking of subordination on lexical verb; (ii) the auxiliary verb analysis would require positing a zero auxiliary for intransitive fronted-VP construction; (iii) the purported auxiliary verb construction would

not have any special semantics that do not follow from the lexical verb itself; (iv) auxiliary constructions display a "neutral" alignment for S/A NPs that intervene between the lexical verb and the auxiliary, but Fronted-VP constructions do not display a neutral alignment (see Section 7.1). From a comparative perspective it might make sense to consider the Fronted-VP construction a (perhaps non-canonical) auxiliary verb construction.

5.2.3.7. Verb stratum 3 - Positions 2 and 7 (objects)

I will use the term **object** to refer to P, T and R constituents (Chapter 7). As pointed out in Section 4.1.1.3, T has the same distribution as P. R has the same distribution as P in so far as it occurs in a neutrally aligned verb complex, and is not coded with the dative marker =ki. Objects can occur in positions 2 and 7. A position 2 object is illustrated in (5.85b) above. When the object occurs in position 2 it is in focus.

That objects can occur in position 7 is illustrated below. Position 7 is a zone where the object and the subject can variably order. My impression is that the argument which is most topical (most activated based on previous discourse context) is the one which is closer to the verb. Thus, PAV order is conditioned where A is mentioned in the previous discourse. This is illustrated with the text examples in (5.111). (5.111a) displays a APV order. The proper noun *adan* is the A argument, and the P argument is *witi* 'fish hook'. The following sentence displays and (5.111b) displays a PAV order.

'Adam paddled the canoe SLOWLY.' TXT021:017-018

The information-structural difference between APV and PAV where both arguments are in position 7 suggested by the example above, requires future research. Note that this variable ordering only exists in C-flexible constructions. Recall, that in C-rigid constructions, the {A,S} subject obligatorily follows the verb complex. Consequently, Chácobo does not allow VPA constituent order at all.

According to Córdoba et al. (2012) P arguments can occur after the verb complex. I have not represented this in the template above. The reason is that in all of my text examples where P appears to follow the verb complex, there is an intonation break and a pause. Literate speakers of Chácobo such as Caco Moreno always insist that there should be a comma where an object occurs after the verb complex.

Objects do occasionally occur postverbally, but they are separated by an intonational pause. In the following example the speaker had mentioned the object in a previous discourse context seen in (5.112a). The object seems to be mentioned as an afterthought in (5.112b) because the original mention of the object was 5 sentences away.

(5.112) a.
$$ka=tiki(n)=ki$$
 $\underline{mako\ yini}$ $pi=i=na$
 $go=AGAIN=DS$ $\underline{suri\ powder}$ $eat=CONCUR:S=EPEN$

'She went again to eat the suri powder.'...

b. $goa=2\acute{a}$ $tsi\ ki\acute{a}$ $pi=tikin=y\acute{a}ma$ $tsi\ ki\acute{a}$ ha
 $get_fat=NMLZ:P$ P5 REP $eat=AGAIN=NEG$ P5 REP 3

 $wa\ =n\acute{i}=ki$ $m\acute{a}ko\ y\acute{i}ni$

TR =REMP=DEC:P $suri\ powder$

'And after getting fatter, she didn't keep eating it, suri powder.'

TXT 022:020-025

I have not investigated the issue of post-verbal P arguments in elicitation contexts in detail. It is possible that future research will reveal that such a constituent order does not require an intonational break.

5.2.3.8. Verb stratum 3 - Positions 2, 7, 8 and 18 (postpositional phrases/adjuncts)

Postpositional phrases are the most distributionally free complex phrases. They can occur in positions, 2, 7 and 18. Examples of postpositional phrases occurring in position 2 occur in (5.113) and (5.114). To my knowledge when a postpositional phrase occurs in position 2 other arguments do not have to.

Postpositional phrases can also occur in position 7 where they can variably order with any of the main arguments. This is illustrated in (5.115) and (5.116). (5.115) provides an example where a postpositional phrase precedes the main verb.

It is less common for adjuncts to occur closer to the verb complex than main arguments, but it is possible. Examples of an adjunct occurring closer to the verb than an argument are provided in (5.116) and (5.117). In (5.116) the postpositional phrase *hato ki* 'to them' occurs closer to the verb than the third person pronoun *ha* 'he/she/it'. In (5.117) the postpositional phrase *pia yá* 'with the arrow' occurs closer to the verb than the subject argument noun phrase *honi* 'man'.

(5.117)
$$hini$$
 $páṣa$ $oka-ta=páma$ tsi $kiá$ $honi$ water crude happen-PNCT=CONCUR P5 REP man pia $=yá$ $rii=ni=ki$ arrow $=COM$ jump=REMP=DEC:P

'At the same time that the water was falling, the man jumped up with his bow and arrow.' TXT 034:067

Chácobo allows postpositional phrases to occur in position 18. This is illustrated in (5.118).

(5.118) kára mífni=bo no inia i=pao=ní=ki toro=kí
rubber little=PL 1PL sell AUX=HAB=REMP=DEC:P Toro=DAT
'We used to sell a little bit of rubber to Toro.' TXT 049:167

Chácobo has a large number of postpositions denoting locational and path semantics. To my knowledge all post-positional phrases share the same distributional properties with one exception. Like object noun phrases, postpositional phrases cannot occur in position 7 in fronted-VP constructions, except for those which are headed by ki 'dative'. Dative post-positional phrases can occur in position 7 with the subject noun phrase in fronted-VP constructions. This is illustrated in (5.119b). In this sentence the subject verb i 'say' is fronted to position 2. The noun phrase subject $naa \ pokó=ka=bo$ 'These ones

inside her stomach' and the postpositional phrase ha ?iwa = ki 'to their mother' occur in position 7. Postpositional phrases that are not headed by =ki 'dative' cannot occur in position 7 in fronted-VP constructions.

(5.119) a.
$$oki$$
 tsi go no $ka=?ái=na$

better P5 DEC 1PL $go=NMLZ:IMPFV=EPEN$
 no $ka=fari=no$

1PL $go=CRAS=OPTATIVE$

b. i tsi $kiá$ $ha-?-iwa=ki$

say P5 REP $3-EPEN-mother=DAT$
 naa $poko='=ka=bo$ $=ni=ki$

DEM1 $stomach=LOC=REL=PL$ $=REMP=DEC:P$

"Its better that we go, let's go." Those who were inside her (this one's) stomach said to their mother.' $TXT026:058$

5.2.3.9. *Verb stratum 3 – Position 9*

Positions 9 and 10 are zones that can be occupied by various functional morphemes. All morphemes which can occur in positions 9 and 10 can be variably ordered to my knowledge. Some of this variable ordering is illustrated with the text example in (5.120)

(5.120)baa=tiki(n)=yáma tsi kiá ha wa = ni = kinami ask for=AGAIN=NEG P5 meat REP 3 TR =REMP=DEC:P i kia há =ni=kitsi wa say P5 REP 3 TR =REMP=DEC:P "I didn't ask for more meat' he said (it is said)." TXT 034:175 nia**=yáma=tikín**=(?)ikiá (5.121)ha-?-iwa tsaya=?aí throw=NEG=AGAIN=REP 3-EPEN-mother see=INTER:NONP:2SG '(it is said) his mother had not thrown it out, you see?' TXT 032:020

The morphemes which can occur in position 9 do not appear to display scope differences under variable ordering. This is illustrated in (5.122) below. These sentences both of the same meaning.

(5.122) a. $tsaya = tiki(n) kar\acute{a} = ki$ see =AGAIN EPIS1 =DEC:P

'He probably saw him again.'

b. $tsaya kar\acute{a} = tik\acute{i}(n) = ki$ see EPIS1 =AGAIN=DEC:P

'He probably saw him again.'

However, when speakers are given different translations of the same sentences and asked to judge which ones are "better" or which ones they consider the more preferred reading, it shows that right-headed scope may also be at work with verbal morphemes of position 4 in the basic verb phrase as well, at least to a certain extent. (5.123) shows minimally contrastive sentences where the negative $=y\acute{a}ma$ and the time of day adverbial =ba?ina are variably ordered. Caco Moreno stated that he preferred the translations that are marked in bold. The bold translations correspond to scopal readings that one would expect based on the assumption that position 4 morphemes of the basic verb phrase follow position 6 suffixes of the verb stem.

Below I provide a list of the functional morphemes that can occur in position 9.

• Quantificational adverbial:

=tikin 'again'; =witsi 'one'; =rabi 'twice or more'.

• Manner adverbial:

pistia~piſa 'a little, attenuative'; =*roʔá* 'limitative'.

• Temporal or time of day adverbial:

=pari 'first'; =ba?ina 'all/each day'; =wini 'before (someone), immediately'; =fina 'at/all night'.

Modal: kará 'epistemic possibility', =kas 'volitive'; =kia 'counterfactual';
 pá 'mirative, obligative'; =pí 'urgentive'; =riá 'negative approximative';
 pi 'abilitative'

• Associated location;

=*tiarí* 'over there'

• Aspectual:

=pao 'durative, habitual'

• Evaluative:

yoi 'sympathetic' ('poor, ugly')

• Negative:

yáma 'negative'

5.2.3.10. *Verb stratum 3 – Position 11*

Some functional morphemes can occur directly after the pleonastic wa (position 10) in between the \bar{V} -constituent and the pronominal plural morpheme =kan (position 12). This is demonstrated in the following sentence in (5.124) where wa occurs because the verb phrase constituent is fronted.

(5.124)
$$yo_sa$$
 $pistia$ $tsay\acute{a}$ tsi ha wa $=tiki(n)=ka(n)$

woman small see P5 3 TR $=$ AGAIN=PL

 $=n\acute{i}=ki$
 $=$ REMP=DEC:P

'They saw the young woman again.' ELIC

Position 7 is a slot; only one morpheme can occur in this position at a time. All of the morphemes that can occur in this position can also occur in position 9 except one (=fina 'at night'). When the \bar{V} -constituent is not fronted in position 2 it is impossible to tell whether a morpheme is occupying position 9 of the verb phrase constituent or position 7 of the clause, because there is no intervening morpheme that allows us to distinguish between these positions. For instance, in (5.125) it is not clear whether =tikin 'again' is in position 4 inside the verb phrase constituent or position 7 of the clause. It is possible that position 7 is simply irrelevant for clauses where the verb phrase is not fronted.

(5.125) yosa pistia ha $tsay\acute{a} = tikin$ $= kan = n\acute{i}$ = ki woman small 3 see = AGAIN = PL = REMP = DEC:P 'They saw the young woman again.' ELIC

The only way to tell whether a given morpheme can occur in position 11 is by considering it in the context of the fronted-VP construction. Examples from naturalistic speech of morphemes that are unambiguously occurring in position 11 are extremely rare, and most of my information on this clause position is from elicitation. An example of a morpheme occurring in position 11 from naturalistic speech is provided in (5.126).

awini=' (5.126)wiaki toa=?á ka kono kono kiá tsi nextday woman=ERG stir=NMLZ:P REL boil boil Р5 REP hina-wa=ria ha wa = tiki(n) = kikará tia do how-tr=approx epis 3 TR =AGAIN=DEC:P EPIS2 'And then the next day, the woman stirred it (the chicha), I believe somehow they made the chicha boil again (but I do not know how).' Txt 063:043

As stated above, all position 11 morphemes can occur in the position 9 except = fina 'at night, during the night'. There are a number of position 9 morphemes that cannot occur in position 11. They are as follows; $kar\acute{a}$ 'dubitative'; = $ro?\acute{a}$ 'limitative'; =wisti 'once';

rabi 'twice or more'; kiá 'reportative'; pi 'urgentive'; =rí 'as well', subsequent'; piſa 'attenuative'; =ria 'negative approximative'.

5.2.3.11. *Verb stratum 3 – Position 12*

The pronominal plural =kan occurs in position 12 of the clause. This is illustrated in (5.127) below. Notice that =kan occurs in between the pleonastic wa (position 10) and the temporal distance morpheme (position 13). This morpheme cannot occur in any other position in the verbal predicate construction.

The pronominal plural can also appear in non-verbal predicate constructions. It is described in more detail in Chapter 15 in the context of number modification in general (Section 15.2).

5.2.3.12. *Verb stratum 3 – Position 13*

Position 12 is occupied by temporal distance morphemes. These morphemes encode a specific degree of temporal distance between the event time of the head verb and the reference time of the discourse. They are as follows; =ni 'remote past'; =yamit 'distant past'; =2ita 'recent past'; =ya 'prefect'; $=tsi\sim=tsa$ 'immediate present'; =fari 'crasternal'; =gi 'remote future'. Their semantics are described in detail in Chapter 10 in the context of an analysis of tense and aspect in Chácobo.

5.2.3.13. *Verb stratum 3 – Position 17*

Position 17 is occupied by a few modal and affective morphemes. That the affective morphemes occur after position 16 (the S/A argument position) is illustrated in (5.128) and (5.129). Position 17 can be occupied by $r\acute{a}$ 'authoritative, $r\acute{i}$ 'lamentative', pa 'mirative' and pi 'anxietive'.

(5.128)
$$[16] 17$$

$$k\acute{a}=ki \quad no?\acute{o} \quad oma=r\acute{a} \quad i \quad tsi \quad ki\acute{a} \quad ha=n\acute{i}=ki$$

$$go=DEC:P \quad 1sG:GEN \quad friend=Ass \quad say \quad P5 \quad REP \quad 3 \quad =REMP=DEC:P$$

$$"My friend left (I assert)" he said.' \quad TxT 113:155$$

(5.129) 16 17

ho=kɨ adán **pɨ**

arrive=DEC:P Adam ANX

'Adam has arrived (what are we going to do?!)' OBSV

The morphemes $=r\acute{a}$ 'authoritative' and $=r\acute{t}$ 'lamentative' are limited to position 17, while $p\acute{t}$ 'anxietive' and pa 'mirative' can occur in other positions in the clause.

5.2.3.14. *Verb stratum 3 – Position 18*

The last position in the sentence can be occupied by a number of different types of categories that encode adverbial semantics, such as adverbials, nominalized/relativized clauses, same subject clauses, different subject clauses and postpositional phrases. These modifiers can occur in any order at the end of the sentence. When subordinate (non-main) clauses occur in this position they combine with the epenthetic clitic =na. Put another way, =na signals that some subordinate clause is a dependent to a clause to its left. The iterative combination of deranked clauses in position 18 of the sentence is illustrated in () (5.130) below.

hawinia = ka(5.130)honi mi=kí ho=?á tsi kiá 2SG=DAT arrive=NMLZ:P P5 where=SPAT=REL man REP =ni=kikasa=?ás**=na** bɨnɨ ho=?á**=na** bari husband =REMP=DEC:P angry=S=EPEN sun arrive=NMLZ:P=EPEN pasna=?ái**=na** be hungry=NMLZ:IPV=EPEN

"From where did the man arrive onto you?" said her husband who was angry as the sun had arrived and while he was hungry.'

5.2.3.15. Verb stratum 3 - Constituency

This section is concerned with constituents in verb stratum 3 (the sentence of a verbal predicate construction) apart from the V-constituent, noun phrases, and postpositional phrases. While some arguments can be made for additional constituents at the level of the sentence, in general, the arguments for additional constituency at this level is weaker than it is for the layers described in Section 5.2.1.4 and Section 5.2.2.3 within the first and second verb strata.

Table 5.9. Constituents of the verb stratum 3

| Layer | Name | Constituent position span | Morphotactic property |
|-------|-------------------|---------------------------|---|
| 7 | Verb Phrase / VP | 2-3:7-8 | i. Fixed ordering (within an intonational/pause domain) |
| 8 | Tense group | 13-14 | i. Rigid fixed orderingii. Uninterruptabilityiii. Deviation from biuniqueness (?) |
| 9 | Light verb group | 10-15 | i. Uninterruptability by noun phrase ii. Independent functional elaboration |
| 10 | Minimal free form | 8-14 | i. Minimal minimum free form / Obligatoriness |
| 11 | Maximal free form | 8-15 | i. Maximal minimum free form |

5.2.3.15.1. Verb Phrase (2-3/7-8 span)

The **Verb Phrase** (Layer 7) consists of the object noun phrase and the \bar{V} -constituent. The primary evidence for this constituent comes from comparing the cases where the \bar{V} -constituent occurs in position 8 to constructions where the \bar{V} -constituent occurs in position 3 (the fronted-VP construction).

The $\{A,S\}$ subject does not occur in the same ordering relation with respect to the \bar{V} -constituent across these constructions. When the \bar{V} -constituent is in position 8, the $\{A,S\}$ subject can occur before (positions 2 or 7) or after (position 16) the \bar{V} -constituent. When the \bar{V} -constituent occurs in position 3, the $\{A,S\}$ subject is fixed in position 7 after the \bar{V} -constituent. The $\{A,S\}$ subject does not occur in a fixed order with respect to the \bar{V} -constituent. On the other hand, the $\{P,T,R\}$ object precedes the \bar{V} -constituent across these constructions where the \bar{V} -constituent occurs in position 8 and position 3.

The Fronted-VP construction can be viewed as a type of displacement test providing evidence for a VP-constituent consisting of the object and the \bar{V} -constituent (Culicover [2009: 84]; Osborne [2015:253] for additional sources). This is illustrated in (5.131) and (5.132).

(5.131) 7 8
$$sota=ki \quad honi=' \quad [siki \quad nani]_{VP}=ki$$

$$bag=DAT \quad man=ERG \quad corn \quad place=DEC:P$$
'The man placed the corn in the bag.'

(5.132) 2 3 $[siki \quad nani]_{VP} \quad sota=ki \quad honi=' \quad wa=ki$ corn place bag=DAT man=ERG TR=DEC:P 'The man placed the corn in the bag.' ELIC

As already stated, it should be pointed out that the $\{P,T,R\}$ object can occur after the clause-type/rank morpheme (and, therefore, after the \bar{V} -constituent) in both of these constructions. However, in naturalistic speech it always seems to be separated by a pause, perhaps suggesting a type of right-dislocation (afterthought) construction (Givón 2001b:267). In elicitation contexts speakers vary concerning whether they accept objects after the clause-type morpheme without an explicit pause. The discourse function of noun phrase constituent order and its relationship to pause phenomena require future research. The point here is that the fronted-VP construction suggests some constituency between the object and the \bar{V} -constituent.

5.2.3.15.2. Tense group (13-14 span)

The **tense group** (layer 8) spans occurs in a 13-14 span in the sentence. The temporal distance morpheme and the clause-type/rank morpheme occur in a fixed order, cannot be interrupted by any element and occur nowhere else in the sentence. They are thus a constituent according to the criterion of contiguity and rigid fixed ordering. There is a deviation from biuniqueness in the tense group as well, noted in Section 4.2.2.1 (see and as well). The deviations relate to the remote past morpheme =ni (see Section 10.1) and, to a lesser extent to the remote future morpheme =gi (see Section 10.6). The deviation from bi-uniqueness associated with the tense group is illustrated (5.133).

```
(5.133) a. ka=ni=ki

go=REMP=DEC:P

'S/he went ( year or more ago).'

b. ka=ni / ka=ni=\emptyset (*ka=ni=2\acute{a})

go=INTER:REMP / go=REMP=INTER:P

'Did s/he go? (a year or more ago)'
```

In the declarative, the remote past TDM =ni plausibly encodes a remote past time, and the clause-type morpheme =ki encodes the declarative and the past tense as in (5.133a). Based on the pattern with other TDMs, we expect =ni to occur beside the interrogative past tense morpheme =2i. Instead, =ni occurs without an overt clause-type/rank morpheme as in (5.133b). There are two ways of analyzing this situation as suggested by the glossings provided above. Either =ni encodes the interrogative and the remote past or else, =ni selects for a phonologically null allomorph of the interrogative past. Both of these analyses entail a deviation from biuniqueness. It is unclear whether the deviation from biuniqueness at the 13-14 span should be regarded as evidence for constituency. The deviations found in the 1-3 span in the verb stratum 1 are relatively systematic patterns that involve many verbal roots, whereas the deviation here only involves one morpheme. Similar cases where the clause-type/rank morpheme does not appear emerge with the remote future TDM $=\varepsilon i$. However, the details are different (see Section 10.6) suggesting that the deviations from bi-uniqueness are related to individual morphemes not the 13-14 span.

5.2.3.15.3. Light verb group (10-15 span)

The light verb group spans position 10 through position 15. It is defined based on the same morphotactic variable as the \bar{V} -constituent; elements within the light verb group cannot be interrupted by a full noun phrase. The left-edge of the light-verb group is the pleonastic wa which surfaces in fronted-VP constructions when the verb complex is transitive. I refer to this as the light verb group based on the idea that wa is a type of "light-verb". Additional evidence that this is a distinct constituent comes from the fact that there is evidence that the light verb group can be elaborated with functional morphemes independently of the verb complex, suggesting a degree of autonomy from the V-constituent that is not otherwise expected. I illustrate this fact about the light verb group below.

Associated Motion (AM) morphemes can occur position 4 of the \bar{V} -constituent (Section 5.2.2.2) and position 11 of the sentence (Section 5.2.3.10). That AM morphemes can occur in position 11 of the sentence is illustrated in (5.134) below.

(5.134) 2 7 10 11 14
$$ts \acute{a}ya \qquad h\acute{a} \qquad wa = bon\acute{a} = ki$$
look 3 TR=GOING:TR/PL=DEC:P

'S/he was going while looking.' ELIC

Like most functional morphemes, AM morphemes cannot be repeated (unless they are copied with a reduplicated verb complex; see Section 6.4). Thus, the string in (5.135) is ungrammatical.

However, AM morphemes *can* occur more than once in the verb complex in the fronted-VP construction. This is illustrated in (5.136).

There is no clear meaning difference between (5.134) and (5.136). Nevertheless, the fact that the constraint on doubling AM morphemes does not apply across the light verb group suggets that this structure is a constituent independent from the \bar{V} -constituent.

The free form as a constituent is identified according to the minimum free form test which was introduced in a different context in Chapter 3 (Bloomfield 1933:178; Hockett 1956:168).

There are actually two types of free form constituents according to how one interprets the minimum free form test. In Section 3.2 I discussed the minimum free form test in relation to the structural definition of individual formatives. The test has another interpretation when applied to strings of formatives. The minimum free form test is traditionally regarded as one of the criteria for identifying word constituents, and in this formulation, it is applied over contiguous groupings of formatives rather than individual morphemes. There are two ways of interpreting this test when one considers its application into the domain of constituency (Tallman et al. 2018). The first interpretation is the minimal minimum free form test. A minimal minimum free form is the smallest (minimal) span of contiguous positions that contains at most one free form. This test identifies a constituent from the V-constituent (position 8) to the clause-type/rank morpheme (position 14). The reason for this is that it is impossible to utter a verbal predicate construction without minimally pronouncing elements of these positions. An example of a minimal minimum free form is provided in (5.137) below. The verb root could be elaborated with any functional elements that could occur inside the verb stem, the \bar{V} -constituent or in positions 9 through 13 of the verb complex. It would still be a minimal minimum free form because the span would be the same size.

(5.137) 8 14
$$a(k)=ki$$
 kill=DEC:P 'S/he killed him/her.'

The **maximal minimum free form test** identifies the *largest (maximal)* span of contiguous positions that contains at most one free form. The maximal minimum free form is the same as the minimal minimum free form except that it contains one more position to the right (position 15). Position 15 is not obligatory. Since it is possible to utter a sentence without an element from position 15, this means that 8-15 is not the smallest span.

(5.138) 8 14 15
$$a(k)=ki \qquad ki\acute{a}$$

$$kill=DEC:P \qquad REP$$
 'S/he has killed him/her (it is said)'

One could not add elements outside of this span without violating the condition that there be one free form. This condition defines the left edge and the right edge of the maximal minimum free form.

In the typological literature the minimum free form test is considered problematic (Haspelmath 2011:39-40; Bickel & Zuñiga 2017:161).²¹ I mention it here because the (minimal or maximal) minimum free form is the closest analogue in Chácobo to what is described as the verbal "morphosyntactic/grammatical word" in grammars of other Panoan languages (e.g. Fleck 2003:207; Valenzuela 2003:255; Zariquiey 2011:179). For instance, Zariquiey (2011:179) seems to evoke the minimum free form test when he states that words in Kashibo-Kakataibo "can be produced in isolation". Fleck (2003:207) states that "a word [in Matses] is a stem combined with inflectional suffixes". Fleck (2003:212) defines inflection as "bound morphemes composing an obligatory category for a lexical class". A span of positions whose boundaries are defined as obligatory corresponds to the minimal minimum free form test. Obligatory elements will be the ones one *must* produce to form a complete utterance.

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²¹ The reason it is considered problematic is because it does not identify certain elements as words that are could be considered words based on other wordhood criteria (specifically determiners and auxiliaries). However, the same authors argue or imply that this is true of most (all?) other wordhood tests as well. Thus, it is unclear why the minimum free form test is singled out as particularly problematic.

I do not refer to the (minimal or maximal) minimum free form as the "morphosyntactic/grammatical word" in Chácobo. Any of the other constituents I have identified in this chapter are equally good or better candidates for such a constituent. I do not see any reason to give the minimum free form special priority in defining the morphology-syntax distinction in Chácobo grammar (see Chapter 3 for discussion on the morphology-syntax divide).

5.2.4A note on verbal reduplication

In Chácobo verbal reduplication encodes pluractionality and durative semantics. Affixes, clitics and some free form functional morphemes can be reduplicated with the verb root. However, based on a systematic study of which elements can undergo this reduplication it is unclear whether reduplication identifies a constituent or layer of the verb complex. It would be a misrepresentation of the verbal reduplication facts in Chácobo to identify it with a span of positions across any of the stratum described above.

While there is a general correlation between bondedness and the ability to double with the verb root, there are affixes which cannot be repeated in reduplicative constructions, and many clitics and free form function words that can. Chapter 6 provides a complete description of the syntagmatic and morphophonological facts of reduplication in Chácobo. Chapter 10 describes the semantics of verbal reduplication. Nominal reduplication is much simpler and is described in the following section.

5.3. THE NOUN COMPLEX

This section describes the syntagmatic and paradigmatic structure of the noun complex. I divide the noun complex into four strata. The first stratum is the **noun stem** which consists of the noun root and body-part prefixes. The second layer is the **N-constituent** which contains one or more noun stems and a few suffixes. This is the level where compounding and reduplication take place. The second layer is the **NP-constituent** which consists of the noun stem and all noun phrase dependents that occur in a fixed order in relation to the head and are contiguous in the sense that they cannot be interrupted from the head by a free form which is not itself a dependent of the noun stem. The fourth stratum is the **Extended-NP**. This consists of the NP-constituent and all other dependents or modifiers of the noun complex. Some elements of the Extended-NP allow the NP-constituent to be dropped.

Every layer corresponds to a formal grouping or constituent by certain criteria of contiguity and boundedness. One important difference that the noun complex has with the verb complex is that the noun complex contains fewer potential bound elements, and in the noun complex the correlation between boundedness and contiguity seems to be weaker. For instance nouns are modified by free adjectives and free quantifiers rather than bound affixes. Adjectives are not bound but they are contiguous with the head noun; essentially the mirror image of the clitic.

5.3.1 The noun stratum 1 (noun stem)

The noun stem consists of at least one noun root and up to two affixes. The position for the noun root is a zone because noun roots can combine into compound structures, which are usually endocentric. Furthermore, noun roots can be reduplicated. The other positions in the first noun layer are slots.you can't actually call this a stem because it can contain more than one free form.

Table 5.10. Template for the noun stem (noun stratum 1)

| POSITION | MORPHEMES/FORMATIVES | STRUCTURE |
|----------|----------------------|-----------|
| 1 | PREFIX (13 PREFIXES) | SLOT |
| 2 | ROOT | SLOT |

In Chácobo body-part prefixes combine with verbs, nouns and adjectives. Like verb roots, noun roots divide into classes according to whether they oblige, prohibit or allow combination with a body-part prefix. These different classes are illustrated below

Examples of body-part prefix-noun root combinations are provided in (5.139). The noun roots *kiisi* 'cut' and *bono* 'scabies' are examples of nouns that allow but do not oblige combination with body-part prefixes, as illustrated below.

(5.139) a. *kiisi* 'a cut'

b. ba-kiisi 'a cut on the arm.'

(5.140) a. bono 'scabies'

b. ba-bóno 'scabies on the arm.'

Most noun roots cannot combination with a body-part prefix. Roots that require combination can be divided into two classes. The first class of body-part prefix nouns occurs with **cranberry** roots; the prefix meaning is discernible, but the root is non-reoccurring and therefore no meaning can be discerned (see Bloomfield 1933; Aronoff 1976 on cranberry morphemes). The second class involves a root that reoccurs in a number of stems but cannot occur on its own, but where the noun stem has a low degree of semantic compositionality. Examples of the two classes across all of the body-part prefixes are provided in Table 5.11.

Table 5.11. Body-part prefixes with noun stems of low etymological transparency

| PREFIX | CRANBERRY ROOTS | REOCCURING ROOTS |
|--------|---|-------------------------------------|
| ba- | ba-tiski 'inner arm (Eng. translation?)' ba-tsistó 'lateral muscle'; ba-tospi 'tree | ba-mísko 'forearm' |
| | limb'; ba-şɨṣɨtí 'bracelete' | |
| baş- | baş-aişi 'the sweat gland of the armpit' | baş-potó 'elbow';baş-patá 'shoulder |
| | | blade (for humans), elbow (animals) |
| | | (n)' (pata 'be able to handle, be |
| | | tough') |
| bi- | bi-bo 'in front of'; bi-nití 'anterior naris'; | bi-maná 'face' (maná 'up'); bí-ro |
| | bi-pará 'front'; bi-nato 'coffee color'; bi- | 'eye, on top'; (-ro 'round') |
| | stiki 'bangs'; bi-ko 'eye brow'; bi-sokati | bi-pata 'slightly drunk, hard-faced |
| | 'eye lid'; <i>biṣpi</i> 'eye lash'; <i>bi–ʔono</i> 'tear' | (adj)' ²² |
| ka- | ká-ti 'back'; ka-tſó 'outside (p)' | ka-şo 'hip' |
| tſì- | tsi-kaşa 'buttocks'; tsilo' 'behind'; tsilo | |
| | pisikai 'red buttocks'; tsi-sopa 'diarrhea' | |
| tsi- | tsi-postó 'before, talon'; tsi-riso 'tail | |
| | bone'; tsi-tiskí 'waist' | |

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²² As a verb *bipata*- means 'to pretend to not know the truth', presumably related to these forms through metaphorical extension.

Table 5.11, cont.

| ha- | ha-na 'mouth, tongue, opening'; ha-toki | |
|-------|---|---|
| | 'stomach' | |
| hi- | hi-na 'tail, penis, feather' | |
| ho- | | ho-poto 'ankle'; hó-tsisi 'toe (nail?)' |
| та- | ma-po 'head'; ma-bişpi 'dandruff' | |
| mɨ- | mɨ-kɨni 'hand'; mɨ-tʃi 'finger' | mi-tsisi 'claw, finger nail' |
| na- | na-kiti 'inside, between, square' | |
| no- | no-?ini 'stomach parasite' | no-bitsi 'stomach' (bitsi 'skin') |
| | | no-ro 'belly button' (-ro 'round') |
| pa- | pa-?oki 'ear'; pa-bişa 'ear wax'; pa-kotsa | |
| | 'noise'; pa-spi 'spleen' | |
| pɨ- | pi-?i 'wing, feather'; pi-şo 'forearm, bone | |
| | (of fish)' | |
| pi- | pi-?i 'wing, fine'; pi-si 'rib'; piasiri | |
| | 'vagina'; pi-patí 'shoulder' (patí ?) | |
| piſi- | ; pif-kɨna 'beam' | <i>pi-fì</i> 'rib' |
| po- | po-ko 'stomach, intestines'; po-yami 'arm, | |
| | tree trunk' | |
| ki- | ki-pi 'border, frontier' | |
| | | |
| | | |

Table 5.11, cont.

| | ki-misko 'thigh'; kifi 'leg' |
|---|---|
| wi-ko 'leg below the knee' | wi-misko 'calf muscle' |
| | ra-potó 'knee' (potó 'joint') |
| ra-bita 'two' | |
| ri-so 'point, final'; ri-sakí 'nose'; ri-hosto | |
| 'snout'; ri-ki 'congestion'; ri-∫o 'mucus, | |
| flu'; ri-tiki 'piece of yuca' | |
| <i>fì-sɨkamɨ</i> 'clavicle, collar bone' | fi-patí 'chest' (patí ?) |
| ta-mo 'cheek'; ta-ʔɨ 'foot'; ta-ka 'liver' | ta-pono 'root, trunk' (pono 'veine') |
| ta-pará 'between the chest and shouler' | tapo-şoko 'root (lit. small vein)' |
| ti-sariti 'neck'; ti-oko 'throat' | <i>ti-patá</i> 'shoulder'; <i>tí-misko</i> 'island, |
| ; ti-pitsa 'brain'; ti-rarasi 'neck'; ti-sarati | peninsula'; ti-para 'crossroads' (para |
| 'neck'; ti-so 'neck' | 'trick, fool') |
| | tɨ-patá 'shoulder'; tɨ-pifi 'gills' (pifi |
| | 'rib); ti-poko 'throat, goitre'; ti-şo |
| | 'neck' |
| <i>şi-ta</i> 'tooth'; <i>şi-ko</i> 'bone, stock of corn | |
| (not including the corn)' | |
| | ra-bita 'two' ri-so 'point, final'; ri-şaki 'nose'; ri-hoşto 'snout'; ri-ki 'congestion'; ri-fo 'mucus, flu'; ri-tiki 'piece of yuca' fi-sikami 'clavicle, collar bone' ta-mo 'cheek'; ta-?i 'foot'; ta-ka 'liver' ta-pará 'between the chest and shouler' ti-sariti 'neck'; ti-oko 'throat' ; ti-pitsa 'brain'; ti-rarafi 'neck'; ti-saratí 'neck'; ti-şo 'neck' |

Some body-part nouns appear to be exocentric, in the sense that they do not contain a noun root. For instance, the noun *bi-maná* 'forehead' appears to be a combination of the prefix *bi-* 'face' and the locative adverbial *maná* 'upwards, high'. I list the recurrent bases in (5.141). Where possible, I have abstracted over the stems and listed a plausible meaning, however, in a few cases the only similarly between forms which contain the reoccurring base is the fact that it refers to a body-part.

(5.141) RECURRENT BASES

- a. -ro 'round, circle'
- b. -patá 'hard, tough'
- c. -potó 'joint'
- d. -tsisi 'nail, claw'
- e. -misko 'muscle'
- f. -so unclear
- g. $-\hat{l}$ UNCLEAR

5.3.2 The noun stratum 2 (N-constituent)

The second noun stratum is the N̄-constituent. This consists of the noun stem and two possible suffixes. The position of the noun stem is a zone. The reason I have represented it as a zone is that multiple noun stems can combine with one another to form N-N constructs

and because position 1 is where reduplication occurs in Chácobo. Constituents larger than the noun stem do not reduplicate to my knowledge.

Table 5.12. Template for the N-constituent (noun stratum 2)

| POSITION | MORPHEMES/FORMATIVES | STRUCTURE |
|----------|-----------------------------|-----------|
| 1 | STEM | ZONE |
| 2 | AUGMENTATIVE -wa | SLOT |
| | VERIDATIVE/SIMILATIVE - ria | |

N-N constructs in Chácobo are productively right-headed. An example of a right-headed N-N construct is provided in (5.142) below. The N-N construct is formed out of the noun stems *maki* 'piranha' and *poróma* 'axe'. The N-N construct *maki poróma* 'piranha axe' is an axe made out of piranha teeth, not a type of piranha. It is thus right-headed (see Section 3.1 for discussion of headedness).

(5.142)
$$hawi$$
 [$maki$ $poroma$] \bar{N} $bi=so$ tsi kia 3SG:GEN piranha axe grab=PRIOR:A P5 REP $ha=ti$ $a(k)=ni=ki$ 3=TOO hit=REMP=DEC:P

'When he grabbed his piranha axe, he hit him with it.' TXT 054: 796

An example of a left-headed N-N construct is provided in (5.143) below. The N-N construct *pia páka* 'bamboo arrow' is a type of arrow rather than a type of bamboo. Left-headed N-N constructs such as these are rare. Section 14.1 provides more details on N-N constructs.

There are two affixes that combine with noun stems. The first is the augmentative suffix -wa illustrated in (5.144) which was already mentioned in Chapter 3 in the context of a description of part-of-speech classes in Chácobo. The suffix -wa is mutually exclusive with the other position 2 suffix -ria.

The meaning of the suffix - *ria* 'veritative, similative' depends on the construction in which it appears. When there is only one noun stem, the meaning of *-ria* is similative. This is illustrated in (5.145) below. The similative suffix occurs directly to the right of the noun stem.

- (5.145) a. honí-ria 'woman, animal, or object similar to a man.'

 (honi 'man')
 - b. yosá-ria 'man, animal, or object similar to a woman'(yosa 'woman')
 - c. *piá-ria* 'instrument similar to an arrow (either functionally or physically)' (*pia* 'arrow')

The suffix - *ria* combines with a reduplicated noun stem as well. When it occurs in this construction it expresses a veritative meaning. This is illustrated in (5.146) below.

- (5.146) a. yoşá ~ yoşá-ria 'a real woman'
 - b. honí ~ honí-ria 'a real man'
 - c. piá ~ piá-ria 'a real arrow (one made by our ancestors)'
 - d. $yawa \sim yawa-ria$ 'a real white lipped peccary (e.g. one that is especially large)'

Noun reduplication cannot occur without the suffix - ria, except in the context of poetry and verbal art. I do not know whether reduplication can operate over N-N constructs or not. This question requires future research.

5.3.3 The noun stratum 3 (NP-constituent)

The third noun stratum is the NP-constituent. It consists of the \bar{N} -constituent and all contiguous dependents of the noun stem. The dependents of the noun stem cannot be interrupted from the \bar{N} -constituent by any free forms.

Table 5.13. Template for the NP-constituent (noun stratum 3)

| POSITION | MORPHEMES/FORMATIVES/CONSTRUCTS | STRUCTURE |
|----------|---------------------------------|-----------|
| 1 | GENITIVE NOUN COMPLEX | SLOT |
| 2 | N-CONSTITUENT | ZONE |
| 3 | ADJECTIVE | SLOT |
| | XËNI-CONSTRUCT | |

The first position of the NP-constituent can be occupied by a noun complex which is the possessor in a possessor-possessed relation with the referent of the \bar{N} -constituent. Genitive modifiers can be complex NP-constituents themselves. This is illustrated in the example below.

kántaro]_{NP} [bata= n_{NP} poi(5.147)[hawi ha raa=ki tsi 3sg:gen container honey=GEN liquid 3 $send=D\{A,S\}$ P5 kono ~ kono i=kiboil ~ boil AUX:=DEC:NONP 'When one puts in its (the arrow's) container's honey (lit. its container honey's liquid), it starts to boil. TXT 053:163

A detailed description of the syntax and semantics of genitive complexes is provided in Section 14.2.9.

Position 3 of the $\bar{\text{N}}$ -constituent is a slot occupied by either one adjective or one *sini*-construct. That an adjective must occur after the noun complex was already illustrated in Chapter 3 (Section 3.3). *sini*-constructs are derived from verb or adjective stems. Like adjectives they can occur in position 3 of the NP-constituent with an attributive function. They have two properties that distinguish them from adjectives; (i) they cannot combine with the verbalizing suffixes -na 'intransitive' and -wa 'transitive'; (ii) they can function as arguments of verbs without modification.

An example of a *şini*-construct in attributive position is provided in (5.148) with the form *titikaa=şini* 'extremely long'.

(5.148) i-á hiná-wa=?iní naa rikí titikáa=şini

1SG-ACC do_how-TR=INTER:NONP DEM1 nose long=ADJ/N

'How they continue bothering me, these long-nosed ones (i.e. giant fish women)?' TXT 068:069

When *şini*-constructs are derived from verb stems, they retain some of their argument structure. *şini*-constructs can thus be complex phrases. This is illustrated in (5.149), where the *şini*-construct takes the object *ʃapokoti* 'loin cloth'.

The syntax of gini-constructs is not completely captured by the template in Table 5.12. While the gini-construct occurs in position 3, dependents of the gini-construct can occur outside of the \bar{N} -constituent. This is illustrated with the structurally ambiguous example in (5.150). On one interpretation (i) the P argument of $ts\dot{a}ya=ki$ 'looked at' is honi 'man' and the P argument of $tsay\dot{a}=gini$ 'looker' is $y\dot{o}ga$. On interpretation (ii) the P

argument of *tsáyaki* 'looked at' is *yoşa* 'woman' and *honi* 'man' is the P argument of *tsayá=şini* 'all the time looker'. *şini*-constructs do not assign case, but they have argument structure when they are built out of verb stems. They also maintain the ability to combine with a large amount of functional material only available to the verb complex.

(5.150) hóni yóşa tsayá=şɨni ɨ tsáya=kɨ
man woman look_at=ADJ/N 1SG look_at=DEC:P
'(i) I saw the man who always looks at women.'
'(ii) I saw the woman who always looks at men.' ELIC

şini-constructs in position 3 are mutually exclusive with adjectives.

5.3.4 The noun stratum 4 (Extended-NP)

The fourth noun stratum consists of the NP-constituent and dependents of the noun stem which can be separated from it by complex free forms (e.g. noun phrases, verb complexes, or verb phrases). One characteristic of the extended-NP is that many of its elements are permutable; can be variably ordered. For instance, all position 1 elements are also position 5 elements; they can occur on either side of the NP-constituent. An overview of the Extended-NP is provided in Table 5.14.

Table 5.14. The noun stratum 4 - Extended-NP

| Position | ELEMENTS | Түре |
|----------|--|------|
| 1 | Possessor NP, Relative clause, Quantifier, | ZONE |
| | NUMERAL, DEMONSTRATIVE | |
| 2 | NP-constituent | SLOT |
| 3 | Numeral, Relative clause, demonstrative | ZONE |
| 4 | Conjunct ti?i~ti?i(ka) | SLOT |
| 5 | Plural = $bo \sim = b\dot{a}$ | ZONE |
| | Dative = ki | |
| 6 | Case (ergative) =' | SLOT |
| 7 | LIMITATIVE = $ro?\acute{a}$ | SLOT |
| | INTERACTIVE = ti | |
| 8 | EQUALATIVE =ri | SLOT |

Below I provide a brief description of the elements that occur in the extended NP-constituent, justifying the template provided in Table 5.14.

5.3.4.1. Noun stratum 4 – Positions 1, 2 and 3

Numerals occur on either side of the NP-constituent in position 1 or position 3. This is illustrated in (5.151) and (5.152). The numeral *wisti~wistita* 'one' is in bold and the NP-constituent (head noun) is underlined.

- (5.151) wisti valde bi=so toro=ki no inia=?ái=na

 one bucket grab=PRIOR:A Toro=DAT 1PL sell=NMLZ:IPV=EPEN

 'We collected one bucket full (of rubber) and then sold it to Toro.'

 TXT 049:175
- (5.152) naa \underline{miki} wistita kiyo=2ai=kato tsi $k\acute{a}=ki$ DEM1 \underline{hand} one finish=NMLZ:IPV=REL P5 go=DEC:NONP no-a

1PL-EPEN

'When we are finished these five fingers, then we go [referring to counting down to a race].' TXT009:34

To my knowledge, demonstratives have the same distribution as numerals. Quantifiers, on the other hand, always precede the NP-constituent (Section 15.4 for a description of quantifiers). Illustrations of the position of the quantifier in relation to the

NP-constituent are provided in (5.153) and (5.154) below. The NP-constituent is underlined and the quantifier is in bold.

- (5.153) wistima no?o=na pi~pi=pao=yamit=ki no?ó kaí

 many 1SG:GEN=POSS eat~eat=HAB=DISTP=DEC:P 1SG:GEN mother

 'He has eaten many of mine.' TXT 113:143
- (5.154) habi toa tsi **wistima** <u>tʃakobo=bá komunidad</u>

 surely DEM2 P5 **many** <u>Chacobo=PL:GEN community</u> i=ni=kiexist=REMP=DEC:P

'Surely there were many communities of the Chácobo.' TXT 036:018

Demonstratives have the same distribution as quantifiers right before the NP-constituent. An illustration of the position of the demonstrative in relation to the head noun is provided in (5.155) below.

yosa=ka=yá=ro?á siri=' ha?ini (5.155)hawí kama naa 3sg:gen woman=rel=com=limit dem1 jaguar old=GEN girl toa=' ia pi~pi=?ái=na tsi kia náa vósa DEM2=SPAT Р5 REP **DEM1** lice eat~eat=NMLZ:IPV=REL woman

'She was with her sister, this (her sister) was the sister of the old jaguar, over there she was delousing this woman (the sister of the old jaguar)' TXT 026:077

A possible exception to the descriptive statement above regarding the position of demonstratives in relation to the \bar{N} -constituent comes from constituent interrogatives. Although it is not common in naturalistic speech it seems that constituent interrogatives have a modifying demonstrative occurring after them as illustrated in (5.156). It is not clear whether demonstratives can occur before the \bar{N} -cosntituent in this construction.

Relative clauses can precede or follow the NP-constituent. Although I do not have a complete analysis of their distributional differences compared with numerals, it seems that relative clauses are more distributionally free than numerals. An example of a relative clause occurring before the NP-constituent is provided in (5.153). The relative clause is in bold and the head noun is underlined.

Examples of relative clauses occurring after the NP-constituent are provided in (5.158) and (5.159). (5.159) shows that the relative clause can be interrupted by a verb complex.

All of the elements of position 1 and position 3 can function as a noun phrase argument by themselves. They can also all be used as referring expressions and as complete

utterances (see Chapter 15 for details). An illustration of a noun complex without a full an overt N-constituent is provided in (5.160) below.

(5.160)
$$i=kan=\acute{a}i=bo$$
 $haba=n\acute{i}=kato$ $toa=bo$ tsi so $say=PL=NMLZ:IPV=PL$ $run=NMLZ:REMP=REL$ $DEM2=PL$ $P5$ DEC toa $yoa=kan=(?)\acute{a}i=na$ $DEM2$ $tell=PL=NMLZ:IPV=EPEN$ 'They tell it this way that they are the ones they call the ones who run away.' $Txt 050:120$

5.3.4.2. *Noun stratum 4 – Position 4*

The conjunction $ti \partial i$ occurs at the end of coordinated noun complexes. The precise grouping identified by $ti \partial i$ -coordination is not known. Placing it in position 6 is a tentative hypothesis based on the fact that it precedes the plural/collective/associative morpheme $=bo\sim=ba$ as in (5.161).

"Their chief and his secretary have been finished (killed)." the ones who were with them said.' TXT 034:210

5.3.4.3. Noun stratum 4 – Positions 5 and 6

Position 5 is a zone that can be occupied by the plural morpheme and the dative morpheme. The case clitic =ki and the plural morpheme $=bo\sim=ba$ can variably order. The dative morpheme is the only case marker that can variably order with the plural.

All other postpositions occur after the extended-NP. The ergative morpheme occurs in the last position of the extended-NP. When the ergative morpheme combines with the plural =bo, the =ba allomorph surfaces (see Chapter 6 and Chapter 7). Unlike the dative,

the plural cannot be variably ordered with the ergative case marker. The dative clitic =ki is the only one that can variably order with the plural morpheme. All other postpositions occur after the extended-NP. **Postpositional phrases** refer to groupings of a combination of a postposition with a noun complex.

5.3.4.4. Noun stratum 4 – Positions 7 and 8

The morphemes that occur in positions 4 and 5 of the extended-NP occur in a fixed order with respect to one another. The equalative =ri 'too' always follows the clitic =ro2a 'limitative' in the extended-NP. The NP-constituent and the numeral always precedes both of these elements. The ordering of the position 4 and position 5 elements with respect to each other and with respect to other elements of the extended-NP is illustrated in (5.164).

(5.164)
$$awini='$$
 $osa=?\acute{a}=ka$ $toa='$ tsi $ki\acute{a}$

woman=ERG laugh_at=NMLZ:P=REL DEM2=SPAT P5 REP

 $osa=y\acute{a}ma=?\acute{a}i=na$ $bari$ $wisi=ro?a=ri$

sleep=NEG=NMLZ:IPV=EPEN sun/day one =LIMIT=TOO

'When the woman laughed at him, that (one) didn't sleep for one whole day

(and no more) either' TXT 075:130

The data I have suggest that these morphemes also follow relative clauses as illustrated in (5.165). However, as stated above, the distribution of relative clauses requires more research.

Positions 4 and 5 repeat after position 8 in the extended-NP. This should not be understood as meaning that the elements of these positions themselves repeat. The clitics $=ro2\dot{a}$ 'limitative' (position 7) and =ri 'equative' (position 8) occur after the plural morpheme of $=bo\sim=ba$ of position 5. This is illustrated in (5.167) and (5.168).

'Surely she was beside that log where he had left her.' TXT 061:148

(5.167) *yoga=bo=rí ma-to=bitá*

woman=PL=TOO 2PL-EPEN=COM

yonoko=yáma=yamɨt=(?)á

work=NEG=DISTP=NMLZ:P

'The women also didn't work with you.' TXT099:058

(5.168) yáma no?íria tɨṣɨ

NEG person other

habí nobá nóma**=bo=ro?a=rí**

surely 1PL:GEN younger_bro=PL=LIMIT=TOO

Txt101:025-026

^{&#}x27;There were no other people, surely it was only his younger brothers too.'

Chapter 6. Morphophonology

This chapter provides a description of the morphophonology of Chácobo. In this grammar morphophonology refers to patterns of allomorphy across all morphemes through all strata and layers. This includes variations in the segmental and suprasegmental form of morphemes. Some morphophonological processes were already mentioned in Chapter 2 in the context of defining the phonological categories of Chácobo. This section is concerned with providing a full description of such processes and their domains of application.

In this vein, two concepts will be used in this description that are influenced by recent literature on emergent prosodic phonology (e.g. Schiering, Bickel, & Hildebrandt 2012). Morphophonological processes apply in **morphophonological domains**. A morphophonological domain is a structurally identifiable string of categories where a morphophonological rule applies and to which it is restricted. A morphophonological domain is **projected** by a category. We know a given morphophonological domain if that morpheme is necessary in defining the distribution of the morphophonological domain in Chácobo grammar.

An example of a morphophonological domain is the stress domain already described in Chapter 2 (Section 2.3). The domain is defined by a root which **projects** the domain and up to one morpheme that combines with it (stress only operates over a two-syllable window). The categories that a morphophonological domain refers to can be of

any degree of granularity or abstraction from individual morphemes to more abstract complexes such as layers, strata, or phrases.

The concept of a morphophonological domain is like the prosodic domain of prosodic-word phonology in that it maps over structural categories in such a way that it could be thought of as defining various phonological constituents in Chácobo grammar that can in principle be non-contiguous with the constituents defined based on morphotactic variables provided in Chapter 5. However, since morphophonological domains can make reference to categories at any level of abstraction, they do not presuppose a distinction between lexical and post-lexical phonology as is done in most approaches to the syntax-phonology interface. Furthermore, there is no assumption that such domains will display perfect nesting or be manifestations of a universal prosodic hierarchy - theoretical concepts which have been falsified or proven to be unfalsifiable by recent typological research (Schiering, Bickel, Hildebrandt 2010, 2012; Bickel, Hildebrandt, Schiering 2012).²³

This Chapter divides morphophonological processes into those which are segmental and those which are suprasegmental. First, I describe segmental processes in Section 6.1 and then in Section 6.2, I describe suprasegmental processes. The next sections on morphophonology deal with processes that are simultaneously segmental and suprasegmental. Section 6.3 described those processes that seem to be motivated by

²³ Furthermore, some important empirical evidence on which the universal prosodic hierarchy was based cannot be replicated (e.g. Absalom, Stevens, Hajek 2002).

constraints on the phonological size of structural elements (minimality constraints). Section 6.4 provides a detailed investigation of the phonology of reduplication in Chácobo where segmental and suprasegmental considerations are both relevant.

6.1. SEGMENTAL ADJUSTMENTS

This section deals with segmental morphophonological processes. I first discuss glottal stop epenthesis and then provide an overview of some of the morphemes with underlying glottal stops which can be analyzed as triggering several segmental morphophonological processes (Section 6.1.1). The reason this section is discussed first is because many other segmental processes refer to underlying glottal stops in some way. Section 6.1.2 describes consonant deletion; Section 6.1.3 describes affricatization and deaffricatization and Section 6.1.4describes alveolarization. Recall from Chapter 2 that Chácobo only allows sibilants to occur in coda positions. This results in Chácobo having sibilant-sibilant clusters at the juncture between two syllables. However, sibilant clusters (where one sibilant is a coda followed by an onset sibilant) undergo various processes of deletion or reduction. Sibilant cluster deletion, reduction and maintenance is described in Section 6.1.5. Finally, morphophonology related to glides are discussed in Sections 6.1.6 through 6.1.8.

6.1.1 Glottal stops

This section is concerned with the morphophonology of glottal stops in Chácobo. I first consider rules of glottal stop insertion and then I provide a brief description of the small group of functional morphemes that have initial glottal stops.

6.1.1.1. Glottal stop epenthesis

Glottal stops are inserted at the boundary between certain morphemes. In most cases the environment must be intervocalic, but not always. Environments for glottal stop epenthesis can be divided into two types; (i) those environments where speakers are uniform in their insertion of glottal stops; (ii) those environments where speakers vary both in terms of whether they apply glottal stop epenthesis and the specifics of the morphophonological rules for the process.

The first class of environments (those where speakers all seem to agree) are listed in (6.1). A description of the environments where there is speaker variation regarding the application of glottal stop epenthesis is provided in (6.2).

(6.1) Consistent environments

 prefix-root: A glottal stop is always inserted between a prefix and a root if the boundary is also intervocalic.

- ii. **doubled verb roots**: A glottal stop is inserted between doubled verb roots if the boundary is intervocalic and the verb roots are monosyllabic.
- iii. **pronoun-element**: A glottal stop is inserted between a pronoun and any following element, if the pronoun is monosyllabic and the following element begins in a vowel.

(6.2) VARIABLE ENVIRONMENTS

- i. **prefix-root**: For some speakers, the process in (6.1i) can be extended to cases where the boundary is between a sibilant and a vowel (where the prefix ends in a sibilant)
- ii. **doubled verb roots**: The process in (6.1ii) is extended to the boundary between doubled verb stems which are larger than bisyllabic.
- iii. **element-***ita*: Some speakers insert glottal stops at the boundary between some final vowel element and =*ita* 'recent past'.
- iv. **element-(?)**i: The morpheme =2i surfaces as =i in certain contexts. It is unclear whether this morpheme should be analyzed as containing an underlying glottal stop or not.
- v. **N-N constructs:** Some speakers insert a glottal stop between two vowels at the boundary between noun stems in a N-N construct.

Case (6.1i) is illustrated below in (6.3), (6.4) and (6.5). In these cases a body-part prefix which ends in a vowel combines with a verb root that begins in a vowel. Glottal

stops are always inserted at the juncture between prefix and a root in such cases. It does not matter what the part-of-speech-class of the root is.

arm-stick_into=DEC:P

'He stuck it into his arm.'

b. [mi.?os.tá.ki]

mi-ostá=ki

hand-stick_into=DEC:P

'He stuck it into his hand.'

As stated in (6.1i), glottal stops are also inserted at the boundary between doubled verb roots in a reduplication construction. Stated in another way, a glottal stop is inserted between a reduplicant and its base as long as both are monosyllabic and contain only a vowel. This is illustrated with verb root i 'do it' in (6.6).

As stated in (6.1iii), glottal stops are inserted between a monosyllabic pronoun and any vowel-initial element. This is illustrated in (6.7) with pronoun-verb_root combinations and in (6.8) with pronoun-noun root combinations.

Full nouns and case marked pronouns do not display glottal stop insertion at their right boundary. One might argue that this shows that nominative pronouns display distinct phonological behavior from full nouns and accusative pronouns. However, since there are no full nouns that contain less than two morae, this analysis cannot be distinguished from

one which simply states that the glottal insertion applies in the cases above because of the phonological size of pronouns; they are one mora.

As summarized in (6.2), outside of the prefix-root or doubled monosyllabic root combinations, and pronoun combinations, glottal stop epenthesis/deletion is more a complex issue. There appears to be dialectical variation for glottal stop epenthesis in certain domains. Furthermore, in the speech of individual speakers the insertion of glottal stops within a given domain is not completely consistent.

The first domain of variation noted in (6.2i) is with respect to the prefix-root juncture. Some speakers allow glottal stop at a sibilant-vowel boundary. This is illustrated in (6.9).

It is not clear to me how prevalent glottal stop insertion is within this domain at a sibilant-vowel boundary. The data I gathered from elicitation suggests that there is speaker variation in this regard, with older speakers tending to insert the glottal stop and younger speakers tending not to.

As noted in (6.2ii), some speakers extend the glottal insertion rule between doubled monosyllabic roots to cases where the roots are not monosyllabic. This is illustrated in (6.10). For speakers who insert glottal stops in this domain, it is not clear whether there are any constraints on the insertion based on the size or complexity of the doubled stem.

(6.10) [
$$?\acute{o}.\grave{s}\grave{a}.?\acute{o}.\grave{s}\grave{a}.?\acute{a}j.n\grave{a}$$
] $\acute{o}.\emph{s}\grave{a}$ \sim $\acute{o}.\emph{s}\grave{a}$ = $?ai$ = na sleep \sim sleep = $NMLZ:IPV$ = $EPEN$ 'S/he is sleeping.'

As stated in (6.2iii-iv), some speakers insert glottal stops at the juncture between a vowel and the temporal distance morpheme =ita 'recent past' (position 13, verb stratum 3) or the clause-type/rank morpheme =i 'same subject' (position 14, verb stratum 3).

At the boundary between the verb root and the temporal distance clitic =*ita* 'recent past', speakers vary in terms of whether they insert an epenthetic glottal stop. All of my main consultants accepted relevant forms with and without glottal stop insertion and the verb root-*ita* boundary. This is illustrated in (6.11).

Glottal stops can be inserted between noun stems in N-N constructs if the morpheme boundary is also a vowel-vowel boundary.

(6.12) a. [ʔá.wà.ʔí.nà.kà]
áwa ínaka
tapir pet
'Pet tapir'
b. [[ʔà.mɨ.ʔí.nà.kà]
amí ínaka
capibara pet
'pet capibara.'

Whether the variable glottal stop insertion in this case reflects dialect variation requires future research. At this point it is not clear because all of my main consultants accepted both pronunciations and dialect-based patterns are not obvious in my corpus.

Glottal stop insertion always occurs to the left of *ita* if the adjacent element ends in a latent stop. This is discussed in Section 6.1.2 below.

The clause-type/rank morpheme =i also sometimes occurs adjacent to what could be epenthetic glottal stops. The problem with this morpheme is that my data do not seem to be amenable to a clear analysis regarding its underlying form. There is some evidence for and some evidence against treating =i as underlyingly =2i, which makes statements regarding glottal stop epenthesis less clear for this morpheme. I address this issue in the following section in the context of functional morphemes with underlying initial glottal stops.

6.1.1.2. Underlying initial glottal stops

There are no roots that contain initial underlying glottal stops. However, Chácobo contains a handful of clause-type/rank morphemes that contain underlying initial stops; =2ai 'nominalization, imperfective / interrogative past'; $=2\acute{a}$ 'nominalization past'; $=2\acute{a}i$ 'interrogative, non-past'; $=2\acute{a}i$ 'interrogative, second person singular, non-past'; $=2\acute{a}i$ 'passive'; $=2\acute{a}i$ 'causative/applicative'. Examples of these roots in sentential contexts are illustrated in (6.13) from elicitation, and (6.14) and (6.15) from naturalistic speech.

back-break=NMLZ:P=EPEN

"...that had been broken by its back." ELIC

b. [βà.tʃɨ̄ş.**ʔá**.nà]

$$ba$$
- t / i s = $P\acute{a}$ = na

arm-cure=NMLZ:P=EPEN

"...that cured his arm." ELIC

c. [tá.nɨṣ.ʔà.ká.kɨ]

tá-nɨṣ-**ʔaká**=kɨ

foot-tie-PASS=DEC:P

'S/he was tied by the foot.'

(6.14) [hí.wì.tà.?áş.?ì.tsì.kì.á]

hiwi ta?aş=**?i** tsi kiá

tree knock=concur:s P5 REP

'He was banging the tree.' TXT 058:396

(6.15) [kà.tɨ.kɨ.hà.**ʔá**.tɨ.ò.tɨ.ò.hà.**ʔá**.kà ...]

$$ka = tiki(n) \quad h\dot{a} = ?\dot{a} \quad tio \quad tio \quad h\dot{a} = ?\dot{a} = ka \quad yo´no$$

$$go = AGAIN \quad 3SG = NMLZ:P \quad fly \quad fly \quad 3SG = NMLZ:P = REL \quad drum$$

$$tima \quad h\dot{a} \quad wa = ?\dot{a} = ka \quad rii$$

$$ring \quad 3SG \quad TR = NMLZ:P = REL \quad IDEOPH$$
'When he went again and kept flying and he ringed the drum with the sound "rii" TXT 032:032

As stated above, it is not clear whether the morpheme $=i\sim=?i$ 'same subject, intransitive' should be analyzed as containing an underlying glottal stop or not. If the clitic =i/=?i follows a sibilant the glottal stop surfaces as in the examples above.

However, when the root ends in a vowel, the glottal stop does not surface. For instance, if the final vowel is /i/ the glottal stop does not have to surface. Speakers accept and produce both pronunciations in this context.

$$siri=2i$$
 $ka=ki=a$

'I am going to pull.'

b. [ʃiɨ.ri.ʔi. kà.kí.à] / [ʃiɨ.ri.ì. kà.kí.à]

$$firi=2i$$
 $ka=ki=a$

'I am going to boil (cook).'

ELIC

When the final vowel of the preceding element ends in an /a/, the glottal stop can only be dropped when this /a/ contains a high tone.

$$han\acute{a}=?i$$
 $ka=k\acute{i}=a$

'I am going vomiting / to vomit.'

b. [hánà?ì kàkíà]/*[hanai kakia]

$$hana=2i$$
 $ka=ki=a$

'I am going leaving.'

The glottal stop always surfaces when the morpheme precedes /i/. This is illustrated in (6.19) below.

The rules of glottal stop deletion stated above display a high degree of speaker variation in the sense that some speakers are more prone to delete glottal stops than others. The Chácobo write the glottal stop with an <h> and frequently disagree concerning whether the <h> should be written in certain examples or not.

Furthermore, it is not even clear to me that the cases of glottal stop deletion described above with =(?)i should really be considered glottal stop deletion. It seems plausible that the underlying form might be without a glottal stop, and that a glottal stop is *inserted* in certain cases above. This question requires more research.

6.1.2 Latent coda stops

There are five morphemes that display allomorphy based on the appearance or non-appearance of a final stop consonant /t/, /n/, /k/, and /tʃ/. These morphemes with their corresponding allomorphs are listed in (6.20).

- (6.20) a. $\dot{a}k\sim\dot{a}$ 'do, take, drink, kill'
 - b. bít/~bí 'grab, get, recieve'
 - c. $=yamit \sim =yami$ 'some months ago'
 - d. $=tik\acute{t}n\sim tik\acute{t}$ 'again'
 - e. $=kan\sim ka$ 'plural'
 - f. $=tan\sim ta$ 'at this moment'

This allomorphy was already mentioned in Chapter 2 (Section 2.2) in the context of syllable structure. Recall that Chácobo disallows non-sibilant coda consonants. In the cases above, the final stop is deleted unless it can be syllabified as an onset.

The morphemes listed above are from distinct categories; $\dot{a}k\sim\dot{a}$ 'do, make, kill, hit, drink' and $bitf\sim bi$ 'get, grab, receive' are verb roots; $=yamit\sim=yami$ 'distant past' is a temporal distance clitic; $=tikin\sim tiki$ 'again' is an adverbial enclitic and $=k\dot{a}n=k\dot{a}$ is a piece of the discontinuous plural pronoun; $=t\dot{a}n$ is an adverbial clitic limited to same subject and imperative clauses. The most common allomorph is the one without the final consonant.

The final coda consonant surfaces when it is followed by an underlying glottal stop, which is present only in the morphemes discussed in Section 6.1.1.2 above. The coda consonant allomorph of the verb root $bitf\sim bi$ 'grab, get, receive' is even more restricted; it only surfaces when the root follows the same subject clitic =(?)i.

Examples where consonant final allomorphs surface are provided in (6.21) below. Notice that in all of these cases the glottal stop is dropped from the right-adjacent morpheme.

(6.21) a. [**à.káj**.nà] ak=?ái=na do/make=NMLZ:IPV=EPEN 'He is/was going.' b. [bá.rì kà.yà.mì.tá.kà.tò] bari ka=yamit=?á=kato day go=distp=nmlz:p=rel 'A month ago (lit. the day that went).' [hó.nì kà.**tì.kì.ná**.nà] c. honi ka=**tikin=?á**=na man go=AGAIN=NMLZ:P=EPEN

'The man who went again.'

d. [kà.kà.náj.nà]

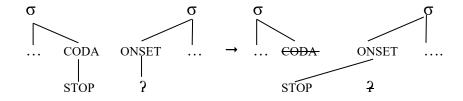
'They were/are going.'

e. [pì.**tá.nì** ká.kɨ]

'He ate and then left.'

The rule for final consonant resyllabification is stated below. Note that the glottal stop of the glottal initial morphemes is always deleted in such circumstances.

(6.22) (RE)SYLLABIFICATION OF LATENT STOP AND GLOTTAL DELETION



ELSEWHERE



The rule makes crucial reference to a glottal stop and can be stated in prose as follows; when a given consonant precedes an underlying glottal stop, syllabify this consonant as the onset and delete the glottal stop. In all other circumstances drop the glottal stop. That an underlying glottal stop needs to be present can be observed by the fact that latent coda consonants are deleted when followed by a vowel. This is illustrated in (6.23). The final /n/ of the morpheme =tikin 'again' is not resyllabified with the following syllable in the noun root $an\delta$ 'lowland paca'. Rather the coda stop /n/ is deleted.

(6.23) [kà.tì.kí.à.nó.kì]
$$ka = tikin \quad anó \quad = ki$$
 go=AGAIN lowland.paca =DEC:P 'The lowland paca went again.'

The non-application of coda stop resyllabification can also be observed in the examples in (6.24). In (6.24a), the final /k/ of ak 'do, make, kill' does not surface when it is adjacent to the temporal distance morpheme =ita 'recent past'.

```
b. [kà.tì.kì.?ì.tá.kì] *[katikinitaki]
ka=tikin=itá=ki
go=AGAIN=RECP=DEC:P
'He went yesterday again.'
c. [kà.kà.?ì.tá.kì] *[kakanitaki]
ka=kán=itá=ki
go=3PL=RECP=DEC:P
'They went yesterday.' ELIC
```

Recall from Section 6.1.1.1 above, that a glottal stop is inserted between the boundary of a vowel final morpheme and $=it\acute{a}$ 'recent past' as in (6.11). What is interesting about the behavior of latent coda stops in the context of $=it\acute{a}$ 'recent past' is that the epenthetic glottal stop does not condition resyllabification in this case. This shows that the rule of glottal stop epenthesis must occur after the rule of final coda consonant deletion. Further evidence for this ordering comes from reduplication constructions with roots that contain a final latent coda stop. Recall that glottal stop epenthesis applies intervocalically between doubled roots, illustrated in (6.6). An epenthesized glottal stop does not trigger resyllabification of a latent coda stop in reduplication constructions. This is illustrated in (6.25). If the resyllabification rule had access to epenthetic glottal stops one would expect the form *[akakajna], but this does not occur, as illustrated below.

(6.25) [á.ʔà.káj.nà] *[akakajna]
á~ák=?ái=na (ii) (insert /?/, see §6.1.1.1)
ak~ák=?ái=na (i) (drop /k/, see (6.23))
do~do=NMLZ:IPV=EPEN
'He is doing it repeatedly.' ELIC

In this section I have discussed latent coda consonant resyllabification as if it was a straightforward phonological rule. It can be analyzed this way. However, it should be pointed out that latent coda consonants only surface in one specific morphosyntactic position; just before the position 14 (verb stratum 3) clause-type/rank morpheme. The reason for this can be attributed to the fact that only clause-type/rank morphemes contain underlying glottal stops. Thus, the rule of latent consonant syllabification is highly restricted. In other works on Chácobo (e.g. Zingg 1998; Córdoba et al. 2012), latent coda consonants are not written in the presentation of morphemes.

6.1.3 Affricatization and deaffricatization

Some morphemes display allomorphy where the sibilant /s/ varies with the affricate /ts/. The morphemes that display this variation are kás~kats~kass 'desiderative' and ma?itsa~ma?is 'in vain'. For the modal clitic kas~kats~kass 'desiderative' the variation in form is illustrated in (6.26) below. The affricatized allomorph occurs when the form

precedes a clitic that contains an initial glottal stop underlyingly. There is variation between speakers concerning whether the desiderative is realized with an affricate or a /s/-/s/ sibilant cluster.

The morpheme *maʔitsa~maʔis* displays an alternation between a final sibilant and a final affricate. The shorter allomorph appears where the morpheme is not at the end of an utterance or an intonational grouping. The shorter allomorph is illustrated in (6.27) below.

(6.27)
$$ma?is$$
 $ho=só$ awi $tsayá \sim tsayá=(?)ikiá$ in_vain come=PRIOR:A woman see \sim see=REP 'After he arrived in vain he watched the woman.' TXT 061:568

No other morphemes display the fricative-affricative allomorphy described in this section to my knowledge. The affricatization rule is thus restricted to two morphemes.

6.1.4 Alveolarization

The body part prefix t/\hat{i} -~tsi-'buttocks, waist' displays alternation in its first consonant based on the place of articulation of the following stop. The allomorph with the alveolopalatal affricate appears to be the underlying form. The alveolar affricate allomorph surfaces when the stop of the following root is /t/ or /ts/. This is illustrated with the examples in (6.28).

- (6.28) a. tsi-tiski 'belt' (tiski 'tied')
 - b. *tsi-tsámi* 'sit behind someone' (Zingg 1998: 290) (*tsami* 'jump on')
 - c. tsi-tsóis 'pinch the buttocks'

 (tsóis 'hit, punch, puncture')
 - d. *tsi-tsiniki* 'tense one's buttocks muscles' (Zingg 1998: 290) (*tsiniki* 'stretch')

All other forms surface with t/i. This is illustrated in (6.29) below.

- (6.29) a. tsi-2-áts-a 'grab the buttocks of someone'
 - b. t/i-2-isi 'have pain in one's buttocks'

- c. *t/i-biri/i* 'lower one's pants'
- d. *tsi-kóso* 'spit on someone's buttocks'
- e. *tſi-tſóko* 'wash one's buttocks'
- f. *t/i-nis* 'tie someone's waist'
- g. *tfi-paifa* 'slap someone's buttocks'
- h. *t/i-pik-a* 'untie someone's waist'
- i. *tʃi-rihi* 'scrape one's buttocks against something.'
- j. *tsi-yaho* 'shake one's buttocks'

There are exceptions to the *tfi*- as default rule. However, these are cases where the prefix-root combination is highly lexicalized. These exceptions are listed in (6.30).

- (6.30) a. tsi?i 'close shut, typically applied to anus'
 - b. *tsi-paspa* 'hit the water (of a duck)'
 - c. *tsi-katsami* 'catch up to somebody from behind'
 - d. tsi-?-otsa 'have sexual relations'
 - e. tsi-pitsoko 'disappear' (Zingg 1998: 288)
 - f. *tsi-pitsa* 'increase the back end of something' (Zingg 1998: 288)
 - g. tsi-riso 'buttocks'

As discussed in Chapter 7, prefix-root combinations form a continuum from highly lexicalized (semantically opaque) forms to highly productive (semantically transparent) forms (cf. Fleck *in press* for this distinction in Shipibo). The data I have suggest that most of the exceptions to the rule of alveolarization are highly lexicalized forms. For instance, the roots present in the examples (6.30) do not form complete paradigms with all of the body-part prefixes in Chácobo and many of the meanings are semantically opaque.

6.1.5 Sibilant cluster reduction

As stated in Chapter 2 the only phonemes that can occupy a coda position in Chácobo are sibilants. Since there are three sibilants there are nine possible sibilant clusters. A sibilant cluster refers to a sibilant in coda position followed by one in onset position. Sibilant clusters are subject to processes of deletion or lenition in the verb complex at the boundary between the prefix and root, root and suffix, suffix and suffix, suffix and enclitic, and enclitic and enclitic. Sibilant clusters at any other boundary are not subject to any morphophonological processes to my knowledge

The alveolar fricative /s/ is deleted when followed by the palatal fricative /ʃ/ when it is the coda consonant of a syllable with a high tone at a root-suffix boundary or a suffix-clitic boundary.

(6.31) a. [tsì.pí.fà.rí.kì] tsipís=farí=ki fart=CRAS=DEC:NONP 'S/he will fart tomorrow.' b. [tʃà.nì.mí.fà.rí.kì] tfani-mís=farí=ki speak-ANTIPASS=DEC:NONP 'He will speak (poorly of someone) tomorrow.'

The alveolar consonant /s/ is also deleted when it occurs before the retroflex /s/ under the same conditions; when /s/ is the coda of a syllable which bears a high tone.

```
(6.32) a. [tsì.pí.şi.nì]

tsipís=şini

fart=ADJLZ

'He is an excessive farter.'

b. [kà.?i.mí.şi.nì]

ka?i-mís=şini

know/arrive-ANTIPASS=ADJLZ

'S/he is a knower (he is wise).'

ELIC
```

When the syllable with the coda sibilant does not bear a high tone, the deletion does not take place. This is illustrated in the examples in (6.33a) and (6.33b) for s- \int clusters and (6.34a) and (6.34b) for s- \int clusters.

```
(6.33) a.
              [nɨ.mòs.ʃà.rí.kì]
              nímos=ʃarí=ki
              mix=CRAS=DEC:NONP
              'He will mix (it) tomorrow.'
        b.
              [tí.pàs.fà.rí.kì]
              típas=ʃarí=kì
              assassinate=CRAS=DEC:NONP
              'He will assassinate (someone) tomorrow.'
(6.34)
              [ti.pàs.şi.ni]
        a.
              tipas=şìni
              assassinate-N/ADJ
              'An assassinator'
        b.
              [tsì.pìs.şí.kì]
              tsipís=sí=ki
              fart=REMF=DEC:NONP
              'S/he will fart at some point.'
                                                  ELIC
```

Sibilant clusters at the boundary between a prefix and a root always undergo deletion regardless of the presence and/or position of a high tone on the left-adjacent syllable. There are only two prefixes that end in a sibilant; kif- 'thigh' and bag- 'elbow'. Their final sibilant never surfaces if the first consonant of the root is a sibilant. The surfacing of coda sibilants on prefixes is illustrated in (6.35a). The deletion of the coda sibilant in these prefixes in the context of a root with an initial sibilant is illustrated in (6.35b) and (6.35c).²⁴

```
(6.35) a. [kìʃ.pá.kì.?áj.nà]
kif-páki=?ái=na
thigh-become_tired=NMLZ:IPV=EPEN
'Have one's thighs become tired.'
b. [kí.sì.nò.?áj.nà]
kiʃ-sino=?ái=na
thigh-rub_with_friction=NMLZ:IPV=REL2
'Have one's thigh's rub against with friction'
```

²⁴ It should be pointed out, however, that the allomorphs kif- and bag- are not very productive to begin with. There are many cases where they simply cannot surface even where the root does not begin with a sibilant. It is, therefore, possible, that the examples above are actually just cases where bag- and kif- are disallowed for non-phonological reasons.

c. [kì.ʃò.ʃó.kì]

kiʃ-ʃoʃó=ki

thigh-blister=DEC:NONP

'He is blistering his thighs.' ELIC

At a root-clitic boundary coda /ʃ/ and /ɛ/ are never deleted. Clusters of \int - \int and ɛ- \int are not reduced in any way. This is illustrated in (6.36) and (6.37) below.

(6.36) a. [tʃi.kíʃ.ʃà.rí.kì]

tʃikíʃ=ʃarí=ki

be_lazy=CRAS=DEC:NONP

'He is going to be lazy tomorrow.'

b. [má.tòṣ.ʃà.rí.kì]

mátoṣ=ʃarí=ki

partition=CRAS=DEC:NONP

'He will partition it tomorrow.'

(6.37) a. [bá.ṣì.sì.nà.ʔái.nà]

baṣ-isi-ná=ʔái=na

elbow-pain-V:ITR=NMLZ:IPV=EPEN

'His elbows are in pain.'

baş-sino=?ái=na

elbow-run.with.friction=NMLZ:IPV=EPEN

'His elbows are rubbing against something with friction.'

c. [**bà.ʃ**ò.ʃó.kì]

baş-ʃoʃó=ki

armpit-blister=DEC:NONP

'His elbows are blistering.'

In principle the lack of cluster reduction for sibilant- \int and sibilant- ξ pairs should extend to root-suffix and suffix-clitic combinations. However, there are no suffixes which begin or end in either $\int \int \int dx \, dx$.

In $/\int -g/$ clusters at a root-suffix/enclitic, the retroflex sibilant seems to delete in fast speech. However, in more careful speech I can still hear the effect of the palatal sibilant on the preceding vowel.

(6.38)
$$[t\hat{j}.k\hat{j}.\hat{s}\hat{i}.n\hat{i}]$$

tſikiſ=[']sɨni

be_lazy-N/ADJ

'One who is lazy all the time.'

Caco Moreno states that he still pronounces the palatal sibilant in such contexts, even in fast speech. A likely explanation for this state of affairs is that the palatal is simply acoustically hidden in fast speech contexts rather than being deleted (cf. Browman and Goldstein 1989). Tentatively, I trust Caco Moreno's judgment concerning such cases, and assume that in $\int .$ § clusters at a root-suffix/clitic boundary, the / \int / is simply articulatorily hidden rather than deleted in fast speech contexts. Instrumental articulatory phonetic investigation may reveal that the / \int / is in fact deleted in certain speech registers.

Sibilant reductions appear to be limited to junctures between a root and some bound morpheme such as an affix or a clitic. In no other contexts do sibilant clusters result in deletion to my knowledge. At the boundary between a verb root and a following noun root, for instance, there appears to be no deletion or lenition. This is illustrated in the following examples.

b. [bì.ís so.tà.kó.wà.kì]
bi-ís sotako= wa=ki
face-look girl=ERG TR=DEC:P
'The girl looked him in the face.'

```
c. [tʃi.kiʃ. sà.ni.nó.ki]

tʃikiʃ saninóa =ki

be_lazy fish =DEC:P

'The fish was being lazy.'

d. [tʃi.kiʃ.só.tà.kò.ki]

tʃikiʃ sótako =ki

be_lazy girl =DEC:P

'The girl is lazy.'
```

As one might have gathered from the examples above, there are not very many prefixes, suffixes or enclitics that can be used in order to investigate the sibilant clusters. For prefixes, there are only two prefixes that have final sibilants; kif- 'thigh'; bag- 'elbow'. There are no suffixes with an initial sibilant. There are two suffixes with final sibilants; mis 'antipassive'; = sini 'agentive deverbalization'. There are three clitics that begin with a sibilant; = sini 'tomorrow'; = si 'remote future'; = sini 'at night'. There is only one enclitic that ends in a sibilant; = sini 'desiderative, abilitative'. There are no nominal suffixes or clitics that begin or end with a sibilant. As a consequence of this there are a number of sibilant clusters that are morphotactically or syntactically unattested at the morphophonological boundaries taken up in this section. A full list of the unattested combinations is provided in Table 6.1. Table 6.1 also provides a summary of all the of morphophonological rules at sibilant boundaries discussed in this section.

Table 6.1. Sibilant clusters in Chácobo

| | PREFIX-ROOT | ROOT-SUFFIX/CLITIC | SUFFIX/CLITIC-CLITIC |
|-----|--|---|---|
| S.S | UNATTESTED | UNATTESTED | UNATTESTED |
| s.f | UNATTESTED | DELETION (s $\rightarrow \emptyset / H_{.}JL.$) | DELETION (s $\rightarrow \emptyset / H_{.}JL$) |
| S.Ş | UNATTESTED | DELETION (s $\rightarrow \emptyset / H_{.} \xi L$) | NOTHING ($s \not \to s \not s$) |
| ſ.s | DELETION ($\int s \rightarrow s$) | UNATTESTED | UNATTESTED |
| ſ.ſ | DELETION $(\iint \rightarrow \int)$ | NOTHING $(\iint \rightarrow \iint)$ | UNATTESTED |
| ſ.ş | DELETION ($\int \xi \rightarrow \xi$) | HIDING $(\int \xi \to \int \xi)$ | UNATTESTED |
| Ş.S | DELETION ($\S s \rightarrow s$) | UNATTESTED | UNATTESTED |
| ş.ſ | DELETION ($\mathcal{E} \rightarrow \mathcal{I}$) | NOTHING ($\S f \to \S f$) | UNATTESTED |
| Ş.Ş | DELETION ($\xi \xi \rightarrow \xi$) | UNATTESTED | UNATTESTED |

6.1.6 Glide deletion

The negative morpheme yáma in Chácobo has the allomorphs áma and yáma. The initial glide of yáma can delete when it follows a sibilant. This reduction can occur when the yáma is right-adjacent to a verb root. The process appears to be optional in the sense that speakers accept and produce both pronunciations. The reduced form with the glide deleted is more common in naturalistic speech.

'He is not tying his foot.'

It can also occur when *yáma* is right-adjacent to the antipassive suffix *-mis* (verb stem – position 4).

When the morpheme yáma occurs right-adjacent to the desiderative morpheme kás (verb stratum 3 position 8), the glide consonant can also be deleted (kasáma). This is the most common environment where yáma loses its first consonant.

This rule of glide deletion does not appear to apply to any other morphemes that begin with a glide such as $=y\acute{a}$ 'perfect, mirative' and $=yam\acute{t}t$ 'distant past'. It also appears to be a rule restricted to the verbal domain. It does not occur, for instance, when $y\acute{a}ma$ is right adjacent to a noun root. The glide deletion thus defines a morphophonological domain that include $y\acute{a}ma$ and any verbal element to its left.

6.1.7 Glide-vowel coalescence: [ya] > [i]

The sequence /ya/ [ja] in clitics coalesces to /i/ [i] when its vowel does not contain a high tone. The temporal distance clitic =yami(t) 'distant past' is sometimes realized as =imi(t). The associated motion clitic $kay\acute{a}\sim bay\acute{a}$ 'do and go' is often realized as $kai\sim bai$. The

process appears to be blocked on roots. For instance, the root $siy\acute{a}$ 'be full' is not reduced to sii if its high tone is lost.

```
(6.43) a. [kà.ì.mí.kì / kà.jà.mí.kì]

ka=yamít=ki

go=DISTP=DEC:P

'He went some some months ago.'

b. [pì.bà.ì.ní.kì] / [pì.bà.jà.ní.kì]

pi=bayá=ní=ki

eat=DO&GO:PL/TR=REMP=DEC:P

'He ate and then left.'
```

This rule only applies when the /ya/ segments do not contain a high tone. The realization of $=bay\acute{a}\sim=kay\acute{a}$ 'do and go' as $=bai\sim=kai$ only occurs when some process deletes the high tone on the morpheme on the final vowel. In the examples above, the high tone on the associated motion clitic is deleted by Anti-Meeussen's rule (see Section 6.2 for a detailed description). If Anti-Meeussen's rule does not delete the underlying high tone the morpheme $=bay\acute{a}\sim=kay\acute{a}$ 'do and go' does not undergo the reduction found in the examples above. This is illustrated in (6.44).

$$[pì.βajá.ki]$$
 / *[pì.bà.í.ki]
$$pi=bayá=ki$$
eat=DO&GO:TR/PL=DEC:P

'He ate and went.'

The rule also sometimes applies to the comitative $=y\acute{a}$ if its high tone is deleted through Anti-Meeussen's rule.

6.1.8 Glide-vowel coalescence: [wi] > [o]

The coalescence process $[wi] \rightarrow [o]$ is associated with speakers of Cachuelita, one of the central communities in the pampas near the Geneshuaya river. In my experience it is rare for speakers from Benicito and the Yata river. It seems to be spreading to some younger speakers in the Alto Ivon region.

(6.46) a. [há.ò.şò.kó.βò.]

 hawi şokóbo

 3SG:GEN child

 'His child.'

 b. [ká.ò.]

 ka=wi
 go=IMPER

 'Go!'

Phonetic studies need to be conducted in order to determine whether this rule involves a categorical phonological change or is just a case of phonetic vowel-vowel coarticulation. At this point in time, its precise morphosyntactic environment cannot be stated.

6.2. TONE PROCESSES AND TONE SANDHI

Chapter 2 provided a description of the general distinction between stress and tone. The domain of stress application was explicitly defined. I noted the difference between the domain of stress insertion and the domain of high tone insertion, but I did not provide a complete description of the latter. This section provides a more detailed description of tone insertion and tone sandhi processes across all junctures in the grammar.

High tone insertion is described in Section 6.2.1 below. This section takes up where Section 2.3 above left off by providing an exhaustive overview of the elements that incorporate into the H-insertion domain (see (2.23) of Section 2.3 above).

Section 4.1.1.2 above shows that Chácobo marks ergative and genitive case with floating tones. There are a few distinct types of floating tones that can be distinguished according to how they behave under certain tone sandhi rules. Floating tones are described in detail in Section 6.2.2.

The most ubiquitous tone sandhi rule in Chácobo is Anti-Meeussen's rule (terminology from Goldsmith [1984]). Anti-Meeussen's rule is a tone reduction rule whereby a high tone is reduced to a low tone when followed by another high tone (H \rightarrow L / _H or H \rightarrow Ø / _H). Anti-Meeussen's rule in Chácobo is described in Section 6.2.3. A somewhat more marginal rule of tone sandhi is described in Section 6.2.4.

6.2.1 High tone insertion

Stress rules are described in Chapter 2 and the general rule of high tone insertion was also introduced. Recall from Chapter 2, that stress is mapped onto syllables with high tones and high tones are mapped onto stressed syllables. This does not result in identity between stress and high tone, however. The reason is because high tone insertion is blocked when another high tone is in the high tone domain and because the stress domain and the high tone insertion domains are not always coextensive.

Taking into account the description of morphosyntactic structure provided in Chapter 3, Chapter 4 and Chapter 5, we are now in a position to describe more precisely the difference between the stress domain and the high tone insertion domain. The properties of the stress domain are summarized in (6.47).

(6.47) STRESS DOMAIN

- a. **Domain of application:** The stress domain is two syllables long at the left edge of a stem. Most enclitics can combine with monosyllabic roots and also be included in the stress domain. The stress domain is projected over stems in all syntactic positions.
- b. **Culminativity:** Stress is always culminative in the stress domain (there can be no more than one stress). High tone is not culminative in the high tone insertion domain. There can be more than one high tone in a high tone insertion domain.
- c. **Obligatoriness:** Stress is always obligatory in the stress domain (there is at least one stressed syllable).
- d. **Self-embedding:** Stress domains do not embed inside other stress domains.²⁵

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²⁵ Another way of stating this is that the stress domain is not recursive in the sense that it does not apply over nested morphophonological domains.

The high-tone insertion domain is described in (6.48).

(6.48) HIGH TONE INSERTION DOMAIN

- a. **Domain of application:** The high tone insertion domain makes no reference to phonological size (number of syllables). The high tone insertion domain consists of the stem and up to one clitic. High tone insertion domains can extend over noun-adjective and noun-noun combinations. The high tone insertion domain is project over relevant elements (stems and some clitics) only when they precede the clause-type/rank morpheme.
- b. **Culminativity:** High tone is not culminative in the high tone insertion domain. There can be more than one high tone in a high tone insertion domain.
- c. **Obligatoriness:** High tone is not obligatory in the high tone insertion domain.
- d. **Self-embedding:** In contrast to stress domains, high tone insertion domains embed in other high tone insertion domains. This occurs in noun-adjective and noun-noun combinations.

In what follows I provide a detailed description of the properties of the high-tone insertion domain in Chácobo.

As stated in (6.48a), all elements of the stem are within the span of the high-tone insertion domain. This means that high tone insertion will never apply if any element of the stem contains an underlying high tone (Chapter 2).

All body-part prefixes contain underlying high tones, and thus high-tone insertion never applies on a stem that contains a prefix. This is illustrated in (6.49a) and (6.49b) below.

```
(6.49) a. [hó.tsì.kì]

hó-tsìk=kì

ankle-take_out=DEC:P

'S/he takes his/her (another person's) ankle out.' ELIC

b. [pí.tì.kì]

pí-tik=ki

wing-break=DEC:P

'S/he breaks his/her (another's) wing.' ELIC
```

One might argue that the examples in (6.49) are compatible with an interpretation whereby high tone is inserted on the syllable of the prefix through the high-tone insertion rule, because stress is assigned to the first syllable by default and high tones are inserted on stressed syllables. However, if this were the case, then a high tone on another affix in the stem would block the appearance of a high tone on the prefix. This does not occur.

Instead, when there is a high tone on another affix in the stem, the high tone still surfaces on the prefix. For instance, when the high-tone bearing intransitive suffix -*i* combines a prefix-root combination high tones still occur on the body-part prefixes. This is illustrated in (6.50). The sentences in (6.50) are mutually contrastive with those in (6.49) except that they contain the high-tone bearing intransitive suffix -*i*.

The sentences in (6.50) illustrate that high tone insertion is not culminative in its domain of application. There can be more than one high tone in the high-tone insertion domain. Note, however, that the process of high-tone insertion can never result in a high-tone insertion domain that violates culminativity. This is because, as described in Chapter 2, high tone insertion only occurs when there is *no* high tone at all in the high-tone insertion domain.

As stated above, all high-tone bearing suffixes block the high tone insertion rule from applying. This is illustrated in the examples below. In all of the root-suffix combinations below a high tone surfaces on the first syllable of the root when it does not occur with the suffix.

- (6.51) $-i \sim -i \sim -i$ 'intransitive'
 - a. potas-í [ˈpò.tà.sí] 'be smashed'
 - b. matos-i ['mà.tò.si] 'be split'
- (6.52) -ná 'intransitive, verbalizer'
 - a. koro-ná ['kò.rò.ná] 'become grey'
 - b. siri-ná [ˈsì.rì.ná] 'become old'
- (6.53) -*mis* 'antipassive'
 - a. tſani-mis ['tʃà.nì.mis] 'speak all the time'
 - b. tsaya-mís ['tsà.jà.mís] 'look all the time'
- (6.54) -ná 'reciprocal
 - a. tʃani-ná [ˈtʃà.nì.ná] 'converse/argue'
 - b. tsaya-ná ['tsà.jà.ná] 'have a staring contest'
- (6.55) *-?aká* 'passive'
 - a. hana-?aká ['hà.nà.?à.ká] 'be placed'
 - b. potas-?aká ['pò.tàs.?à.ká] 'be smashed'

Unlike affixes, clitics vary in terms of whether they incorporate into the high tone insertion domain projected from the stem. In other words, some clitics block high tone insertion and other clitics do not. Most of the clitics of the V-constituent (second verb stratum) incorporate into the high tone insertion domain. That clitics of this level incorporate into the high tone domain of the verb stem is illustrated in the sentences in (6.56). For instance, *hana* 'leave' receives stress on its first syllable. High tone insertion does not map a high tone on the verb root, however, because =biki 'interactional' incorporates into the high tone insertion domain of the stem. High tone insertion does not apply because it only inserts a high tone if one is not present underlyingly.

(6.56) a. ['hà.nà.
$$\beta$$
ì.kí.kì]

hana=bɨkí=kɨ

leave=INTRCT=DEC:P

'S/he left it together with you.'

b. [hà.nà.tá.pì.ki]

hana=tápi=ki

leave=PNCT=DEC:P

'S/he left it immediately'

Other morphemes of the second verb stratum that incorporate into the high tone insertion domain are $=m\acute{a}$ 'causative'; $=y\acute{o}$ 'telic/all'; $y\acute{a}ma$ 'negative'. The only

morphemes of the second verb stratum that do not incorporate into the high tone insertion domain are associated motion morphemes (position 4). This is illustrated in (6.57).

(6.57) a. [há.nà.βò.ná.kɨ]

hana=boná=ki

leave=GOING:TR/PL=DEC:P

'S/he was leaving it while going.'

b. ['há.nà.βɨ.ná.kɨ]

hana=biná=ki

leave=COMING:TR/PL=DEC:P

'S/he was leaving it while coming.'

In the third verb layer clitics vary in terms of whether they incorporate into the high tone insertion domain. Examples of position 9 verb stratum 3 enclitics that block high tone insertion are provided in (6.58) below.

(6.58) a. ['hà.nà.tì.kí.ki] hana=tikin=ki'S/he left it again.'

b. ['hà.nà.ɾà.βɨ.kɨ]
 hana=rabɨ=kɨ
 'S/he left it a few times.' ELIC

The other position 9 clitics of the third verb layer that incorporate into the high tone insertion domain are as follows; =tikin 'again'; =wisti 'once'; =rabi 'twice or more'; =fari 'at night'; =tiari2i 'do (way from view of speaker)'; =pao 'habitual'; =ti 'purposive'; =vi 'affection'; =pi 'urgency, anxiety'; =ki 'desiderative'. Some position 9 functional morphemes do not incorporate. This is illustrated with the examples in (6.59) below.

(6.59) a. ['há.nà.pà.rí.kɨ]

hana=parí=kɨ

leave=FIRST=DEC:P

'S/he left him first.'

b. ['há.nà.rò.ʔá.kɨ]

hana=roʔá=kɨ

leave=LIMIT=DEC:P

'S/he left only it.' / 'S/he only left it.' ELIC

Other position 9 morphemes that do not incorporate are as follows; =baʔiná 'all day, every day'; =winí 'do before someone else' =ʃiná 'at night'; pistia 'a little'; =kiá 'counterfactual'.

The temporal distance morphemes (position 13) vary in terms of whether they incorporate into the high tone insertion domain. The remote time TDMs =ni 'remote past' and =gi 'remote future' incorporate into the high tone insertion domain, and the recent past and distant past TDMs $=?it\acute{a}$ and $=yam\acute{t}t$ do not incorporate. The difference is illustrated in (6.60) and (6.61) below.

(6.60) [hà.nà.ní.kɨ]

hana=ní=ki

leave=REMP=DEC:P

'S/he left him/her/it (in the remote past).'

(6.61) [há.nà.?ì.tá.kì]

hana=?itá=ki

leave=RECP=DEC:P

'S/he left him/her/it (yesterday).'

Finally, clause-type/rank (position 14) morphemes vary in terms of whether they incorporate into the high tone insertion domain as well. Those clause-rank/type morphemes that incorporate into the high tone insertion domain are as follows; =2\alpha 'interrogative,

past'; $2\acute{a}$ 'past nominalization'; $=w\acute{t}$ 'imperative'; $=p\acute{a}$ 'imperative'; $=t\acute{a}$ 'imperative, do and go'; $=2\acute{a}i$ 'imperfective nominalization'; $=k\acute{t}$ 'different subject conjunct'; $=k\acute{t}$ 'same subject simultaneous (transitive)'; $=g\acute{o}$ 'same subject prior'; $=2\acute{a}g$ 'same subject prior'; $=p\acute{a}ima$ 'possibility'; $=t\acute{t}go$ 'necessitative'; $=p\acute{a}ma$ 'same subject simultaneous'; $=2\acute{a}\acute{t}$ interrogative non-past, second person singular'.

The clause-type/rank morphemes that do not incorporate into the high tone insertion domain are as follows; $=iki\acute{a}$ 'reportative'; $=2in\acute{i}$ 'interrogative non-past'; ='no 'same subject simultaneous'; =nospari 'same subject prior'; $=2imar\acute{i}$ 'similative, as if'.

The list of morphemes described thus far is not exhaustive. It only contains those morphemes that have an underlying high tone. One cannot tell whether functional morphemes that do not contain an underlying high tone incorporate into the high-tone insertion domain. The reason is that they would require a high-tone to block high-tone insertion at all, and thus high-tone insertion on the root in such cases provides no evidence for their status with respect to their (non)incorporation into the high tone insertion domain. Noun roots that are adjacent to verb roots never incorporate into the high-tone insertion domain. This is illustrated in (6.62). The noun root *rami* 'Rami' does not prevent high tone insertion on the verb *hána* showing that the noun root does not incorporate into the high tone insertion domain of the verb root.

(6.62) [há.nà.rà.mí.wà.ki]

hana rámi= wa=ki

leave Rami=ERG TR=DEC:P

'Rami left her/him/it.'

Noun roots project their own high tone insertion domains in the same way that verbs do. The behavior of the prefix-root combinations in the noun complex behave the same as prefix-root combinations in the verb complex.

Clitics in the noun complex are similar to clitics in the verb complex in that they vary in terms of whether they incorporate into the high tone insertion domain of the noun stem. An example of a clitic which incorporates into the high tone insertion domain of the noun root is the limitative morpheme $=ro2\acute{a}$ 'limitative'. This is illustrated with the minimal pairs in (6.63). In (6.63b), the appearance of $ro2\acute{a}$, 'limitative' blocks the insertion of high tone on $m\acute{o}to$ 'chive' showing that it incorporates into the high tone insertion domain of this morpheme. For nouns as for verbs, high tone is not culminative in the high-tone insertion domain. This is illustrated in (6.63a).

(6.63) a. ['mó.to.ro.?á]

móto=ro?á

motorcycle=LIMIT

'Only the motorcycle.'

The clitic = $ro2\acute{a}$ 'limitative' also combines with adjectives and incorporates into their high tone insertion domain. This is illustrated in (6.64a), where the appearance of $ro2\acute{a}$ 'limitative' blocks the insertion of high tone on hogo 'white'. The example in (6.64b) with the high tone bearing tfiki 'black' shows that adjectives as well vary in terms of whether they have underlying high tones.

To my knowledge, all noun complex clitics incorporate into the high tone insertion domain of an element to their left. But there are very few that contain a high tone; ri 'too as well'; =ti 'too'; = 'ergative'.

As noted in (6.48), one of the structural differences between the stress domain and the high tone insertion domain is that the high tone insertion domain displays self-similar embedding. Embedding of high-tone insertion domains occurs at the NP-constituent level for noun-noun combinations and noun-adjective combinations.

The application of the high tone insertion rule in noun-adjective combinations is fairly complex, because adjectives vary according to whether they project a high tone insertion domain. As shown in (6.64), adjectives vary in terms of whether they contain an underlying high tone. The adjective *tfiki* 'black' has an underlying high tone, whereas *hoşo* 'white' does not. However, in noun-adjective combinations the prosodic difference between an adjective that has an underlying high tone and one that does not is neutralized. I interpreted this as implying that adjectives project high tone insertion domains in noun-adjective combinations. This is illustrated in the examples in (6.65) and (6.66).

b. [ˈjò.ɾà. ˈtʃ í.ki] tſĭki yora body white 'Black body.' (6.66)[ˈkɨ.nì.ˈhó.sò] a. kɨni hoso beard white 'White beard' b. $['k\hat{i}.n\hat{i}.'t\hat{j}\hat{i}.k\hat{i}]$ kɨni tſiki beard black

'Black beard'

High tone insertion is blocked on noun stems in noun-adjective combinations. The examples in (6.65) and (6.66) illustrate this. In isolation or as without adjective modification, the nouns *yora* 'body' and *kini* 'beard' receive a high tone on their first syllable. Thus, noun-adjective combinations appear to be in the same high tone insertion domain. If the noun has an underlying high tone, then a high tone is realized on both the noun and the adjective. This is illustrated in (6.67). The noun *kifi* 'thigh' has an underlying high tone and it combines with a high tone bearing adjective *tfiki* 'black'.

When the adjective is not high-tone bearing, the adjective can still surface with a high tone due to the high tone insertion rule. This is illustrated in (6.68). In (6.68a) the high-tone bearing noun kifi 'leg' combines with the underlyingly toneless adjective hoso 'white'. High tone insertion applies to hoso 'white' in this case. Other examples of this same type of prosodic pattern are provided in (6.68b) and (6.68c).

c. [ˈí.nà.ˈó.ʃò.]

ínaka ofo

dog skinny

'Skinny dog.'

The application of high tone insertion on *hoşo* 'white' and *ofo* 'skinny' in the examples above does not follow from the high tone insertion rule unless the adjective forms a separate high tone insertion domain from the noun. If the noun-adjective combinations above were under one high-tone insertion domain, the high-tone bearing noun roots *kifî* 'leg/thigh', *kíni* 'cave, hole' and *ínaka* 'dog, pet' would block the insertion of high tone on the adjective.

However, the blocking of high tone insertion on nouns in the noun-adjective combinations in (6.65) and (6.66) suggest otherwise. These examples show that there is an asymmetry in the blocking of high tone insertion in noun-adjective combinations such that high tone bearing adjectives block high tone insertion on nouns, but high tone bearing nouns do not block high tone insertion on verbs.

One way of capturing this asymmetry is to posit that in noun-adjective combinations there are two high tone insertion domains; one that maps over the adjective and another that maps over the noun-adjective combination, resulting in an embedded structure depicted in (6.69) where HI refers to a high tone insertion domain.

(6.69) [NOUN ADJECTIVE]_{NP}
$$\rightarrow$$
 (NOUN (ADJECTIVE)_{HI})_{HI}

The analysis in (6.70) works for most adjectives. However, there is a small subset of underlyingly toneless adjectives that do not receive a high tone in noun-adjective combinations. An example of such an adjective is *şoko* 'small'. For many speakers a high tone is not inserted on this adjective in noun-adjective combinations if the head noun has an underlying high tone. This is illustrated in (6.71a). However, if the head noun contains no underlying high tone as in (6.71b), a high tone is realized on *şoko* 'small'.

'The little ant eater.'

Precisely how to understand adjectives such as *soko* 'small', which seem to be a small class, is unclear to me. Tentatively, we might propose that *soko* does not project a

high tone insertion domain and that the high tone insertion rule inserts a high tone on the rightmost stressed syllable. However, more research is required on this question.

Noun-noun combinations have comparable behavior to noun-adjective combinations in of the bheavior of high tone insertion. This is illustrated in the examples in (6.72), (6.73), (6.74) and (6.75). The examples in (6.72) are cases where the right-most noun has an underlying high tone. High tone insertion on the left-most noun is blocked.

- (6.72) a. ['bà'.?ì. yò.'∫í'.nì]

 ba?i yo∫ini

 road demon

 'Duende (lit. road spirit).'
 - b. ['βà.tà. 'hí.nà]bata hína

honey tail/penis

'Bee stinger.'

c. ['tʃì.ʔì.'má.kɨ]

tsi?i maki

fire piranha

'Type of piranha.'

When most of the nouns contain an underlying high tone, no reduction occurs. This is illustrated with the examples in (6.73).

When neither of the nouns contains an underlying high tone, high tone insertion only applies to the right-most noun in a noun-noun combination. This is illustrated in the examples in (6.74).

```
(6.74) a. [βà.rì. jó.ṣà]
bari yoṣa
sun woman
'The sun woman (mythological character).'
b. [màj.ṣó.βò]
mai ṣobo
dirt/earth house
'A mud house.'
```

In a noun-noun combination where *only* the left-most noun contains a high tone, high tone insertion applies to the right-most noun. This is illustrated in the examples in (6.74).

```
(6.75) a. [tsá.ka.jó.şa]
tsákaka yoşa
agouti woman
'Agouti woman.'
b. [pà.tà.rò.só.tà]
pataró sota
pants bag
'Pocket'
```

Comparison of these examples shows that there is an asymmetry in the blocking of high tone insertion. The presence of a high tone on the right most noun blocks high tone insertion on the left-most noun as in (6.72). The presence of a high tone on the left-most noun does not block high tone insertion on the right-most noun as in (6.74). The high tone insertion domain embedding analysis for noun-adjective combinations can be applied to noun-noun combinations.

$$(6.76) \qquad [\text{NOUN NOUN}]_{\tilde{N}} \rightarrow (\text{NOUN (NOUN)}_{HI})_{HI}$$

Noun-noun combinations display different degrees of semantic opacity. Some semantically opaque noun-noun combinations display prosodic patterns that cannot be predicted by the rule of high-tone insertion as described thus far. Examples of these are illustrated in (6.77). The noun-noun combination *kana popoma* 'green frog' is literally 'parrot owl'. The left-most noun is realized without a high tone, contradicting the patterns above. This is also true of the less semantically opaque form in (6.77b). The noun *hini* 'water' is realized without a high tone, even though it contains an underlying high tone and there is no productive tone sandhi process that could plausibly be responsible for the tone reduction in this case.

(6.77) a. ['kà.nà. pò.'pó.mà]
kána popóma
parrot owl
'Green frog (lin. Lithobates palmipes)'
b. ['hì·.nì. yò.'ʃì·.nì]
hɨnɨ yoʃini
water demon
'Water demon, siren.'

Tentatively, I attribute this behavior to lexicalization. I assume that as noun-noun combinations become more lexicalized they show a tendency to only contain one high tone. However, the issue still requires future research.

6.2.2 Floating tones and tone sandhi

This section describes floating tones in Chácobo. Floating tones are those which are not underlyingly associated with any syllable or mora, but dock to a syllable on the surface (Yip 2002: 76). All floating tones in Chácobo are high tones. I distinguish two types of floating tone. Functional tones are floating tones that contain no segmental material. They are called functional because they always encode a grammatical category. Listed tones are floating tones that are part of the underlying form of some segmentally

represented morpheme, but that are not associated with any syllable of that morpheme underlyingly.

This section also introduces tone sandhi rules in Chácobo. Both tone sandhi rules conspire to prevent sequences of more than one adjacent high tone in certain domains. Broadly speaking, there are three types of tone sandhi rules in Chácobo; Meeussen's rule and Anti-Meeussen's rule (cf. Goldsmith 1984). **Meeussen's rule** lowers a tone when it directly follows another high tone (HH \rightarrow HL). **Anti-Meeussen's rule** lowers a tone when directly precedes another high tone (HH \rightarrow LH). The AM was already mentioned in the context of ergative marking (Chapter 4). I dedicate a whole section below to its description (Section 6.2.3). It is the most ubiquitous and important tone sandhi rule of Chácobo. Meeussen's rule is limited to a few floating tones and it is described in full in this section with the account of floating tones. The third type of tone sandhi rule is the long-distance tone reduction (LDTR) rule discussed in Section 6.2.4. This rule is not clearly relevant to floating tones.

Functional tones dock to the end of words or phrases. They are all high tones. They are the genitive clitic, the ergative clitic, the spatial clitic and the vocative clitic. Examples of these clitics are provided in (6.78).

```
[ ra. 'βí. 'í.na.ka ]
(6.78) a.
                rabi='
                             ínaka
                rabi=GEN dog
                'Rabi's dog'
         b.
                [ '\bar{\imath}.nà.ká. '\bar{\imath}a.\betai. 'ti.\hat{\imath}à.kì ]
                ínaka='
                             rabi
                                      tisa=ki
                dog=ERG Rabi
                                       bite=DEC:P
                'The dog bit Rabi.'
                [ náà. 'jà.kà.tá.tsì . 'kí.βò. 'ī. 'tsá.jà.kì ]
         c.
                        yakáta =
                naa
                                         tsi
                                                kɨbo
                                                          \dot{t}
                                                                  tsáya=k<del>i</del>
                DEM1 town=SPAT
                                         Р5
                                                turkey 1sG
                                                                  see=DEC:P
                'In this town, I saw one wild turkey.'
         d.
                [ kà. 'í ]
                kai= '
                mother=voc
                'Mother!'
```

There are no floating low tones, and functional high tones never dock to a syllable to their right. If one regards functional high tones as morphemes (rather than phrase-level process morphology), then they can be understood as clitics. In this thesis, I will regard

functional tones as non-segmental morphemes, because I find that it makes the description and discussion easier.

There is one additional functional tone in Chácobo associated with reduplication constructions. Its prosody is described in the context of a general discussion of reduplication provided in Section 6.4.

The other class of floating tones in Chácobo are listed tones. As stated above, a listed tone is a high tone that is part of the underlying phonological representation of a morpheme with segmental content. However, the listed tone is not associated with any syllable of of this morpheme underlyingly. (6.79) provides a list of the morphemes that I analyze as containing listed tones. I will refer to all the morphemes below as **listed tone morphemes**.

(6.79) LISTED TONE MORPHEMES

- a. $= \dot{s} + i ni$ 'nominalization'
- b. *pistia* 'a little'
- c. 'paşa 'new, raw'
- d. =ria' 'augmentative, attenuative'
- e. $= p\hat{a}$ 'non-visual'
- f. $= \dot{r}\dot{a}$ 'admonitive'
- g. $= n\hat{o} \sim =$ 'spatial, by means of'

All of the listed tones are high tones except for the nominal clitic = $\dot{r}a$ 'admonitive'. This form displays prosodic behavior that none of the other morphemes do, and, thus, I am not sure how to analyze it. I discuss all of the other cases morphemes first, where I think some generalizations can be made, before moving onto the admonitive.

The default rule for the realization of listed tones is that the listed tone docks to the syllable to its left. This is illustrated with the morpheme $= \hat{s}ini$ 'habitual agentive nominalizer' in (6.80). Evidence that this morpheme contains a floating tone on its left edge comes from the fact that when it combines with roots which do not have an underlying tone, a high tone surfaces on their right edge beside the listed tone morpheme. For instance, as we have seen (see Section 2.3) hana 'leave (tr.)' does not have an underlying high tone. Unless high tone insertion is blocked, hana 'leave' will surface with a high tone and stress on the first syllable, as was shown in Section 6.2.1. However, when this hana 'leave (tr.)' combines with the listed tone morpheme $= \hat{s}ini$ 'nominalizer', a high tone surfaces on the right-most syllable of hana 'leave (tr)', as shown in (6.80a). Other examples of this phenomenon are provided in (6.80b) with the root afi 'bathe'; (6.80c) with the root tsaya 'see' and (6.80c) with the root tsaya 'see' and (6.80c) with the root tsaya 'see' and (6.80c) with the root tsaya

hana= sini

leave=N/ADJ

'A person who is always leaving things behind.'

- c. [tsà.ˈjá.sɨ.nì] tsaya='sɨnisee=N/ADJ
 - 'A person who is always watching.'
- d. [βà.ˈná.ṣɨ.nì]bana=ˈsɨniharvest=N/ADJ
 - 'A person who is always harvesting'

A listed tone cannot dock to the syllable to its left if this results in adjacent high tones. For instance, in cases where the bisyllabic roots contain a high tone on the first syllable, the listed tone appears to have no discernible realization. This is illustrated in the examples in (6.81a), the listed tone of $='\hat{s}ini$ 'habitual agentive nominalization' does not dock to the right-most syllable of $k\acute{a}ga$ 'be angry' (*[ká.ṣá] is not acceptable). The same pattern is attested for all bisyllabic roots that contain an underlying high tone on the first syllable as illustrated in (6.81b), (6.81c) and (6.81d).

```
[ ˈká.ṣà.ṣɨ.nì ]
(6.81) a.
              kása= sini
              be angry=N/ADJ
              'Someone who is always angry / a bad person.'
              [ 'tʃó.kò.ṣɨ.nì]
        b.
              tſóko= sini
              wash clothes=N/ADJ
              'Someone who compulsively washes clothes.'
              [ˈsó.tò.sɨ.ni ]
        c.
              sóto= sini
              blow_wind=N/ADJ
              'A place where it is always windy.'
        d.
              [ 'jɨ.ɨ.ṣɨ.nì ]
              y_{i}=\dot{s}ini
              stay stable(of liquid)=N/ADJ
              'Water (river, stream) that is always stable and never moves.'
```

When the morpheme $= \hat{s} + i \hat{n} i$ combines with verb roots that contain a high tone on their second syllable such as kasa 'play' and kasa 'vomit' the listed high tone also has no discernible realization. In this case however, it is not clear whether it is the high tone of the

root that is deleted or the listed tone. I tentatively assume that it is the listed tone which deletes.²⁶ Illustrative examples are provided in (6.82).

A listed tone can be on free adverbials as well. For instance, the free adverbial *'pistia'* a little' contains a listed tone. It behaves the same as the clitic form = *'gini'* habitual nominalization'. This is illustrated with the sentences in (6.83). In (6.83a) the listed tone of *'pistia'* a little' docks to the final syllable of *hana'* leave (tr.)'. This example shows the

 26 Note in the example in (6.82b) receives the same surface realization as (6.80a), even though the underlying

root is different; the form [hà.'ná.ṣì.nì] is thus ambiguous between the interpretation in (6.82b) and the

interpretation in (6.80a).

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default realization of the listed tone. As with the clitic $= \hat{s} + ni$ there is no realization of the listed tone.

Notice that in these examples *pistia* 'a little' is also realized with a high tone on its first syllable. The reason for this is that *pistia* is a stem and constitutes its own stress domain and high tone domain.

Listed tones do not always need to be on the left side of their associated morpheme. For instance, the morpheme =ria' 'augmentative, attenuative' has listed tone on its left edge. The underlying high tone of this morpheme surfaces as in [rjá] when there is no underlying high tone on the syllable to its left. For instance, when it combines with $k\dot{a}ga$ 'be angry' the listed high tone of -ria' docks to the right-most syllable and surfaces as in [rjá] in (6.84a). When =ria' combines with the toneless root hana 'leave (tr.)' its associated

high tone docks in the same way as in (6.84c). If, however, there is a high tone to the left of =ria' 'augmenative, attenuative' then the associated high tone is not realized as in (6.84b) and (6.84d).

kása=ria =ki

be angry=AUG=DEC:P

'He was surely angry.'

b. [kà.ˈsá.rjà.kɨ]

kaşá=ria =ki

play=AUG=DEC:P

'He surely played.'

c. [ˈhá.nà.rjá.kɨ]

hana=ria =ki

leave=AUG=DEC:P

'He surely left something.'

d. [hà.ná.rjà.kì]

haná=ria[']=kɨ

vomit=AUG=DEC:P

'He surely vomited.'

Clitics with listed tones actually display some interspeaker and/or dialectal variation. While the suprasegmental patterns associated with the clitic = gini and the adverbial *pistia* 'small' appear to be consistent across speakers, other clitics vary either in terms of whether they have an listed high tone; the associated motion/location clitic =pa is an example of this.²⁷ For Miguel Chavez (Alto Ivon), this morpheme has an associated high tone and therefore its underlying representation is = pa. Evidence for this comes from the fact that when = pa 'go and do (outside of vision of speaker)' combines with a verb root that has no underlying high tone, a high tone surfaces on the last syllable of the root (6.85a). Just like with the associated high tone enclitics discussed earlier, when = pa combines with a root with an underlying high tone, the listed tone has no surface realization as in (6.85b).

hana= pà=ki

leave=GO&DO=DEC:NONP

'He went and is leaving something behind out of our vision.'

²⁷It should also be pointed out that this morpheme varies across speakers in terms of its

interpretation/translation. At this moment it is not clear whether this variation reflects dialect variation or the

fact that perhaps there is more than one morpheme. I strongly suspect the differences reflect dialect variation,

however.

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be.angry=GO&DO=DEC:NONP

'He left and now he is angry outside of our vision.'

For Caco Moreno (Alto Ivon), =pa 'do outside of vision' has no listed tone, and when it combines with toneless roots, high tone and stress are realized on the first syllable of the root.

(6.86) a. ['há.nà.pà.kì]

hana=pa=ki

leave=GO&DO=DEC:NONP

'He is leaving something behind out of our vision.'

b. ['ká.şà.pà.kì]

kása=pa=ki

be angry=GO&DO=DEC:NONP

'He left and now he is angry outside of our vision.'

For Paë Yaquë (Cachuelita), the morpheme = $p\dot{a}$ 'do outside of vision' not only has a listed high tone, but also has a high tone docked to its only syllable underlyingly. When this morpheme combines with a toneless root the associated high tone surfaces on the last

syllable of the root and on the enclitic $= p\dot{a}$ as in (6.87a). The listed tone does not surface if the root already has an underling high tone as is illustrated in (6.87b).

leave=GO&DO=DEC:NONP

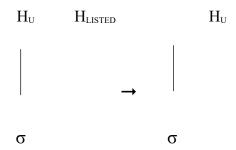
'He went and is leaving something behind out of our vision.'

be angry=GO&DO=DEC:NONP

'He left and now he is angry outside of our vision.'

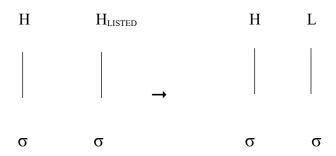
Thus, there are three dialectical variants of the morpheme $=pa\sim=pa\sim=pa$. Future research is required to determine whether such variation is found with other listed tone morphemes. The distribution of listed tones can be accounted for with reference to two rules.; floating tone deletion and Meeussen's rule. The listed tone deletion rule is presented in (6.88). It accounts for the data in (6.82) where the listed tone is not realized. The rule states that a listed tone H_{LISTED} deletes when it is right-adjacent to a which which is underlyingly associated with a syllable H_U . This can be viewed as an instantiation of Meeussen's rule.

(6.88) Listed tone deletion I (Meeussen's rule)



Recall that the listed tone deletes when its docking to the left-most syllable would result in a HH sequence. I tentatively assume that in such cases the listed tone does dock to an adjacent syllable and is then subsequently deleted by Meeussen's rule. In other words a listed tone H_{LISTED} docks to a syllable to its left, which is illustrated in the examples in (6.80). When this listed tone is to the right of an underlyingly associated high tone, it deletes even when it is docked to a syllable. This is depicted in (6.89). The result of the application of this rule is illustrated in the examples in (6.81). We will see in Section 6.4 in the context of reduplication that the leftmost high tone can also be listed as well.

(6.89) Listed tone deletion II (Meeussen's rule)



The versions of Meeussen's rule stated in (6.88) and (6.89) only apply when the right-most high tone is a listed tone. Meeussen's rule does not apply when the left-most tone is a functional tone. Functional tones do not delete in the presence of an underlyingly associated tone to their left. Instead, the underlyingly associated tone deletes. This is illustrated in the examples in (6.90). For instance, the nouns *kamáno* 'jaguar' and *yofini* 'ghost' have underlying tones on their penultimate syllable. In combination with the functional ergative morpheme, the underlyingly associated tone deletes and the functional tone docks to and surfaces on the final syllable.

```
(6.90) a. ['kà.mà.nó]

kamáno=´

jaguar=ERG

'The jaguar (ergative).'

b. ['jò.ʃì.ní]

yoʃǐni=´

spirit=ERG

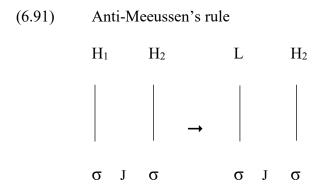
'The spirit'
```

I analyze this as a case of Anti-Meeussen's rule, which deletes a high tone when it *precedes* another high tone. Anti-Meeussen's rule is much more prevalent in Chácobo than Meeussen's rule. Meeussen's rule only applies when the right-most syllable is a listed tone,

where Anti-Meeussen's rule applies across spans of all other types of high tones. The application of Anti-Meeussen's rule is so complex that I dedicate an entire section to it below.

6.2.3 Anti-Meeussen's rule

The most prevalent tone sandhi rule in Chácobo is a version of Anti-Meeussen's rule. In this rule a high tone H₁ becomes an L tone when it precedes another high tone H₂.²⁸ The rule applies at the following junctures (among others); prefix-root, root-suffix, suffix-suffix, root-clitic, clitic-clitic, stem-stem. I represent the juncture as J in the summary of Anti-Meeussen's (henceforth AntiM) rule in Chácobo in (6.91).



²⁸ The rule could also be stated as one where H₁ deletes rather than turns into an L tone. This would make the same predictions since L tones are inserted on toneless syllables by default.

The application of AntiM is difficult to summarize because it is highly dependent on the nature of the juncture. The rule is obligatory, optional or disallowed from application depending on the juncture J, and the status H₂ as underlying (underlying or functional) or inserted. Table 6.2 provides a summary of all of the application of AntiM at all the relevant junctures depending on the status of H₂. I provide a description of the relevant empirical phenomena after stating a few generalizations concerning the application of AntiM in Chácobo.

Table 6.2 shows that the application of AM is highly dependent on the juncture at which it applies. The following generalizations sated in (6.92) can be made concerning AM in Chácobo based on Table 6.2 below.

(6.92) ANTIM IN CHÁCOBO

- a. AntiM obligatorily applies at the boundary between an affix in a root in either order.
- b. AntiM obligatorily applies at a juncture between some element and a following clitic (stem-clitic *or* clitic-clitic).
- c. For a given construction, if H_2 is an underlying tone, and the application is optional or disallowed, AM will always be disallowed if H_2 is an inserted tone.

Table 6.2. Anti-Meeussen's rule in Chácobo

| Construction | STRUCTURAL | H_1 | H ₂ | APPLICATION |
|--------------------|---------------|------------|----------------|-------------|
| | JUNCTURE | | | |
| stem | PREFIX-ROOT | UNDERLYING | UNDERLYING | OBLIGATORY |
| stem | ROOT-SUFFIX | UNDERLYING | UNDERLYING | OBLIGATORY |
| stem | SUFFIX-SUFFIX | UNDERLYING | UNDERLYING | OBLIGATORY |
| clitic | ROOT-CLITIC | UNDERLYING | UNDERLYING | OBLIGATORY |
| clitic | SUFFIX-CLITIC | UNDERLYING | UNDERLYING | OBLIGATORY |
| clitic | CLITIC-CLITIC | UNDERLYING | UNDERLYING | OBLIGATORY |
| N-Adj | STEM-STEM | UNDERLYING | UNDERLYING | OBLIGATORY |
| N-Adj | STEM-STEM | UNDERLYING | INSERTED | OPTIONAL |
| N-N | STEM-STEM | UNDERLYING | UNDERLYING | OBLIGATORY |
| N-N | STEM-STEM | UNDERLYING | INSERTED | OPTIONAL |
| NPs-V | STEM-STEM | UNDERLYING | UNDERLYING | OBLIGATORY |
| NPs-V | STEM-STEM | UNDERLYING | INSERTED | OBLIGATORY |
| NP _P -V | STEM-STEM | UNDERLYING | UNDERLYING | OBLIGATORY |
| NP _P -V | STEM-STEM | UNDERLYING | INSERTED | OBLIGATORY |
| V-NPs | STEM-STEM | UNDERLYING | UNDERLYING | OBLIGATORY |
| V-NP _S | STEM-STEM | INSERTED | UNDERLYING | OBLIGATORY |
| V-NPs | STEM-STEM | UNDERLYING | INSERTED | DISALLOWED |

Table 6.2, cont.

| V-NPs | STEM-STEM | INSERTED | INSERTED | DISALLOWED |
|----------------------------------|-------------|------------|------------|------------|
| NP _A -NP _P | STEM-STEM | UNDERLYING | UNDERLYING | OPTIONAL |
| NP _A -NP _P | STEM-STEM | UNDERLYING | INSERTED | DISALLOWED |
| NP _T -NP _R | STEM-STEM | UNDERLYING | UNDERLYING | DISALLOWED |
| NP _R -NP _T | STEM-STEM | UNDERLYING | UNDERLYING | DISALLOWED |
| within clause | CLITIC-STEM | UNDERLYING | UNDERLYING | OPTIONAL |
| within clause | CLITIC-STEM | UNDERLYING | INSERTED | DISALLOWED |
| across clause | CLITIC-STEM | UNDERLYING | UNDERLYING | DISALLOWED |
| across-clause | CLITIC-STEM | UNDERLYING | INSERTED | DISALLOWED |
| ergative-V/NP | STEM-STEM | UNDERLYING | UNDERLYING | OPTIONAL |
| ergative-V/NP | STEM-STEM | UNDERLYING | INSERTED | DISALLOWED |
| genitive-V/NP | STEM-STEM | UNDERLYING | UNDERLYING | OPTIONAL |
| genitive-V/NP | STEM-STEM | UNDERLYING | INSERTED | DISALLOWED |

The first two statements ((6.92a) and (6.92b)) state that AntiM is always obligatory when the right-most element is bound. (6.92c) is a more complicated relational statement, based on generalizing from the data in Table 6.2. Below I provide the empirical evidence for the descriptive statements in Table 6.2 that form the basis for the generalizations stated in (6.92).

Another important aspect of AntiM in Chácobo is that it applies from right to left, such that strings of sequential high tones can surface as low (HHH -> LHH -> LLH) through cyclic application of the rule. This property of the rule will be described below as well.

Inside stems AntiM applies without exception. In other words, AntiM always applies at the prefix-root, root-suffix, suffix-suffix junctures. Recall from Section 6.2.1 that all body-part prefixes contain an underlying high tone. This high tone of a body-prefix is always deleted if there is an underlying high tone on the first syllable of the root. This is illustrated in (6.92).

(6.92) a. [tà.'tís.ki]

tá-tíş=ki

foot-bite=DEC:P

'S/he bit his/her foot.'

b. [**βà.**ˈk**i**.ɨs.kɨ]

bá-kíis=ki

arm-cut=DEC:P

'S/he cut his/her arm.'

That AntiM applies at the root-suffix juncture is illustrated in (6.93).

tií-ná=ki

sweet-VBLZ:ITR=DEC:NONP

'It is becoming sweeter.'

b. ['báːʃò.**ʃò.ná**.kì]

bá-∫o**ʃó-ná**=ki

arm-blistered-V:ITR=DEC:NONP

'His arm is blistering.'

AntiM applies at the suffix-suffix juncture as illustrated in (6.94) below.

(6.94)
$$[\dot{n}_{i}.s_{i}.m(s.k_{i})]$$

nis-i-mis=ki

tie-ITR-ANTIPASS=DEC:P

'S/he tied all the time.'

AntiM also applies at root-clitic junctures. This is illustrated with second verb stratum clitics in (6.95) (= $m\dot{a}$ 'causative'; = $y\dot{o}$ 'completive').

AntiM applies at the root-clitic junctures where the clitics are third stratum. AntiM applies between the root and the sentence level position 9 morpheme $=k\acute{a}s$ 'desiderative in (6.96) and the root and the clause-type/rank morpheme $=k\acute{a}$ 'prior, different {A,S} subject' in (6.97).

b. ['hà.**nà.kás**.kɨ]

haná=kás=kɨ

vomit=VOL=DEC:P

'He wanted to vomit.' ELIC

(6.97) a. [hā.ˈkà.**ṣà.kí**]

ha **kaṣá=ki** ...

3SG play=PRIOR:DA/S

'When he played ...' ELIC

b. [hà.ˈkà.**ṣà.kí**]

ha **haná=kí** ...

3SG vomit=PRIOR:DA/S

'When he vomited ...'

(6.98) provides an example of AntiM applying between a root-clitic boundary in noun complexes.

(6.98) a. [bà·.kì.rí]

baki=rí

child=TOO

'The child as well.'

```
b. [ʃîː.nò.rí]

fìnó=rí

monkey=TOO

'The monkey as well.'
```

AntiM also applies at the juncture between suffixes and clitics. This is illustrated in (6.99) where AntiM applies at the boundary between -mis 'antipassive' and = $y\delta$ 'completive'.

```
(6.99) a. ['kà.şà.mìs.jó.kì]

kaṣá-mís=yó=ki

play-ANTIPASS-TEL=DEC:NONP

'They all play (all day/all the time).'

b. ['hà.nà.mìs.jó.kì]

haná-mís=yó=ki

vomit-ANTIPASS=CMPL=DEC:NONP

'They all vomit (all day/all the time).'
```

AntiM always applies at the left juncture of the negative morpheme yáma 'negative' as well regardless of its position. An example of AntiM conditioned by the high tone on yáma 'negative' is provided in (6.100).

(6.100) ['pì.mà.**jò.jámà**.kɨ]

 $pi=m\acute{a}=y\acute{o}$ $y\acute{a}ma=ki$

eat=CAUS=CMPL NEG=DEC:P

'He made him eat all of it.'

The examples in (6.99) and (6.100) also show that AntiM applies from left-to right. For instance, in (6.99a) the AM applies at the boundary between the root $kaş\acute{a}$ 'play' and - $m\acute{s}$ 'antipassive' deleting the high tone on the root. Then AntiM applies between - $m\acute{s}$ 'antipassive' and $=y\acute{o}$ 'telic', resulting in a deletion of the high tone on the former morpheme.²⁹

AntiM also applies at the boundary between stem-stem combinations. However, whether it applies obligatorily depends on the construction and whether the leftmost high tone H_1 is underlying or inserted. Noun-noun and noun-adjective combinations behave the same with respect to the application of AntiM. AntiM applies obligatorily if H_2 is

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²⁹ Originally, I thought that multiple high tone reduction was a result of a constraint such that prosodic words only contained one high tone (Tallman 2013, 2014). However, this is false as is demonstrated by the examples in (6.50) where two high tones surface in the stem. Furthermore, the concept of a prosodic word used in my previous descriptions of the prosodic system was stipulatory and not motivated based on the morphophonological facts of Chácobo.

underlying. This is illustrated in (6.101) and (6.102). If H_2 is an inserted tone then AntiM applies optionally. This is illustrated in (6.103) and (6.104).

```
(6.101)
               H<sub>2</sub> is underlying tone (NOUN-ADJECTIVE JUNCTURE)
               ['βà.kɨ.'βá.rà]
               bak<del>í</del>
                       bára
               child bald
               'The bald child.'
               H<sub>2</sub> is an underlying tone (NOUN-NOUN JUNCTURE)
(6.102)
               [ˈjò.ʃì.ˈpó.pò]
               yo∫íni pópo
               demon owl
               'Crested owl (lit. demon owl).'
(6.103)
               H<sub>2</sub> is an inserted tone (NOUN-ADJ JUNCTURE)
               [ˈʃi.nò.ˈhó.sò ] /[ʃi.ˈnó.ˈhó.sò ]
               ſinó
                          hoso
               monkey white
               'White monkey.'
```

(6.104) H₂ is an inserted tone (NOUN-NOUN JUNCTURE)
 [kà.rà.şó.βò] / [kà.rá.şó.βò]
 karáma şobo
 rubber house
 'A rubber house.'

AntiM also applies obligatorily at the juncture between a dependent noun and its head verb. It does not matter whether the dependent noun is the subject (S) or the object (P). This is illustrated in the examples in (6.105). AntiM applies at this juncture regardless of whether H₂ is underlying as in (6.105a) or inserted as in (6.105b).

 $(6.105) \ \ a. \ \ \ \ AntiM \ Between \ S \ and \ V$

['ʃì.**nò.**'**ʔá**.ʃì.kɨ]

ſinó áſi=kɨ

monkey bathe=DEC:P

'The monkey bathed.'

b. AntiM between P and V

[rà. 'mí. sì'. nò. 'há. nà. kì]

rámi= **jinó hana**=ki

Rami=ERG monkey left=DEC:P

'Rami left the monkey.'

AntiM also applies at a verb_stem – noun_stem juncture (the reverse of what is shown in (6.105) above). However, the rule only applies if H_2 is an underlyingly associated tone as it is with the noun root $R\acute{a}mi$ 'Rami' in (6.106).

When H_2 is an inserted tone, AntiM does not apply. This is illustrated with the examples in (6.107) and (6.108). The noun root rabi 'Rabi' does not have an underlying high tone, one is inserted through the high tone insertion rule. This is true regardless of whether H_1 is underlying as in (6.107) or inserted as in (6.108).

At the juncture between an A noun phrase and an P noun phrase, AntiM applies in the same way as it does in (6.107) and (6.108) above. The tone reduction only applies where H_2 is an underlyingly associated tone as in (6.109), but not when H_2 is an inserted tone as in (6.110). In (6.109), the tone reduction on *inaká* 'dog (erg.)' is optional, but this should be attributed to the fact that its right-most tone is a functional tone, rather than an underlyingly associated one (more on this below).

```
[ ʔì.'nà.kà. 'rá.mì. 'tí.ṣà.kì ] / [ ʔì.'nà.ká. 'rá.mì. 'tí.ṣà.kì ]
(6.109)
               ínaka=<sup>′</sup>
                           rámi
                                    tís-a=ki
               dog=ERG
                           Rami
                                    bite-TR=DEC:P
               'The dog bit Rami.'
(6.110)
               [ ʃi. 'nó. 'rá.βì. 'tí.ṣà.kì ]
               ſinó=
                                 rabi
                                          tís-a=ki
               monkey=ERG
                                 Rabi
                                          bite-TR=DEC:P
               'The monkey bit Rabi.'
```

However, between two objects in a double object construction (T-R or R-T), AntiM never applies. This is illustrated in (6.111), where AntiM does not apply between boundary of *finó* 'monkey' and *rámi* 'Rami' regardless of which one is interpreted as the T or the R.

A mutually contrastive sentence where AntiM does apply between the nouns *finó* 'monkey' and *rámi* 'Rami' is provided in (6.112). However, if AntiM applies, the sequence of *finó* and *rámi* is interpreted as a noun-noun combination and is interpreted as in 'The monkey named Rami' as in (6.114).

AntiM also applies optionally at the juncture between sentence level clitics and other elements in the sentence. This is illustrated with the reportative clitic $ki\acute{a}$ 'reportative' and the noun stem $r\acute{a}mi$ 'Rami' in (6.113). In this circumstance the application of the rule is optional.

AntiM does not apply between clause-level conjunctions and other elements in a following clause. This is illustrated in (6.114) below. The clause level conjunction is $=s\acute{o}$ 'prior same {A} subject'.

 $ho=s\acute{o}$ rámi $ra\beta i=\acute{a}$ ák=ki

come=PRIOR:A Rami Rabi=ERG hit=DEC:P

'After he arrived Rabi hit Rami.'

Thus far the discussion has concerned cases where H_1 is an underlying tone and in a few cases an inserted tone. The application of AM varies according to the juncture.

When either H_1 or H_2 is a functional tone the behavior is less variable across different juncture types. First, if H_2 is a functional tone, AM always applies. This is illustrated in (6.90) in §6.2.2 above. In other words, functional tones always condition tone reduction on a high tone to their left.

AM is never obligatory when H_1 is a functional tone. In other words, there are no conditions where functional tones obligatorily delete. AM is optional when H_2 is an underlyingly associated high tone across all junctures (in all constructions). This is illustrated in (6.115) and (6.116).

In (6.115), the ergative high tone on $r \dot{a} m i = '$ 'Rami' is optionally deleted by the presence of an adjacent underlying high tone on $\dot{a}k$ 'hit'.

In (6.116) the genitive functional tone optionally deletes because it occurs to the left of the underlyingly high tone of *inaka* 'dog'.

In contrast to the cases in (6.115) and (6.116), when H_1 is a functional tone and H_2 is an inserted high tone, AM does not apply at the juncture between nouns. This is illustrated in (6.117). For instance, deletion of the genitive high tone = cannot occur in this example, even though, a high tone is inserted on the first syllable of $y\acute{o}bika$ 'shaman'.

(6.117) ['kì.rì.kó.'jó.βɨ.ka] / *[kì.rì.kò.jó.βɨ.kà]
 kiriko= yobɨka
 foreigner=GEN shaman
 'The foreigner's shaman.'

In all other environments where H_1 is a functional tone and H_2 is an inserted tone, the tone reduction of the functional tone seems to be optional. However, this issue requires more research.

Based on the fact that AM can delete functional tones, Iggessen (2007) argued that tone sandhi rules in Chácobo undermined the morphosyntactic coding of case. He referred to this as "a puzzling waste of resources" and described other ways that the Chácobo were able to discern grammatical relations apart from the case morphemes. This argument partly fails, because Iggesen only pays attention to whether the functional tone has a direct manifestation as a high tone on the surface. Because functional tones always delete preceding high tones, they have other distributional correlates, such as the non-appearance of high tones in the rest of the stem they combine with.

This can be illustrated with the ergative case marker by comparing (6.115) above with (6.118). (6.118) presents the same order of elements as (6.115) except with the high tone on the first noun rather than the second. In both sentences AntiM can apply to delete the ergative marker, but this does *not* result in ambiguity.

In (6.115) the surface form of *rami* 'Rami' is either realized as [rà'mí] (LH, where AntiM does not apply) or ['rà.mì] (LL, where AntiM applies). These are the forms of this root when it is marked as ergative. The root *rámi* 'Rami' has one realization when it is an P argument, ['rá.mì] (HL). In other words the tone patterns associated with the A form of this noun are totally disjunct from those of its P form. If one observes the noun root *rabi* 'Rabi' across these two examples the same is true of its realization; LL and LH correspond to the ergative form and HL corresponds to the non-ergative form. In other words, deleting underlying H tones (as in the case of *rámi* 'Rami') or blocking the insertion of H tones (as in *rabi* 'Rabi') can also be viewed as important reflexes of functional tones. Iggesen's view that "suprafixal" case marking is a waste of resources in Chácobo is not based on a complete analysis of the tonal system.

Iggesen is right to point out that there are other ways of determining argument structure in the clause, and this would mitigate against deletion of the functional tone if this were an issue. However, this is not born out by empirical evidence for functional tones in the noun phrase. There is no syntactic difference between a genitive-noun combination and a noun-noun combination. The only difference in this case is the presence of a

functional tone in the genitive-noun construction. This can be illustrated by comparing the genitive-noun construction in (6.117) above with the noun-noun construction in (6.119).

(6.119) [kì. ˈrí.kò. ˈʔí.nà.kà]

kiríko ínaka

foreigner pet

'Pet foreigner.' (e.g. a foreign dog, or a slave who is a foreigner)

In line with Iggessen's point, superficial comparison between (6.117) and (6.119), might make one think that because AntiM can delete the high tone exponent of genitive case such that there is no phonological difference between the genitive construction and the noun-noun combination. However, this is not true. The phonological realizations of the genitive and the dependent non-case marked form of *kiriko* 'foreigner' are disjoint. For the genitive construction, when AntiM does *not* apply the noun root is realized with an LLH shape ['kì.rì.kó] and when AM does not apply the form is realized with an LLL shape ['kì.rì.kò]. In contrast, the non-case marked dependent form is realized with an LHL shape [kì.ri.kò].

In both cases discussed above, there are reflexes on the surface of the functional tones even when AntiM applies, and these perfectly disambiguate between marked and non-marked forms. Iggesen's claim that Chácobo contains a "vast range" of "potentially

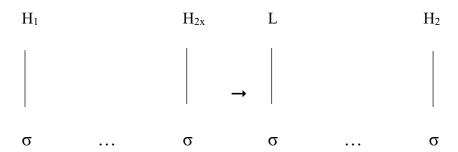
ambiguous constellations" is based on a lack of attention to detail in the surface reflexes of functional tones.

This section has attempted to provide a basic description of AntiM across all relevant junctures. One issue that has not been addressed thus far is whether the optional application of AntiM is more or less likely in certain constructions or under certain phonological environments. This question requires future research based on naturalistic speech.

6.2.4 Long distance tone reduction

Chácobo contains a rule of **long distance tone reduction** (henceforth LDTR), whereby a high tone H_1 is reduced to a low tone when it is followed by one or two toneless syllables and then an underlying high tone H_{2x} . The rule applies at specific morpheme junctures J. It does not matter whether the juncture occurs directly after H_1 or directly before H_{2x} as long as it occurs between them. The rule is represented in (6.120).

(6.120) LONG-DISTANCE TONE REDUCTION (LDTR)



There are two important structure differences between AM and LDTR. First, in contrast to AM, LDTR only applies at the juncture between an element and a small set of suffixes and clitics in the verb complex. In other words, the H_{2x} in the equation above only applies to junctures that involve a small number of suffixes and clitics, but the H₂ of the AM rule is much more general. Secondly, in contrast to AM, LDTR applies from right-to-left rather than left-to-right.

The rule is illustrated in the examples in (6.121) below with a variety of root-suffix and root-clitic combinations.

kása-mís=ki

be angry-ANTIPASS=DEC:NONP

'S/he is angry all the time.'

```
b.
     [ˈkà.ṣà.má.kɨ]
     k\acute{a}sa=m\acute{a}=ki
     be_angry=CAUS=DEC:P
     'S/he made him him/her angry.'
     [ˈkà.ṣà.βɨ.kí.kɨ]
c.
     kása=bɨkí=kɨ
     be angry=COMIT=DEC:P
     'S/he was angry with him/her.'
d.
     [ˈkà.sà.tá]
     kása=tá
     be angry=IMPER:GO&DO
    'Go away and be angry!'
     [ˈkà.sà.ʔá]
e.
     kása=?á
     be angry=INTER:P
      'Was he mad?'
```

As mentioned above, the domain of application of this rule can only be stated by reference to individual suffixes and clitics. (6.122) provides an exhaustive list of all of the affixes and clitics that have been shown to condition LDRT on the element to their left. I will refer to these morphemes as **LDRT domain projecting morphemes**.

(6.122) LDRT DOMAIN PROJECTING MORPHEMES

- a. -mís 'antipassive'
- b. $=m\acute{a}$ 'causative'
- c. =biki 'comitative'
- d. =koná 'counter-directional (intransitive/singular)'
- e. =tikin 'again'
- f. =wisti 'once'
- g. = rabi 'twice or more'
- h. = $\int in\dot{a}$ 'at night'
- i. =ni 'remote past'
- j. =?aí 'second person interrogative'
- k. =t\(\alpha\) 'associated motion imperative'

As stated above, LDRT applies from right-to-left. This is illustrated in the examples below in (6.123). The domains of application of the rules are given in parentheses. Note first that both =biki 'reciprocal' and $=m\dot{a}$ 'causative' condition LDRT, and thus, in principle, one might expect the LDRT to apply twice in the sentence in (6.123). I represent right-to-left application of LDRT from bottom to top starting with the glosses.

'They made him/her annoyed together.'

The first application of the rule is notated with (i), the second potential application of LDRT is above that one in (ii). In the first cycle of the rule (in $=m\acute{a}=bik\acute{i}$), the high tone in $=m\acute{a}$ is deleted. However, in (6.123ii) LDRT does not apply because the high tone of $=m\acute{a}$ 'causative' has been reduced to a low tone by LDRT in (6.123i). In the final surface form the high tone of $k\acute{a}$ sa 'be angry' is not reduced. Compare this with (6.121b), where $k\acute{a}$ sa 'angry' combines with $=m\acute{a}$ 'casuative' and the LDRT deletes the high tone on $k\acute{a}$ sa 'angry'. The difference here is that the high tone of $=m\acute{a}$ 'causative' has not been deleted. The facts above can be understood by positing that LDRT applies on groupings of morphemes from right to left.

AntiM can also block the LDRT from applying, by reducing the high tone on a LDRT domain projecting morpheme. This is illustrated in (6.124), where AM applies at (6.124i), deleting the high tone of =biki 'reciprocal'. In (6.124ii), LDRT fails to apply for the kaşa=biki 'be angry together' because the high tone of biki deletes through AM in (6.124i).

This result further suggests that AntiM applies before LDRT. Since AntiM might be better thought of a set of rules that depends on the nature of the type of juncture the rule applies at and the nature of the high tones involved, the relationship between AntiM and LDTR requires future research.

For certain morphemes, the LDRT-domain projecting property of morphemes is lexically contrastive. For instance, the clause-type/rank morpheme = $2\dot{a}$ 'interrogative, past' appears to be phonologically identical to the clause-type/rank morpheme = $2\dot{a}$ 'nominalization, past, anterior'. However, the interrogative past morpheme conditions LDRT, as is illustrated in (6.121e), but the past nominalizer does not. Contrast (6.121e) with (6.125) below, where the high tone of $k\dot{a}sa$ 'be angry' is *not* deleted by LDRT.

The LDRT rule requires future research. I do not know whether LDRT applies across all verb roots or not. It was only investigated on a small set or verb roots. I do not know whether all speakers converge on which morphemes are LDRT-domain projecting. I identified the LDRT-projecting morphemes based on elicitation with two speakers (Caco Moreno Ortiz, Miguel Chávez Ortiz). I would be extremely surprised to find that all speakers converged on which morphemes conditioned long distance tone reduction, because the class of morphemes in (6.122) seem to not form a coherent structural class. These morphemes have in common that they contain an underlying high tone, they are verbal, and they are bound. However, surprisingly they do cluster around any level in the verb complex.

6.3. APOCOPE, VOWEL LENGTHENING AND MINIMALITY

This section deals with morphophonological processes that are conditioned or constrained by minimality constraints. All lexical roots in Chácobo project a minimality-domain such that they require at least two morae (for verbs) or two syllables (for nouns and adjectives). One cannot identify the minimality domain with the stem, because clitics can interact with it.

There is a class of noun roots and a class of adjective roots that contain short forms, where their final vowel is apocoped. Apart from being lexically specified, apocope is constrained in its application such that it cannot occur on bisyllabic roots; it obeys

bisyllabic minimality. There are also a number of function morphemes (all clitics) that contain short forms with an apocoped final vowel. The short forms do not obey bisyllabic minimality. However, the syntactic distribution of the long and short forms is comparable across lexical roots and functional clitics. Section 6.3.1 deals with apocope across all morphemes in Chácobo.

Verb roots in Chácobo lengthen their vowel in certain syntactic contexts. This process only affects monomoraic roots and thus it seems to be conditioned by a constraint on minimal bimoraicity. There are also a few cases where vowel lengthening occurs in noun roots, but it does not appear to be conditioned by any minimality constraint. All vowel lengthening processes are described in Section 6.3.2.

6.3.1 Apocope

Noun and adjective roots in Chácobo divide into classes according to whether they can drop their final vowel. The basic pattern is illustrated in (6.126). This process only affects nouns and adjectives that have three or more syllables.

- (6.126) a. mitsisi ~ mitsis 'fingernail'
 - b. raísi ~ raís 'father-in-law'
 - c. bakisi ~ bakis 'darkness'
 - d. bitiwáisi ~ bitiwáis 'soup, broth'

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e. awáso ~ awás 'wolf fish'
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- f. $mas \acute{a} s a \sim mas \acute{a} s$ 'stone'
- g. nişişi ~ nişiş 'hoatzin'

As stated in Chapter 2, only sibilants can resyllabify as coda consonants in the short forms. All other final consonants are deleted because of the phonotactic constraint in Chácobo that disallows non-sibilant codas. Nouns or adjectives with more than three syllables are rare in Chácobo. However, out of those that do exist, some of them can apocope their final vowel as illustrated in (6.127)

b. *sisikámi* ~ *sisika* 'Collarbone'

Not all trisyllabic nouns and adjectives can undergo apocope. For instance, the following nouns or adjectives cannot undergo apocope.

(6.128) a.
$$piași \sim *piaș$$
 'vagina'

- b. tápaşi ~ *tápaş 'Andean tucan'
- c. manisi ~ *manis 'Swallow tailed Cotinga'
- d. $m \acute{o} i \acute{f} i \sim *moi \acute{f}$ 'dry'

The examples in (6.128) illustrate that whether a given noun or adjective has an apocoped form is not perfectly predictable. There is one phonological constraint on the application of apocope noted in the introduction. It stated in (6.129).

(6.129) BISYLLABIC MINIMALITY: Short apocoped roots must be bisyllabic.

To illustrate the constraint in (6.129) note that there are no cases of bisyllabic roots with monosyllabic root forms; for example, the noun root *honi* 'man' does not apocope to **ho*. One might argue that (6.129) should or could be stated as a constraint on bimoraicity. However, this makes incorrect predictions. As noted in Chapter 2, Chácobo provides evidence for weight-by-position whereby coda consonants are treated as one mora. There are no cases of nouns or adjectives of the form CVSV where S is a sibilant that have an apocoped form (e.g. paşa 'raw, new' does not apocope to * $p\acute{a}$ s for example).

Apart from the phonological constraint noted above, apocoped forms only appear in certain syntactic contexts. There are two constraints on the application of apocope on lexemes that have apocoped forms. The first constraint is that if a noun or adjective root is directly to the left of an underlying functional high tone, then the apocoped short form cannot surface. This is illustrated in the examples in (6.130), (6.31) and (6.132) from naturalistic speech. Instances of the short form of the noun root *áwara~áwa* 'tapir' are illustrated in (6.130) and (6.31).

- (6.130)hatsi kiá ka=só áwa sáni ha bi=ni=kithen tapir pubic hair 3 grab=REMP=DEC:P REP go=PA:A 'Then (it is said) when he went that he (the man) took the tapir and the pubic hair.'
- (6.131) hatsi kiá áwa ha pi=yáma=ní=ki
 then REP tapir 3SG eat=NEG=REMP=DEC:P
 'Then (it is said) he didn't eat tapir.' TXT055:128

The blocking of apocoped forms is illustrated in (6.132). The short form *áwa* 'tapir' cannot surface in these examples, because it is left-adjacent to a functional high tone morpheme.

- (6.132) a. ha?á tsi no?ó şani hana=şo=wɨ
 there P5 1sG:GEN pubic.hair leave=REM=IMPER
 "Leave my pubic hair over there."
 - b. hana=?á=ka ho=páma awara= ſitá=kí tsi leave=NMLZ:P=REL come=CONCUR tapir=ERG cross=D{A/S} Р5 tsi awara=' ho?ití tsi bikiri=?ái=na SO P5 tapir=GEN heart P5 wrap=NMLZ:IPFV=EPEN DEC

'After leavinig it, while the tapir comes and crosses (the path), it (the pubic hair) will wrap itself around the tapir's heart.' The second constraint is based on the position of the noun or adjective root in the sentence. When a noun or adjective root is the right-most element in an extended-NP to the right of the clause-type/rank morpheme (in position 16 of the sentence), the apocoped form cannot surface. This is illustrated in the text example in (6.133). The noun root *áwara* 'tapir' follows the clause-type/rank morpheme in the example above and is the right-most element of the noun phrase it heads. Thus, the short form does not surface.

In this dissertation I understand both of the constraints as primarily syntactic. However, there are plausible reasons to consider a phonological account for the blocking of apocope beside a functional high tone morpheme.

Apocope is *extremely* rare on noun roots that have a final associated high tone (Tallman 2017). This makes the phonological account attractive, since the banning of apocope beside functional high tone morphemes might simply follow from a constraint banning apocope on all syllables with an underlying high tone.

The phonological account of the blocking of apocope goes as follows; the functional high tone = 'ergative' docks to the right-most syllable of *áwara* 'tapir' causing it to be derived as *awará*. Since apocope cannot delete syllables with high tones, the form

awa is not permitted. The phonological account requires that the docking of functional tones to the right-most syllable must occur before the apocope process.

One problem with the strictly phonological account is that the blocking of apocope still applies even when the functional tone is deleted. Recall from Section 6.2 that floating tones are optionally deleted through AntiM when they precede a high tone. For instance, the noun root *kamáno* 'jaguar' has the short apocoped form *kamá* illustrated. An example of this form surfacing in a sentential context is provided in (6.134a). When the lexical root occurs to the left of an ergative marker, the apocoped form cannot occur even when the functional high tone is deleted as is illustrated in (6.134b).

koya=´ **kamáno tsáya**=kɨ

Coya=ERG **jaguar see**=DEC:P

'Coya saw the jaguar.'

b. [kó.jà.kà.mà.nò.tí.sà.ki] / ['kò.jà. 'kà.mà.nó.tís.à.ki]

koya **kamáno**- **tíş**-a=ki

Coya jaguar=ERG bite-TR=DEC:P

'The jaguar bit Coya' ELIC

A purely phonological account would have to claim not only that apocope cannot result in the loss of a functional high tone, but that apocope cannot apply to a syllable that

has ever had a functional tone docked to it, even if this functional tone has been deleted. This is why I understand the constraint illustrated in (6.134) to be syntactic.

Prost (1962: 111) associates the apocoped form with the absolutive. The analysis was repeated by subsequent researchers (see Iggesen and Valenzuela [2007]; Córdoba, Villar and Valenzuela [2012]). The analysis is incorrect or at least misleading. Note that functional high tone morphemes are all postpositions. The constraint as I have specified it does not apply to elements inside noun phrases that are coded with a functional high tone morpheme. Apocoped forms can, therefore, occur in noun phrases marked with the ergative functional high tone morpheme as long as they are not directly to the left of this high tone. This is illustrated in (6.135). The noun root *kamáno~kamá* 'jaguar' has an apocoped form. However, in the example below the apocoped form surfaces even though this noun root is in an ergatively marked noun phrase. The reason is that the apocope is only blocked when *kamáno* 'jaguar' is directly to the left of the functional high tone marker, but in this case, it is interrupted by the adjective *siri* 'old'.

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³⁰ Prost (1962: 111) states "Transitive object and intransitive subject are both marked by subtraction of final CV". The analysis is repeated in Córdoba, Valenzuela and Villar (2012: 47) 'The absolutive presents two variants; one form which is trisyllabic and another which is disyllabic with the cut off" (my translation); "El absolutivo presenta dos variantes: la forma trisilábica y otra disilábisa recortada en la última sílaba.". Note that Loos (1973, 1999) questioned this analysis, but did not provide a detailed account of the distribution of apocope.

Other examples of a apocoped form occurring in an ergatively marked noun phrase is provided in (6.136) and (6.137). The apocoped form of $awini\sim awi$ 'woman' surfaces in the following examples because awi is not at the right-edge of the noun phrase. Rather the plural marker $=bo\sim =ba$ 'plural' is.

'The women bewitched them.' TXT 034:185

(6.137)
$$om\acute{a}ka$$
 $ho=?\acute{a}i=na$

tucunare come=NMLZ:IPV=EPEN

awi=ba=' omáka bi=?ái=na

mother=PL=ERG tucunare bring=NMLZ:IPV=EPEN

'The tucunare are coming, (and then) the women bring the tucunare.'

TxT045:264

Córdoba et al. (2012) and Valenzuela and Iggesen (2007) also claim that apocope is blocked for noun phrases that occur-post-verbally (position 8 of the verb complex). As I stated above, apocope is blocked at the right edge of a noun phrase that occurs after a clause-type rank morpheme (position 14), which is a distinct generalization from that of Córdoba et al. (2012) and Valenzuela and Iggesen (2007). The latter predicts that apocope will be blocked when the \bar{V} -constituent is fronted and a {A,S} subject noun phrase occurs between the \bar{V} -constituent and the clause-type/rank morpheme. However, this is not correct.

That Córdoba et al. (2012) and Valenzuela and Iggesen's (2007) generalization concerning the blocking of apocope is incorrect is illustrated by the examples in (6.138) and (6.139). In both of these examples the noun roots *yobika~yobi* 'shaman' and

kamáno~kamá 'jaguar' surface with their short apocoped forms. In both examples they occur after the main verbs (underlined). The reason the apocoped forms surface is because these nouns precede the clause-type/rank morphemes (underlined and in bold).

Note that even when an apocopable morpheme occurs after the clause-type/rank position, apocope is not blocked without caveats. In order for apocope to be blocked the noun or adjective needs to be on the right edge of the noun phrase in position 16. This is illustrated with in (6.140) and (6.141) below. In both cases the noun root *kamáno~kamá*

'jaguar' follows a clause-type/rank morpheme and in both cases the apocoped form surfaces. These examples illustrate that the apocope is *only* blocked in position 16 when the relevant noun or adjective is the right-most element in the noun phrase.

(6.140)
$$ka=ni=ki$$
 $kam\acute{a}$ $siri$

go=REMP=DEC:P $jaguar$ old

'The old jaguar had already left.' ELIC.

(6.141) $h\acute{a}tsi$ $ki\acute{a}$ ha $a(k)=ka(n)=ni=ki$

then REP 3 do=3PL=REMP=DEC:P

 $tiobiri\acute{a}=ka$ $kam\acute{a}$ $tfa?ita=bo$ $ki\acute{a}$
 $two=REL$ $jaguar$ $big=PL$ REP

'And they killed them (it is said), two large jaguars (it is said).'

 $Txt 050:224$

The full set of apocopable forms found in my data base are listed below in (6.142) to (6.169) organized by the phonological shape of their final two phonemes. Thus far I have found 159 forms that have a short apocoped form. I have organized these forms according to their final syllable in order to show that the apocoped syllables should not be regarded as reflexes of some suffixal formative. The portion of the phonological form of these morphemes that is deleted under apocope is represented in parentheses.

- (6.142) aa
 - a. titika(a) 'tall'
- (6.143) *tfi*
 - a. kɨbí(tʃi) 'lips'
 - b. $rini(t/i) \sim rini$ 'an inclined thing'
 - c. riispi(tfi) 'bow and arrow'
- (6.144) *tfo*
 - a. boi(t/o) 'beez wax, tar'
- (6.145) *ka*
 - a. honokára(ka) 'rusty margined Guan'
 - b. isa(ka) 'bird'
 - c. ina(ka) 'dog'
 - d. mabá(ka) 'roots sticking out of ground'
 - e. *mápo(ka)* 'the chalky mud'
 - f. matsá(ka) 'mud'
 - g. tsáka(ka) 'agouti'
- (6.146) ki
 - a. wɨá(ki) 'dawn'
- (6.147) ko
 - a. bóto(ko) 'picazuro pigeon'
 - b. *iko(ko)* 'all the children of a household'

- c. tsóbo(ko) 'naked'
- (6.148) ki
 - a. mosó(ki) 'oar'
 - b. ható(ki) 'stomach'
 - c. ayó(ki) 'Velvet-fronted grackle'
 - d. roró(ki) 'corn flour'
- (6.149) *ma*
 - a. wifti(ma) 'star'
 - b. *tʃitʃá(ma)* 'small basket'
 - c. popó(ma) 'duck'
 - d. báko(ma) 'type of bee (machuhuaso)'
 - e. báto(ma) 'bocachica (cz)?'
 - f. korá(ma) 'el paquio (arb.)'
 - g. wáko(ma) 'babocuro (small partridge)'
 - h. wani(ma) 'peach palm'
 - i. itsá(ma) 'el majo (palmera)'
- (6.150) *mi*
 - a. nonó(mi) 'muscovy duck'
- (6.151) mi
 - a. $poy\acute{a}(mi)$ 'arm'
 - c. biti(mi) 'soup'

- d. witfa(mi) 'perpendicular' (?? LLH tone needs to be checked)
- e. $isp\acute{a}(mi)$ 'side burns'
- g. hibá(mi) 'post, arc'
- h. $\int i r i(mi)$ 'clear' (adj)
- i. *şɨpá(mɨ)* 'motacusillo leaf'
- (6.152) ni
 - a. pişki(ni) 'armpit'
 - b. hasi(ni) 'razor-billed curassow'
 - c. ka?i(ni) 'military macaw'
 - d. yosi(ni) 'devil, demon, spirit'
 - e. bipí(ni) 'resin, gum'
 - f. tfifi(ni) 'red feather of a bird'
 - g. isi(ni) 'pain'
 - h. ha?i(ni) 'girl'
 - i. nimi(ni) 'deep water'
 - j. no?í(ni) 'parasite'
 - k. rɨwi(ni) 'point'
 - 1. sáki(ni) 'uvilla (tree/fruit)'
 - m. sibí(ni) 'motacú'
 - n. bai(ni) 'swelling, flood'
 - o. wɨnɨnɨka(ni) 'garden'

- p. koi(ni) 'smoke'
- (6.153) na
 - a. koki(na) 'fire fly'
 - b. wapá(na) 'flood plain'
 - c. maká(na) 'mountain, valley'
 - d. masá(na) 'termite'
 - e. (na)ská(na) 'sweat'
 - f. pɨpá(na) 'width'
 - g. tsapá(na) 'fish scale'
- (6.154) no
 - a. kamá(no) 'jaguar'
 - b. boi(no) 'woodpecker'
 - c. bawi(no) 'type of fish (pintado/surubi)'
 - d. biwi(no) 'grain of the cheek'
 - e. bɨró(no) 'easy, light'
 - f. bikó(no) 'el renacuajo'?
 - g. biwi(no) 'ant eater'
 - h. bokó(no) 'vine'
 - i. komɨ(no) 'drum'
 - j. *tfiami(no)* 'early in the morning'
 - k. ma?i(no) 'cichlid (fish)'

- 1. saní(no) 'fish'
- m. si?ó(no) 'striped'
- n. tapó(no) 'root'
- o. satá(no) 'mate, coconut shell'
- p. simi(no) '(no)cturnal monkey'
- q. sópi(no) '(no)cturnal butterfly'
- r. yotá(no) 'southern wind'
- (6.155) *ni*
 - a. miki(ni) 'hand, arm'
 - b. waşmi(ni) 'cotton'
 - c. tokani? 'peg'
 - d. bisá(nɨ) 'clase de palomita' (from Zingg)
 - e. taná(nɨ) 'bridge'
 - f. şawá(nɨ) 'huacamayo (paraba ojo)'
 - g. sani(ni) 'inside of the stomach'
 - h. sɨná(nɨ) 'pacai'
 - i. şa?á(ni) 'tick, mite'
 - j. iá(nɨ) 'lake'
 - k. riski(ni) 'embers'
- (6.156) *pa*
 - a. sisipa 'Raft'

- b. titipa 'Gray-headed kite'
- c. ha?ipa 'Father'
- d. *şɨnipa* 'Year'
- (6.157) *po*
 - a. mifa(po) 'blister'
- (6.158) *pi*
 - a. *mábiş(pi)* 'dandruff'
- (6.159) ra
 - a. *ispa(ra)* 'temple'
 - b. $\dot{a}wa(ra)$ 'tapir'
 - c. háska(ra) 'same'
 - d. mása(ra) 'garbage'
- (6.160) ro
 - a. másko(ro) 'bald'
- (6.161) sa
 - a. *ítsis(a)* 'hot'
- (6.162) si
 - a. $h \acute{o} t s(i) s(i)$ 'tone nail'
 - b. mits(i)s(i) 'finger nail'
 - c. nasis(i) 'type of yuca'

```
'string'
               risís(i)
         e.
         f.
                             'fart'
               ts(i)pís(i)
                             'stiff (body-part)' (hataris(i) 'stiff mouth')
               -tarás(i)
         g.
(6.163)
               \int (i)
               komíf(i)
                            'the smell of smoke'
         a.
               wáif(i)
                            'broth'
         b.
                            'a long sharp point'
               rɨwiʃ(i)
         c.
                            'colored peccary'
         d.
               yawif(i)
(6.164)
               s(a)
                            'ear wax'
               pabɨs(a)
         a.
                            'buttocks'
         b.
               tſikás(a)
                            'rotten'
               bóas(a)
         c.
                             'gland of the throat'
         d.
               tɨ̞s(a)ɨṣɨ
(6.165)
               S(i)
               nɨṣɨʂ(ɨ)
                             'hoatzin'
         a.
                             'half, part'
               bɨkɨs(ɨ)
         c.
         d.
               hop_{is}(i)
                               'isango (type of fish)'
                               'gland'
               şάɨς(ɨ)
         e.
```

'with various colors'

d.

(6.166)

ŞO

kɨsís(i)

mabós(o) a. 'tree' (6.167)ta'yellow browned tyrant' hɨnɨ bai(ta) a. isko howi(ta) 'Dusky-green Oropendola' b. tʃaʔí(ta) 'grand father' c. 'bunch, cluster' d. tɨṣká(ta) 'village' e. yaká(ta) (6.168)ti 'grandmother' ɨwá(ti) a. yora kɨrɨ(tí) 'tatoo' a. b. poa(tí) 'rug' (6.169)tŧ biſá(tɨ) 'la cuta (arb.)' a. 'patasca (type of bolivian dish)' ma?ó(tɨ) b. 'cacao' c. no?ó(tɨ)

'caiman'

6.3.2 Vowel lengthening

kápi(ti)

d.

Vowel lengthening occurs on monomoraic verb roots and noun roots that contain an associated high tone on their final syllable. The vowel lengthening on monomoraic verb

roots is prevalent across all verb roots in certain syntactic contexts. The lengthening of monomoraic verb roots is partially conditioned by bimoraic minimality. However, in certain contexts, vowel lengthening of such roots is not an automatic consequence of satisfying minimality and seems to encode affect.

As stated in Chapter 2, there are no monomoraic noun roots. The vowel lengthening on noun roots is not conditioned by minimality. Rather it is a process that occurs when certain noun roots combine with the admonitive suffix $=r\acute{a}$.

(6.170) provides a list of monomoraic roots in Chácobo. These are all subject to vowel lengthening under certain circumstances. When monomoraic roots lengthen the Chácobo represent them with two vowels orthographically. For ease of exposition I will follow this convention in my phonemic transcriptions.

- (6.170) a. ka~kaa 'go'
 - d. bo~boo 'go (also go w/ plural subject)'
 - c. hó~hoo 'come, arrive'
 - d. $bi \sim bii$ 'bring (also come w/ plural subject)'
 - e. ko~koo 'wander, hunt, be born'
 - f. *i~ii* 'do'
 - g. $\dot{a} \sim aa$ 'do, kill, take, drink, hit'
 - h. pi~pii 'eat'

Verb roots that are at least bimoraic do not have lengthened allomorphs. (6.170) above is an exhaustive list of all of monomoraic verb roots in Chácobo that have lengthened forms, except for the verb i 'say' which does not lengthen its vowel. As stated in Chapter 2, monosyllabic verb roots with a CVC shape such as his do not lengthen their vowel under any circumstance. This can be explained if the final consonant of such forms has a mora. Lengthened allomorphs occur when the verb root does not combine with any affixes or clitics. In cases such as (6.171) where the verb root is directly to the left of a noun complex, the verb root must lengthen. The short allomorph cannot surface.

Vowel lengthening is blocked when the verb root is adjacent to certain verbal affixes or clitics. All affixes block vowel lengthening. Clitics vary in terms of whether they necessarily block vowel lengthening. This is illustrated with the \bar{V} -constituent verbal clitics in (6.172) below. The clitic =ma 'causative' disallows vowel lengthening completely. However, the clitic =biki 'interactional' allows vowel lengthening.

```
(6.172) a. [pì.ˈmá.kɨ] (*[píì.má.kɨ] )

pi=má=kɨ
eat=CAUS=DEC:P

'S/he made him eat.'
b. [ˈpì.βɨ.kí.kɨ ] / [ˈpíì.βɨ.kí.kɨ]

pi=bɨkí=kɨ
eat=INTRCT=DEC:P

'S/he ate with him/her.'
```

The clitic =biki 'interactional' is different from the causative in that the vowel lengthening of monomoraic verb roots can occur. However, when the lengthened verb root occurs adjacent to the clitic =biki it is distinct from the lengthened verb roots that appear in (6.171). It adds an affective/emphatic meaning to the function expressed by the affix or

clitic that the verb root is adjacent to. I represent this below as a μ (mora) which attaches to the vowel of the verb root, resulting in a bimoraic (long) vowel.

(6.173) [pîì.βɨ.kí.kɨ]pi-μ=bɨkí=kɨeat-EMPH=INTRC=DEC:P'He SURELY ate with HIM/HER!' ELIC

The semantics of such lengthened forms still require detailed investigation, but the important point for the purposes of this section is that affixes and clitics vary in terms of whether they can or must occur with a lengthened verb root, and whether the lengthened version encodes no semantic difference as in (6.171) or encodes an emphatic difference as in (6.173).

Sentence level clitics similarly vary in terms of whether they block vowel lengthening or not. The clitic =rabi 'more than once' is like the clitic =ma 'causative' in that it blocks the lengthened vowel root from occurring at all. Stated more abstractly, =rabi 'more than once' is incompatible with μ 'emphatic'. This is illustrated in (6.174a). The clitic =pari 'first' can can block vowel lengthening but is also compatible with the affective lengthened verb root. This is illustrated in (6.174b) and (6.174c).

```
(6.174) a. ['pì.rà.βɨ.kɨ] / *[píì.rà.βɨ.kɨ]

pi=rabɨ=kɨ

eat=PAUC=DEC:P

'S/he ate more than once.'

b. [pì.pà.rí.kɨ]

pi=parí=kɨ

eat=FIRST=DEC:P

'S/he ate (it) first.'
c. [píì.pa.rí.kɨ]

pi-μ=parí=kɨ

eat-EMPH=FIRST=DEC:P

'And s/he ate (it) FIRST OF ALL.' ELIC
```

An example of affective vowel lengthening from naturalistic speech is provided in (6.175) below.

(6.175)[kaa.pa.ri.no.ma.ni.no.kí. ka.?i.ka.mi.tsa.i.tsi.kiá.ho.ni.ní.ki] ka-µ=parí=no=ma=ní no-kí ka?í ka mitsa go-EMPH=FIRST=HORT=NEG=INTER 1PL-ACC know REL POSS i tsi kia hóni =ní=ki Р5 say REP man =REMP=DEC:P

The free negative morpheme $y\acute{a}ma$ patterns with clitics like $=par\acute{i}$ in (6.174b) and (6.174c), despite the fact that it is not a clitic (it is not bound). Free adverbs such as pistia 'small' require that the verb lengthen. These forms are like noun roots in that they cannot block vowel lengthening when they are adjacent to the verb root.

The epistemic clitic = $kar\acute{a}$ 'dubitative' and the associated motion/location clitic = $p\acute{a}$ 'do and go (outside of vision) are the only clitics in Chácobo that require that the verb lengthen. The short form is not permitted in a sentence such as (6.176).

(6.176) a. [pîì.kà.rá.kì.sá] *[pì.kà.rá.kì.sá]
$$pi = \mathbf{kar\acute{a}} = k\mathbf{i} \qquad s\acute{a}$$
 eat =EPIS1=DEC:P EMPH

'It seems that they (the fish) are not catching (lit. eating)' OBSV

[&]quot;Let's go because they could discover us." the man said

b.
$$[pî.pá.ki]$$
 * $[pi.pá.ki]$

$$pi = pa = ki \quad sa$$

$$eat = GO\&DO = DEC:P \quad EMPH$$

'He went somewhere (away from the speaker) and now he is eating.' OBSV

When the verb lengthens beside the adverb *pistia* 'small' or the epistemic modal $kar\dot{a}$ it does not have an emphatic sense. Rather its lengthening seems to be purely structural as in the case in (6.171). Apart from $=kar\dot{a}$ 'epistemic modal' and ='pa 'do and go' all verbal clitics in Chácobo behave like $=t\acute{a}pi$ 'punctual', blocking vowel lengthening or like =pari 'first' allowing vowel lengthening but with a special affective meaning, glossed with a μ 'emphatic' above.

(6.177) lists all of the verbal affixes and clitics that allow affective vowel lengthening when adjacent to the verb root. That is, they do not necessarily block vowel lengthening. All affixes and clitics that are not listed below are incompatible with a lengthened vowel root.

(6.177) a.
$$=biki$$
 'reciprocal'

- b. =tikin 'again'
- c. =baʔiná 'all day'
- d. =wisti 'once'
- e. =ro?á 'limitative'

f. =pari 'first'

g. =wini 'before someone else'

h. $=kan\acute{a}\sim=bon\acute{a}$ 'going'

i. = $hona \sim = biria$ 'coming'

j. $=k\acute{a}s$ 'volitional'

k. =pi 'anxietive'

1. =pi 'permissive'

m. =yoi 'sympathetic'

There are no temporal distance clitics (position 13) nor clause-type/rank clitics (position 14) that are compatible with a left-adjacent lengthened verb root. All suffixes block vowel lengthening. Thus, with respect to the allomorphy of monomoraic verb roots, the verbal clitics which are nearly the most distant from the verb root and nearly the least bonded with it morphosyntactically pattern with suffixes.

There is one case where noun roots vary in terms of whether they can occur with a lengthened vowel. All noun roots with an underlying high tone on their final syllable require this final syllable to lengthen in combination with the admonitive ='ra. The alternation is illustrated with the examples in (6.178) below. Noun roots like *hini* 'water' with no underlying high tone on their final vowel do not display the vowel lengthening. Noun roots like *baki* 'child' must lengthen their final vowel when they are left adjacent to the admonitive.

(6.178) a. [hì.nì.rá]

hɨnɨ-rá

water-ADMON

'Oh the great water!'

b. [βà.kɨi.rá]

baki-rá

child-ADMON

'Oh the great wonderful child!'

Vowel lengthening does not occur in any other circumstances on noun roots.

6.4. REDUPLICATION

Reduplication encodes pluractionality, durative and some imperfective meanings for verbs, and similative and veritative meanings in nouns. In rare occasions it also encodes distributive meanings when applied to nouns. The semantics of reduplication are described in Chapter 11 for verbs and Chapter 14 for nouns. This section is concerned with the formal morphosyntactic and phonological aspects of reduplication. In my view the morphosyntax of reduplication is so deeply interwoven with phonological considerations that it is difficult to fully describe one without the other. This is why I treat the morphosyntax and phonology of reduplication in this section.

Reduplicative constructions are often described as consisting of a base and reduplicant (McCarthy 1994; McCarthy 1997; Urbanczyk 2001). In the following discussion I will refer to the left constituent of the reduplication construction as the reduplicant and the right most constituent as the base. The reason for this is that the left constituent can always be viewed as some subconstituent of the morphosyntactic constituent on the right side, but the reverse is not true. On the other hand the reduplicant always corresponds to a morphosyntactic subpart of the base – it is not clear that phonology is the overriding consideration in identity. It is for this reason that I do not provide a special gloss for the reduplicant but rather gloss it as its own constituent with the same categories as that of the base.

6.4.1 The linker formative

The reduplication construction imposes a high tone onto the final syllable of the reduplicant and the base. This is illustrated in (6.179). Recall that a verb root without an underlying high tone such as *hana* 'leave' will receive a high tone on its first syllable through high tone insertion, illustrated in (6.179a). However, in the reduplication construction, both the base and the reduplicant surface with a final high tone, illustrated in (6.179b).

(6.179) a. ['há.na.ki]

hana=ki
see=DEC:P

'S/he left it/him/her.'

[hà. 'ná.hà. 'ná.ki]

hana = hana = = = ki

leave =LNK leave =LNK =DEC:P

b.

'S/he was leaving things.' / 'S/he kept leaving it.'

I understand this alternation as resulting from a linker formative that occurs on the right edge of the constituents in the reduplicative construction. The tonal patterns associated with reduplication fall out of the assumption that there are linker formatives as long as it is assumed that these are listed tones (see Section 6.2.2). In keeping with their status as listed tones, they delete if their docking to the right-most syllable would result in a sequence of two high tones. In Section 6.2.2 I describe this as a version of Meeussen's rule. The application of this rule to the linker morpheme is illustrated in (6.180). The verb root $k\dot{a}ga$ 'be angry' does not surface with a final high tone in the reduplication construction.

'S/he was angered.'

The reduplication of monomoraic roots is different from that of other roots in some important respects that I will describe below. The tonal patterns of reduplicated monomoraic roots are illustrated in (6.181) below.

The high tone patterns on monomoraic reduplication constructions is accounted for if linker tones are understood as listed tones. The example in (6.181b) is straightforwardly

accounted for, because the listed tones simply delete following the listed high tone deletion rule I, depicted in (6.88). After this AntiM applies two the two underlying H-tones resulting in the HL pattern observed in [á?a].

(6.181a) is accounted for with Meeussen's rule applying to listed tones (as depicted in (6.89)) as long as this rule applies from the left of the sentence to its right. The first listed high tone docks to the first syllable of the reduplicant bi 'grab'. The second listed tone docks to the base bi 'grab'. Then the latter deletes according to listed high tone deletion rule II depicted in (6.89) which deletes any high tone before another underlying high tone. This results in a HL tone pattern; which is what we predict from the application of Meeussen's rule across adjacent high tones.

6.4.2 Conscription

Minimally a reduplicant consists of a root, but reduplicants can be complex consisting of more than one morpheme. I will refer to the ability of a functional morpheme to appear on the reduplicant as **conscription**. A non-root morpheme that appears repeated, doubled or copied in the reduplicant will be referred to as **conscripted**. Functional morphemes fall into four classes according to their conscription properties; (i) obligatorily conscripting; (ii) freely conscriptable; (iii) variably conscriptable (iv) unconscriptable. Definitions of these concepts are provided in (6.182) and illustrative examples are provided below.

(6.182) CONSCRIPTION

- a. **Obligatorily conscripting**: If the affix or clitic is on the base, it must also appear on the reduplicant.
- b. **Freely conscriptable**: If the affix or clitic is in the base, it *can* appear on the reduplicant, as long as the reduplicant corresponds to a contiguous string of morphemes found in the base.
- variably conscriptable: If the affix of clitic is in the base it must appear on
 the reduplicant if not doing so would result in a monomoraic reduplicant.
 Otherwise the affix is freely conscriptable.
- d. **Unconscriptable**: The affix or clitic never appears on the reduplicant.

All prefixes are obligatorily conscripting. This means that if a prefix combines with a base root is must also occur with the root of the reduplicant. For instance in the following example, the bosy-part prefix ta- 'foot' must occur on the reduplicant, it cannot be excluded. This is illustrated in (6.183)

(6.183) [í.nà.tá.nìş.tá.nìş.kì.hó.nì]

ína tá-nɨş=´ tá-nɨş=´=kɨ hóni dog foot-tie=LNK foot-tie=LNK=DEC:P man

'The man was tying the legs of the dogs.'

There are three suffixes and two clitics in Chácobo that are also obligatorily conscripted. They are listed in (6.184) below.

(6.184) *Obligatorily conscripting suffixes and clitics*

- a. $-i\sim-i\sim-o$ 'intransitive'
- b. -mis 'antipassive'
- c. -wa 'transitive'
- d. = rabi 'many times'
- e. =ko 'distributive'

The distinction between these freely conscriptable and variably conscriptable morphemes is subtle. Freely conscriptable morphemes always optionally combine with the root of the reduplicant if they combine with the root of the base. Variably conscriptable morphemes are only optional when they combine with a root or stem that contains two or more morae. But when a variably conscriptable morpheme combines with a monomoraic root it must appear on the base and the reduplicant.

The difference is illustrated in (6.185) and (6.186). In combination with a bimoraic root, both the clitics =ma 'causative' and $=kan\acute{a}\sim=\beta on\acute{a}$ 'going' display identical behavior. When they combine with a base they optionally occur on the reduplicant. However, in combination with a monomoraic verb root it can be shown that =ma is variably

conscriptable while $=kana\sim=bona$ is optionally conscriptable. The sentences in (6.185) show that =bona 'going' is either repeated with the root of the reduplicant or only occurs with the base root, even in cases where the verb root is monomoraic.

This is not true of the clitic $=m\acute{a}$ 'causative'. The clitic $=m\acute{a}$ cannot be ommitted from the reduplicant if present on the base. The unacceptability of (6.186) shows that $=m\acute{a}$ is variably conscripted rather than optionally conscripted as in $=\beta on\acute{a}$.

Morphemes such as $=m\acute{a}$ 'causative' do not obligatorily conscript when they combine with a verb stem that contains more than one mora. This is illustrated in (6.187). The morphemes -mis 'antipassive', =biki 'comitative', and $=m\acute{a}$ all obligatorily conscript in the context of a lone bimoraic verb root. However, in the following example they are all optional.

The sentence above also illustrates another constraint on reduplication. While there does not appear to be any size constraints on the reduplicant, the reduplicant must correspond to a contiguous string of morphemes of the base. For instance, in the sentence above, =biki 'comitative' could not be omitted in the reduplicant without also omitting $=m\acute{a}$ since then the reduplicant would not consist of a contiguous string of morphemes present in the base otherwise.

To my knowledge the only variably conscriptable morphemes in Chácobo are $=m\acute{a}$ 'causative' and $=bik\acute{i}$ 'comitative'. These morphemes are interesting in the context of the minimality constraints discussed in Section 6.3. Arguably, the requirement that these morphemes appear on the reduplicant just in case the reduplicant is monomoraic reflects a preference that the reduplicant be bimoraic. However, the base and the reduplicant are still monomoraic if there is no adjacent obligatory conscripting or variably conscripting morphemes.

However, a much greater number of clitics in Chácobo are freely conscriptable and as such their (non)appearance on the reduplicant does not obviously have anything to do with minimality constraints.

The fourth class of morphemes are those that are unconscriptable. Unconscriptable clitics cannot appear in the reduplicant. Temporal distance morphemes (position 13, verb stratum 3), the plural morpheme $=k\acute{a}n$ (position 12, verb stratum 3), and clause-type/rank morphemes (position 14, verb stratum 3) are unconscriptable. They cannot appear in the

reduplicant. Clitics of the V-constituent vary in terms of whether they are freely conscriptable or unconscriptable. Sentence level clitics of positions of position 9 likewise vary in this regard. Below I list the unconscriptable clitics of Chácobo.

(6.188) *Unconscriptable clitics*

- a. All temporal distance morphemes (position 13, verb stratum 3)
- b. All clause-type/rank morphemes (position 14, verb layer 4)
- c. $=k\acute{a}n$ 'plural'
- d. =*parí* 'first'
- e. $=ri\acute{a}$ 'augmentative/attenuative'
- f. =wisti 'once'
- g. =baʔiná 'all day'
- h. = $\int in\acute{a}$ 'at night'
- i. = farí 'tomorrow'
- j. $=kar\acute{a}$ 'epistemic modal'
- k. =pi 'permissive'
- 1. = $p\acute{a}$ 'mirative'

There is one unconscriptable suffix; the causative/applicative -?ak (see Chapter 8). Apart from this one suffix, all affixes are obligatorily conscripting. There are a number of freely conscriptable clitics that are banned from occurring in the reduplicant, but only in the

past tense. These are listed in (6.189). Presumably the explanation for this constraint is semantic, but I do not know what the explanation is at this point.

(6.189) Freely conscriptable clitics only in the past

- a. $=pa\acute{o}$ 'habitual'
- b. =tikin 'again'
- c. $=k\acute{a}s$ 'volitional'
- d. $=kay\acute{a}\sim=bay\acute{a}$ 'do and go'

There is one freely conscriptable clitic =wini 'before someone else' that displays the reverse situation; it freely conscripts in the non-past, but is banned from conscription in the past. The list of unconscriptable clitics in (6.188) does not include perfective clitics which are banned from all reduplication constructions for semantic reasons (Chapter 11).

Chapter 7. Arguments, grammatical relations and alignment

This chapter provides a description of grammatical relations and alignment in Chácobo. In Chapter 4 (Sections 4.1.1.2 and 4.1.1.3) I divided arguments in Chácobo into five distinct grammatical relations listed in (7.1).

- (7.1) a. A: Subject of a transitive verb.
 - b. S: Subject of an intransitive verb.
 - c. **P**: Object of a monotransitive verb.
 - d. T: Theme object of a ditransitive verb.
 - e. R: Recipient object of a ditransitive verb.

Alignment refers to the way such arguments are grouped together across constructions and referential domains. The **referential domain** refers to semantic subcategories of arguments of the verb that are relevant for the coding of dependency (Bickel et al. 2014). For instance, Chácobo uses an ergative case {A} in the referential domain of noun phrase, and an accusative case {P} in the referential domain of pronouns (see Section 4.1.1.2 for a basic introduction). Four alignments can be distinguished by comparing intransitive and transitive constructions.

- (7.2) a. **Ergative**: {A} is distinguished from {S,P}
 - b. Accusative: $\{P\}$ is distinguished from $\{A,S\}$
 - c. **Neutral**: All arguments are treated the same; {A,S,P}
 - d. **Tripartite**: All arguments are distinguished from one another; $\{A\}, \{S\}, \{P\}.$

Chácobo displays the first three alignments across different constructions and referential domains. The alignment types above are based on a distinction between intransitive and monotransitive constructions. Cross-cutting these distinctions, more alignment types can be established when we compare P, T and R across monotransitive with ditransitive constructions (Haspelmath 2006; Guillaume 2008; Malchukov et al. 2010; Zariquiey 2012).

- (7.3) a. **Direct/indirect**: $\{P,T\}$ is distinguished from $\{R\}$
 - b. **Primary/secondary**: $\{T\}$ is distinguished from $\{P,R\}$
 - c. **Neutral**: No arguments are distinguished from one another; {T,P,R}

Recall from Chapter 4 (Section 4.1.1.3) that I distinguished two types of ditransitive verbs in Chácobo; direct/indirect and neutral. Direct/indirect verbs code R with the dative clitic =ki and mark T the same as the P argument is in monotransitive clauses; \emptyset in the case of full NPs, and with an accusative case suffix in the case of pronouns. Neutral verbs are

those that encode R and T identically with P with respect to case assignment. The basic distinction made in Chapter 4 between direct/indirect and neutral verbs is based on case. This chapter considers alignment across other coding properties such as constituent order.

The alignment of constituent order is discussed in Section 7.1. The alignment facts of case marking are described in Section 7.2. An overiew of alignment facts based on coding and behavioral properties is provided in Section 7.3.

Iggesen (2006, 2007), Iggesen & Valenzuela (2007) and Córdoba, Villar and Valenzuela (2012) provide descriptions of alignment splits in case marking in Chácobo. A number of their descriptive statements need to be revised or updated in light of the more detailed description presented here. Section 7.4 provides a brief summary of such these revisions.

7.1. ARGUMENT CONSTITUENT ORDER

Chapter 5 presented an overview of the syntagmatic distribution of elements in the clause. The position of noun phrase dependents in the sentence are represented in Table 5.6. The alignment of constituent order in the clause is split, displaying a nominative-accusative or neutral alignment depending on the position in the clause.

There are three construction types that display an accusative alignment in constituent order; (i) fronted-VP constructions (Section 5.2.3.6); (ii) auxiliary verb constructions (Section 4.1.4); (iii) reportative C-flexible constructions (see 5.2.3.4 on the

definition of C-flexible constructions; see Section 4.2.5 and Section 13.16 on reportative constructions). I discuss these alignments by comparing intransitive and monotransitive clauses in Section 7.1.1. With respect to alignments based on comparing monotransitive and ditransitive constructions, P, T and R display neutral alignment with respect to constituent order. The one exception to this is for constructions where R is marked with the dative clitic =ki (indirect/direct ditransitive verbs). In such cases R patterns distributionally with A in certain constructions. The constituent order alignment of ditransitive constructions is discussed in Section 7.1.2.

7.1.1 Intransitive vs. Monotransitive: A, S and P

7.1.1.1. Fronted-VP constructions: {A,S} vs. {P}

Recall from Section 5.2.3.5 that the subject can occur in positions 2,7 and 16 of the sentence. In positions 2 or 7, the alignment based on constituent order is neutral {A,S,P} since A and P can be variably ordered. However, in the fronted-VP construction, only the A and S arguments can occur in position 7, and P appears in a fronted position before the V-constituent (see Section 5.2.3.15.1 for discussion).

The following sentences from elicitation illustrate the position of the A and S arguments in the fronted-VP construction. These arguments pattern together by occurring between the \bar{V} -constituent and the clause-type/rank morpheme; =ki 'declarative, past,

anterior' in this case. It has been robustly confirmed with multiple consultants that P arguments cannot intervene between the \bar{V} -constituent and the clause-type/rank morpheme. There are no examples from naturalistic speech that contradict this. Fronted-VP constructions that show the position of the $\{A,S\}$ subject with respect to the \bar{V} -constituent and the clause-type/rank morpheme are provided in (7.4) and (7.5). The \bar{V} -constituent and the clause-type/rank morphemes are underlined, and the subject $\{A,S\}$ arguments are in bold.

Examples of Fronted-VP constructions from naturalistic speech that illustrate the position of A and P with respect to the V-constituent are provided in (7.5) and (7.6).

(7.5) [P] [
$$\bar{V}$$
] [A] ha $ak=2ai$ $a(k)=t\acute{a}pi$ $ki\acute{a}$ $yosa=ba='$

3 $do=NMLZ:IPV$ $do=PNCT$ REP $woman=PL=ERG$
 $wa=n\acute{i}=ki$
 $TR=REMP=DEC:P$

'From those that taught, the women learnt very fast.' TXT 029:393

(7.6) $aka=t\acute{i}=ka$ tsi $ki\acute{a}$ $rani=kon\acute{a}$
 $kill=NMLZ:PURP=REL$ P5 REP $hug=CNTRDIR:ITR:SG$

[P] [\bar{V}] [A] ha-to $tatso=bo2on\acute{a}$ tsi $ki\acute{a}$ tsi ts

That S patterns with A in the fronted-VP construction is illustrated in (7.7) below.

[7.7] [
$$\bar{V}$$
] [\bar{S}]

$$\underline{haba=hon\acute{a}} \qquad tsi \qquad ki\acute{a} \qquad toa \qquad h\acute{o}ni \qquad =n\acute{i}=\underline{k}i$$

$$\underline{run=COMING:ITR:SG} \quad P5 \qquad REP \qquad \textbf{DEM2} \qquad \textbf{man} \qquad =REMP=\underline{DEC:P}$$
'And (it is said) that man came running.' TXT 003:133

7.1.1.2. Auxiliary verb constructions: {A,S} vs. {P}

S and A pattern together distinctly from P in auxiliary verb constructions as well. While, A, S and P cannot be distinguished when these arguments precede the lexical verb, only the {A,S} can intervene between the lexical verb and the auxiliary. A case where the S intervenes between the lexical verb and the auxiliary is illustrated in (7.8). A sentence where A intervenes between the lexical verb and the auxiliary is provided in (7.9).

[7.9] [P] [V] [A]

... yawa wisti
$$\underline{bi=2i}$$
 no?\(\delta\) papa

white_lipped_peccary one $\underline{come=Concur:s}$ 1sG:GEN father

[AUX]

 $\underline{i=ni=ki}$

AUX=REMP=DEC:P

'My father would bring back on white lipped peccary.' TXT 050:010

7.1.1.3. Reportative C-flexible constructions: {A,S} vs. {P}

Another domain where A and S pattern together against P is in reportative C-flexible constructions. If the reportative morpheme *kiá* occurs after the clause-type/rank morpheme (position 14) in position 15 in a C-flexible construction the S or A argument *must* occur in position 16. However, the P argument retains its freedom of position. That a position 15 reportative *kiá* requires the S and the A to occur in position 16 is illustrated in (7.10) and (7.11).

TXT 037:028

Robust data from elicitation has shown that it is impossible to have the reportative and an {S,A} on opposite sides of the verb. This is not true of the P argument. When the reportative occurs in position 15 after the clause-type/rank morpheme the P argument can occur on either side of the verb as illustrated in (7.12).

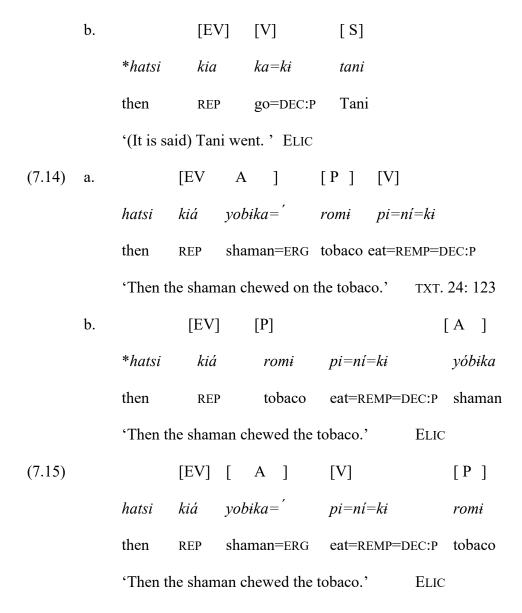
If the reportative morpheme occurs in position 6 before the verb, then the S and A must occur before the verb also in position 2 or position 7. S and A *cannot* occur in position 16 if the reportative morpheme *kiá* occurs in position 6. In contrast the P argument can occur on either side of the verb complex. The is illustrated with S and A arguments in (7.13) and (7.14). The P argument is not similarly constrained as is illustrated by comparing the aforementioned examples with (7.15), where the V intervenes between the reportative (EV) and the verb (V).

(7.13) a. [EV S] [V]

hatsi
$$ki\acute{a}$$
 $t\acute{a}ni$ $k\acute{a}=ki$

then REP Tani go=DEC:P

'(It is said) Tani went.'



S and A can occur in position 16 after the clause-type/rank when there is no reportative. This is illustrated in (7.16) and (7.17).

$$[7.16) \qquad [V] \qquad [S]$$

Post-clause-type/rank morpheme: {A,S,P}

However, without the reportative marker one cannot observe a clear distinction between {A,S} and {P}. The reason is that P can occur after the clause-type/rank morpheme as well (see Section 5.2.3.15.1 for some caveats to this statement). It is only when the reportative is present that one can see that {A,S} occupy a distinct syntactic position. Examples of AVP order are illustrated in (7.18), (7.19), (7.20) and (7.21). I have found one example where VP order occurs when the reportative follows the verb. It is provided in (7.20). In this case the subject is null.

(7.21) hatsi nika i
$$a(k)=ki$$
 no? $a(k)=ki$ no? $a(k)=ki$ no? $a(k)=ki$ no? $a(k)=ki$ homework i= $a(k)=a$ say=DEC:NONP=1SG

'So I did my homework this way, I say.' TXT 019:018

Chácobo also displays a VAP constituent order; it is extremely rare, however. Chácobo seems to disprefer sentences where all of the core arguments appear after the verb. One example of VAP order is provided in (7.22).

(7.22) a.
$$tfa?ita$$
 $pi=y\acute{a}ma=so=w\acute{i}$ i $ki\acute{a}$ $kako$ $k\acute{i}$... gra_fa $eat=NEG=REMF=IMPER$ say REP Caco DAT $ha-t\acute{o}$ $iw\acute{a}ti$ $=n\acute{i}=ki$ 3-PL:GEN $gra.mo$ $=REMP=DEC:P$ "Don't eat your grandfather" his mother said to Caco.'

b.
$$ha$$
- $t\acute{o}$ i $w\acute{a}ti$ ha ki $=k\acute{a}$

3-PL:GEN gra.mo 3 DAT =PRIOR:DA

 pi = $y\acute{a}ma$ = ki kai = $'$

eat=NEG=DEC:NONP mother=VOC

 V A P

 his = $(y)\acute{a}ma$ = ki no - a tfa ? ita

see=NEG=DEC:NONP 1PL-EPEN gra fa

'When his grandmother said this to them' [they said] "We haven't eaten her mother!" "We haven't eaten our grandfather." TXT 028:011

A and P occur in a fixed order after the clause-type/rank morpheme. Based on this, one might say that Chácobo displays an accusative alignment for core NPs after the clause-type/rank morpheme, because it shows that there is a dedicated position for the {A,S} subject. However, there is a no evidence that P and S actually occur in distinct syntactic positions after the clause-type/rank morpheme. It is possible that in the future such evidence might be uncovered, but for now, the alignment difference is only observable when a reportative morpheme occurs.

Pre-clause-type/rank morpheme: {A,S,P}

NP arguments display a neutral alignment when they occur before a lexical verb or a V-constituent. That A and P can variably order and, thus, display a neutral alignment when they precede the \bar{V} -constituent is illustrated in (7.23) with consecutive sentences from the same text.

In auxiliary verb constructions it is rare to find cases where A and P precede the lexical verb. When A and P do precede the lexical verb, they can occur in either order, with APV order slightly more common. Examples of auxiliary verb constructions with APV order are provided in (7.24). An instance of PAV order for an auxiliary verb construction in found in (7.25).

(7.24)
$$tfoo=ti$$
 tsi ha $a(k)=yo=ki$ tsi $wisti$ $tako$

EXCLAM=TOO P5 3 $do=CMPL=D\{A,S\}$ P5 one staff

A P V AUX

no tsi poa $bana=?i$ $i=ni=ki$

1PL P5 bachi harvest=CONCUR:S AUX=REMP=DEC:P

'After finishing, there was one staff, and we harvested the bachi fruit.'

TXT 101:048

(7.25) P A V

[mama-na Tira yamabo] no $nika=?i$ $i=ni=ki$

mo's_sis-POSS Tëra deceased 1PL listen=S AUX=REMP=DEC:P

 $ha-to$ $tfani$ ha $a(k)=no$

3-PL:ACC saying/story 3 $do=CONCUR$

'We used to listen to the deceased Tera of your aunt (mother's sister)'s side, as he would say his story.' TXT 115:094

Constituent order differences between noun phrases and pronouns

Full NPs and pronouns display different alignments with respect to case marking (see Section 7.2 below). In Chácobo there is *almost* no difference in terms of the distribution of full NPs and pronouns in constituent order. I have only found one difference

between full noun phrases and pronouns. The difference is found in non-verbal predicate constructions. (7.26) provides an example of a zero marked non-verbal predicate construction marked with a full NP *mi baki* 'my child'.

'Your son is the one who is a compulsive laugher.' OBSV

When the relative marker *kato* occurs on the predicative constituent of the verbal predicate construction it occurs to the right of the predicative construction. Pronouns, however, can occur inside the predicative relative clause as in (7.27b).

(7.27) a.
$$tsiri=sini=ka$$
 $mi-a$ laugh=N/ADJ=REL 2SG-EPEN 'You are a laugher.'

b.
$$tsiri=sini$$
 $mi=kato$ laugh=NMLZ 2SG=REL 'You are a laugher.'

This is the only difference between full NPs and pronouns in Chácobo that I am aware of in terms of position in the clause. The ungrammaticality of relative clause internal

full NPs in such cases has not been tested systematically. It's possible that there is no difference at all. Either way it does not tell us anything about alignment with respect to S, A, P, T and R because the distributional difference of pronouns presented in (7.27b) can only be found in non-verbal predicate constructions.

7.1.2 Monotransitive vs. Ditransitive: P, T and R

Recall that I made a distinction between neutral ditransitive verbs and direct/indirect ditransitive verbs based on case marking (See Section 4.1.1.3 above). This section is concerned with alignment based on constituent order. Neutral ditransitive verbs display a neutral alignment with respect to constituent order; P, T and R all display the same distributional properties.

For instance, T and R can be variably ordered with A and with each other before the V. That T and R arguments can be variably ordered is illustrated in (7.28) and (7.29).

^{&#}x27;Wait for me here, stoke the fire, and put this top on top of the fire...'

Txt 112:017

In fronted-VP constructions, neither T nor R can interrupt the \bar{V} -constituent and the clause-type/rank morpheme; they display the exact same distribution as P in monotransitive clauses. The same is true of auxiliary verb constructions as well. T and R cannot interrupt the lexical verb and the auxiliary verb. This is illustrated below.

There are no enough text examples where all three arguments of such constructions are present to demonstrate that T and R occur in all the positions P occurs in using naturalistic speech. In elicitation, speakers accept T and R arguments in all syntactic positions that are relevant for P arguments.

For neutral verbs T and R arguments pattern with P arguments in not being able to interrupt the V-constituent and the clause-type/rank morpheme in fronted-VP constructions. However, for direct/indirect verbs, the R can interrupt the \bar{V} -constituent and the clause-type/rank morpheme. All dative marked arguments can occur in this position as well. An illustration is provided in (7.31).

This is not a special property of R arguments in ditransitive constructions, however. Rather, all obliques marked with =ki can occur in this position. For instance, dative marked obliques frequently intervene between the intransitive verb i 'say' and the clause-type/rank morpheme as in (7.32).

Dative marked R can interrupt the \bar{V} -constituent and clause-type/rank morpheme in Fronted-VP constructions. It can occur in the same syntactic position as $\{A/S\}$ in this construction This does not constitute an alignment grouping of $\{A,S,R\}$, because in fronted-VP constructions $\{A,S\}$ *must* intervene between the \bar{V} -constituent and the clause/type rank morpheme, while this is optional for R. This distributional property of dative marked R shows that it does not pattern with $\{P,T\}$ in Fronted-VP constructions.

7.2. ERGATIVE, ACCUSATIVE AND EPENTHETIC CASE

Case is coded through suffixes on pronouns and phrase final clitics on noun complexes. Full noun phrases display an ergative alignment before the clause-type/rank morpheme. In the referential domain of full NPs, a case marker is assigned to {A}, and no case marker is assigned to {S,P}. There is no overt case morpheme for the absolutive. Like

pronouns, full NP arguments display non-canonical behavior when they occur after the clause-type/rank morpheme. No ergative case can appear on an NP when it occurs in position 16 of the clause, after the clause-type/rank morpheme.

The descriptive generalization concerning ergative case assignment is that ergative case is always assigned to A when A precedes the clause-type rank morpheme of the lexical verb to which A is a dependent; otherwise ergative case is not assigned. In the referential domain of full noun phrases, this rule captures all of the alignment splits in Chácobo. There is no evidence for an aspect-based split in Chácobo case marking, contra Iggesen & Valenzuela (2007) and Córdoba, Villar and Valenzuela (2012). Ergative case assignment is described in detail in Section 7.2.1.

Pronouns display an accusative alignment before the clause-type/rank morpheme. A case marker is assigned to {P} and no case marker is assigned to {A,S}. The accusative suffix is not predictable across the person and number of the pronouns (-a, -to, -ki depending on the case and number). Nominative pronouns are not marked. However, when pronouns in the S and A function occur after the clause-type morpheme they surface with an "epenthetic case" which is phonologically similar to the accusative case. The description of case assignment in pronouns is complicated when one considers the form of such {A,S} pronouns after the clause-type/rank morpheme. After the clause-type rank morpheme, a formative that is identical to the accusative suffix appears on all {A,S} pronouns. I suggest that this situation has a phonological explanation and refer to these formatives as epenthetic case suffixes. The case assignment of pronouns is described in Section 7.2.2.

Like full NPs, direct/indirect verbs assign the dative marker =ki to R pronouns. There is case syncretism between the accusative and dative for the first person plural *no-ki*. Apart from this, case assignment in ditransitive constructions is already captured by the distinction between neutral and direct/indirect verbs described in Chapter 4. Thus, case marking in ditransitive constructions is ignored in the following section.

7.2.1 Full noun phrases: ergative case assignment

The basic facts of ergative case assignment and its association with transitivity were described in Chapter 4. This section is concerned with providing a more precise description of ergative case assignment across all syntactic positions. Ergative case is encoded by a functional high tone in position 6 of the extended-NP (Section 5.3.4). A discussion of the phonology of this functional high tone is found in Section 6.2. Ergative case is also realized through ablaut when a noun complex contains the plural/associative morpheme $=bo\sim=ba$ (position 5 of the extended-NP). This morpheme surfaces as =ba when it precedes a functional high tone and =bo elsewhere (see Section 6.2.2 for discussion).

Ergative case is assigned to A when it precedes the clause-type/rank morpheme of the verb to which it is a dependent. This means that all A NPs in position 2 or position 7 of the verb complex are assigned ergative case. An example of ergative case assigned to an NP of position 7 is provided in (7.33). The NP *katamamáhi* 'Siriono' is assigned ergative case in both of the sentences below from the same text.

Constituent order in relation to the P argument does not affect case assignment. This can be seen from a later sentence in the same narrative provided in (7.34) that displays an APV order rather than a PAV order as in (7.33).

As stated above, ergativity is also coded through the allomorphy of the plural morpheme $=bo\sim=b\acute{a}$. This is illustrated in the examples below. In (7.35) and (7.36), $=bo\sim=ba$ 'plural, associative' surfaces as bo when it combines with NPs in {S,P} function. In (7.37), $bo\sim ba$ 'plural, associative' surfaces as ba because it occurs in an A NP.

'When we arrived, the carayana (Spanish speaking bolivians) were looking for us wanting to kill us.' TXT 058:030

In some languages there is differential ergative marking conditioned by animacy of the NP (McGregor 2009). In Chácobo, first, second and third person pronouns do not display ergative marking. However, all other types of full noun phrases (kin terms, humans, animals, inanimate objects) do display ergative alignment. Examples of ergative marking occurring on human entities are provided in (7.33), (7.34) and (7.37) above. An example of ergative marking applying to an animal is illustrated in (7.37), with the NP *kamáno* 'jaguar'.

Γ (7.38)A 1 nɨbí $ak=(?)\acute{a}=ka$ kamano=' awi ha 3 do/kill=NMLZ:P=REL here woman jaguar=ERG tɨrɨsa=ita=ʔá =ka pat/o= sobo tana decapitate=RECP=NMLZ:P=REL Pacho=GEN house distance kiá tsi hawi sobo pistia i=ni=kiP5 REPORT 3sg:gen house little be=REMP=DEC:P 'It is here that the he (the jaguar) killed the wife, where the jaguar decapitated her, about the distance of Pacho's house there was a little house (it is said)' TXT 037:0980

(7.39) [A] [P] V
$$kamano=' ha-to kiyo=ni=ki$$
 jaguar=erg 3-pl:acc kill=remp=dec:p

'The jaguar was killing them (the people).' TXT 014:23

Lower down on the animacy hierarchy the fish *bawino* 'sorubim' is assigned ergative case in the example below.

(7.40) [A] [P] V
$$bawino=' i-a bi=ki$$

$$sorubim=ERG 1SG-ACC grab=DEC:P$$
"The sorubim (erg.) grabbed (married) me." TXT 068:096

Inanimate NPs in A function are also assigned ergative case as in (7.41).

(7.41)
$$hawi$$
 naa $boko$ $ha-2\acute{a}$ ha

3SG DEM1 ambaibo 3-LOC 3

[A]

 $tsa2o=2\acute{a}=ka$ tsi $ki\acute{a}$ $hiwi='$
 $sit=NMLZ:P=REL$ P5 REP $stick=ERG$
 $tia-2ak=n\acute{a}=ki$

block-APPL/CAUS=REMP=DEC:P

'The ambaibo (Lin. *cecropia membranacea*) where he was sitting, its **trunk** blocked him (the caiman).' TXT 061:400

Ergative case assignment is also assigned to position 2 and position 7 A NPs inside subordinate clauses in the same way as it is assigned in main clauses. This is illustrated in the examples in (7.42) and (7.43). (7.42) provides an example of ergative case assigned in a subordinate clause marked with the remote past nominalizer =ni. (7.43) provides an example of ergative case assigned inside a subordinate clause marked with the past tense nominalizer =2a.

'The sun woman and the moon woman were breaking urucu when the man grabbed them.' TXT 063:228-229

Ergative case can also be assigned in subordinate clauses that contain an imperfective nominalizer. This is illustrated in (7.44), (7.45) and (7.46). Previous linguists have associated neutral alignments in Chácobo with an "incompletive aspect" (Valenzuela & Iggesen [2007: 190-191]; Córdoba, Villar, Valenzuela [2012:46]). To the extent that incompletive is a type of imperfective aspect, the examples below are important for assessing this question.

yoa=?ái=ka \dot{t} nika=pao=ní=ki tell=NMLZ:IPV=REL 1s_G hear=HAB=DEC:P 'In this way, I listened to what my aunt and my uncle were saying.' TXT 040:012 (7.45)boti boti boti boti wa=?á ha lower lower lower lower 3 TR=NMLZ:P A 1 [po?iko=' tsi kiá hawí poo P5 REP 3sg almond butter [vulture=ERG] pi=?ái=na eat=NMLZ:IPV=EPEN 'The vulture kept lowering and lowering eating almond butter.' TXT 118:013 (7.46)1 óka maní $his=(y)\acute{a}ma=k\acute{i}=a$ toa [raya= 1 [parrot=ERG] happen see=NEG=DEC:NONP=1SG DEM2 CONJEC pi=?ái=na i=kiá eat=NMLZ:IPV=EPEN say=REP 'It's possible, I didn't see it, but the parrot could have eaten it (he said).' TXT 006:008

Recall that in fronted-VP constructions {A,S} is fixed in position 7 of the sentence. According to my description of VP-fronting, that A arguments are assigned ergative case in fronted-VP constructions falls out from the fact that they are assigned case when they occur in position 7. An example of a fronted-VP construction with ergative case assigned to the A argument is provided in (7.5) from Section 7.1 above.

NPs in A function can also appear in position 2 of the sentence. When they occur in this position they are marked with a contrastive focus. In most dialects of Chácobo (Central, Benicito, Yata), such NPs are assigned ergative case. I have not found any exceptions to the assignment of ergative case for A arguments in position 2, for speakers of such dialects. An example of ergative case assigned to an A NP in contrastive focus is provided in (7.47b). Some of the important context is provided in (7.47a) which shows that NP A is in contrastive focus in (7.47b).

Another illustration of contrastive focus occurring on an A argument is provided (7.48c). I provide the context so that the reader can understand what is being focused.

- (7.48) a. hátsi kiá toa popoa ha mani=ní=na
 then REP DEM2 owl 3 transform=NMLZ:REMP=EPEN
 'From there they transformed into those owls.'
 - b. hatsi kiá toa popoa dos honi tsi kiá toa then Р5 REP DEM2 owl two man REP DEM2 'Those are owls, those are two men.'
 - c. [A]

 [ható awí ba='] tsi kiá

 [3PL:GEN woman PL=ERG] P5 REP

 yofi-wa=ni=ki

 cast spell-TR=REMP=DEC:P

'THEIR WIVES (in contrast to the shaman) were the ones who enchanted them.' TXT 007:184-185

7.2.1.1. A note on differential case marking

There are a few examples where ergative case marking is dropped for A NPs in position 1. An example is provided in (7.49). The noun *kamá* 'jaguar' should surface as *kamanó* 'jaguar (erg.)', however, it appears that its ergative case is not assigned.

Cases where ergative case marking does not occur when a full NP argument appears before the \overline{V} -constituent are rejected by my consultants in elicitation contexts. However, all of my primary consultants that I conduct elicitation with speak dialects of the central region (Alto Ivon, Cachuelita) (the example above is from a speaker who lived most of her life on the Benicito river). I have not found the phenomenon of differential subject marking in this position widely attested in Chácobo texts and I have not been able to corroborate this construction in elicitation. However, this could reflect dialectal differences between the speech of some of the speakers in naturalistic speech and my primary consultants. It also might be the case that the lack of ergative case assignment (or absolutive case "assignment") in cases where A is in the focus position is semi-grammatical (7.49). Future research might reveal that some Chácobo speakers display incipient differential case

marking triggered by information structure in a similar fashion to what Valle (2011, 2014a, 2014b, 2017) has documented and described extensively with San Alejandro Kakataibo.

7.2.1.2. Position 16 {A,S} NPs

In position 16 of the clause after the clause/type rank morpheme, Chácobo displays a neutral alignment with respect to case marking. Ergative case is not assigned in position 16. Instead a full NP A arguments have the same morphosyntactic coding as S or P arguments, i.e. none. Constructions where a {A,S} subject occurs in position 16 of a C-flexible clause encode perfect semantics (Chapter 10). The A argument is never assigned ergative case in this context.

'-The cat fish woman took my fishing line – he said.' TXT 068:086

Note that the clause-type/rank morphemes =ki 'declarative, past tense' and $=2\acute{a}$ 'interrogative, past tense' are C-flexible morphemes. This means that they allows the $\{A,S\}$ NP to occur in position 2, 7 or 16. Only in position 16 does this NP not receive ergative case (except perhaps in cases of incipient differential subject marking triggered by focus as noted above).

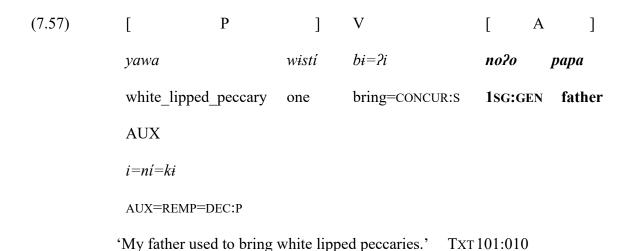
The clause-type/rank morphemes =ki 'non-past' $=iki\acute{a}$ 'reportative' $=2in\acute{a}$ 'interrogative, non-past' $=2a\acute{a}$ 'interrogative, non-past, second person singular' are C-rigid morphemes (see Section 5.2.3.4). Recall that this means that they only allow an {A,S} NP in position 16. Since ergative case is not assigned for NPs in position 16, this means that clauses that contain C-rigid morphemes *never* assign ergative case and therefore display a neutral alignment with respect to case assignment. That C-rigid clauses display a neutral alignment is illustrated in (7.52) and (7.53) where the A subject is not assigned an ergative case. In these sentences the subject cannot occur outside of position 16, which means ergative case is never assigned.

Nominalized clauses and different subject clauses do not allow {A,S} subjects to occur in position 16. Ergative alignment in nominalized and different subject clauses holds for APV clauses as in (7.54) and (7.55) and PVA clauses as in (7.56). Since the A argument cannot occur after the clause-type/rank morpheme, case marking on full NPs in cuh clauses never displays a neutral alignment.

tii?a ha wa=?á saa 3 IDEO:shake shake TR=NMLZ:P a(k)- $2=it\acute{a}=2a$ veces habiha tíita tres three times true do-EPEN=RECP=NMLZ:P thrice 'When the mutum spit in his hand and then after shaking "xaa", well about three times he must have done it.' TXT 026:365 (7.56)habi tóka=ka wiakí ha-tó like this=REL surely next day 3-PL:ACC ha-tó pi=mawiakí pi=mawiakí eat=CAUS next_day 3-PL:ACC eat=CAUS next_day [P] [V] ſ A] ha-?-íwa iwati= $wa=?\dot{a}=ka$ ha-tó pi=ma3-PL:ACC eat=CAUS 3-EPEN-mother gra mo=ERG TR=NMLZ:P=REL náa nino kiá i=kan=ni=kitopo tsi ha DEM1 Nino size Р5 REP 3 be=PL=REMP=DEC:P 'Sure in this way, the next day, the grand mother fed them the next day and fed them the next day and fed them the next day until until they were the size of this Nino here.' TXT 111:162

7.2.1.3. Auxiliary verb constructions

Recall that A arguments can occur between the lexical verb and the auxiliary verb in auxiliary verb constructions. When they occur in this position they are not assigned ergative case. This is illustrated in (7.57). The noun phrase *no?o papa* 'my father' occurs in between the lexical verb and the auxiliary and receives no ergative case despite functioning as the A argument of the lexical verb *bi* 'bring'.



One way to account for the neutralizing above would be to consider the NP argument *no?o papa* 'my father' as really an S argument of the auxiliary verb. On this analysis, the construction above would not be an example of neutralization of ergativity, but rather an example of biclausal construction where the matrix clause is headed by an intransitive auxiliary (cf. Salanova 2009, 2015; Coon 2013a, 2013b, 2013c).

When the A argument precedes the lexical verb in an auxiliary verb construction, it is assigned accusative case. This is illustrated in (7.58) and (7.59) with the noun phrases awi bá 'the wives' and kokina bá 'the firefly group'

Thus, a neutral alignment cannot be unequivocally associated with auxiliary verb constructions. In the context of the literature on Chácobo alignment which claims that neutralization of ergative case marking is conditioned by aspect, this is an important fact because auxiliary verb constructions such as the ones provided in (7.57) and (7.58) encode imperfective aspect (Section 11.1).

Summary

To conclude there are three cases where ergative case is or appears to be neutralized in Chácobo. These are listed in (7.60a.)

(7.60) APPARENT NEUTRALIZATIONS OF ERGATIVE CASE:

- a. When an A NP occurs in position 16 after the clause-type/rank morpheme.
- b. When an A NP of a nominalized clause occurs in the position dedicated to S_{NV} arguments in a non-verbal predicate construction
- c. When an A NP occurs in between the lexical verb and the auxiliary in an auxiliary verb construction.

The following rule accounts for case assignment in Chácobo.

(7.61) ERGATIVE CASE ASSIGNMENT RULE:

(i) Ergative case is assigned to an A argument that precedes a clause-type/rank morpheme of a transitive verb to which the A argument is a dependent. (ii) A cannot be interrupted from the head verb's clause-type/rank morpheme by a clause boundary.

It accounts for (7.60a) because an A argument in position 16 is after the clause-type/rank morpheme. It accounts for (7.60b), because because S_{NV} arguments are outisde of the transitive clause that conditions ergative case assignment. It accounts for the lack of case assignment for A arguments that intervene between the lexical verb and the auxiliary, because in such cases the clause-type/rank morpheme =2i 'conccurrent S' occurs before the A argument.

7.2.2 Pronouns

Pronouns in Chácobo display an accusative alignment. Speech-act-participant (first and second person) pronouns and the third person plural pronoun in P function are assigned an accusative case marker that displays suppletive allomorphy depending on the number of person of the pronoun with which it combines. Nominative pronouns are unmarked. There is no accusative case marker for the third person singular pronoun; rather a third person singular is null.

Chácobo's alignment system in pronouns displays an interesting complication, however. In certain positions, {A,S} pronouns surface with an epenthetic suffix. The epenthetic suffixes have segmental shapes that are phonologically identical to the case suffixes of corresponding accusative pronouns for all number and person categories except the first person plural. Based on this phonological similarity one might argue that {A,S} pronouns neutralize to accusative case in certain positions. I argue that a better explanation is that these suffixes surface due to a morphophological rule. This argument will be presented below after I have provided a description of the case marking facts on pronouns in verbal and non-verbal predicate constructions.

I refer to pronouns with epenthetic case in the latter sense as **epenthetic case pronouns.** Because of the phonological overlap across accusative pronouns and epenthetic case pronouns there are some cases where epenthetic case can be seen as neutralizing the accusative alignment in Chácobo's pronominal system (see Section 7.3). Another complication in the pronominal paradigm of Chácobo is the syncretism between the accusative and the dative in the first person plural. While all pronouns in R function surface with accusative case for neutral ditransitive verbs, the first person plural in R function always surace as *noki*. Furthermore, dative plural pronouns in general display opacity in that they contain formatives from the accusative paradigm. This supports the general idea that some formatives in the case paradigms are meaningless and hence support the general concept of epenthetic case. The pronouns of Chácobo are displayed in Table 7.1.

Table 7.1. Pronouns in Chácobo.

| PERSON | NUMBER | Nominative | ACCUSATIVE | DATIVE | "EPENTHETIC" |
|--------|--------|------------|---------------|----------|------------------------|
| | | $\{A,S\}$ | $\{P, T, R\}$ | {R} | $\{A,S\}$ |
| 1 | | i | i-á | i-kí | <i>i-a</i> ~= <i>a</i> |
| 2 | SG | mi | mi-á | mi-kí | mi-a |
| 3 | | ha~Ø | Ø | hakí | ha~Ø |
| 1 | PL | no | no-kí | no-kí | no-a |
| 2 | | та | ma-tó | ma-to-kí | ma-to |
| 3 | | ha=kan | ha-tó | ha-to-kí | =kan |

In positions 2 and 7 of the sentence nominative and accusative pronouns occur. In these positions in the sentence, accusative case is assigned to the P argument. No case is assigned to nominative {A,S} pronominal arguments. The accusative alignment of pronouns before the verb is illustrated in (7.62), (7.63), (7.64), and (7.65).

For transitive clauses with pronominal arguments, PAV order is by far the most common in narratives, although both PAV and APV are acceptable as illustrated below.

(7.66) a. P A V
$$i-a \qquad mi \qquad ts \acute{a}ya=ki$$
 1SG-ACC 2SG see=DEC:P 'You saw me.' ELIC

b. A P V

$$mi$$
 i - a $ts \acute{a}ya=ki$

2SG 1SG-ACC see=DEC:P

'I saw you.' ELIC

The accusative alignment is maintained for pronouns in position 2 of the clause. Chácobo pronouns do not display differential argument marking based on whether or not they are in the focus position. This is illustrated in (7.67) below. That a {A,S} pronoun can receive contrastive focus and not be assigned accusative case is illustrated in (7.69).

(7.67) ...
$$i$$
 tsi $boti=ni=ki$

... $1SG$ P5 descend=REMP=DEC:P

'I descended (into the caiman's cave).' TXT 116:123

(7.68) i - \acute{a} tsi $\acute{a}(k)=ki$
 $1SG$ -ACC P5 do/bite=DEC:P

'It (the caiman) bit ME (I was the one who was bitten)' TXT 116:146

(7.69) a.
$$no?iti$$
 toa $no?o$ rais $yamabo$ $i=ni=ki$

poor DEM2 1SG:GEN mo_in_law deceased be=REMP=DEC:P

 $nia=?a=na$

leave=NMLZ:P=EPEN

'My mother in law was poor when he (her husband) left her.'

b.
$$\mathbf{i}$$
 tsi $mi-bi=pao=ni=ki$

1sg P5 HAND-grab=HAB=REMP=DEC:P

'I was the one who was helping her.' TXT 054:404-405

Case assignment on pronouns works the same in subordinate clauses. This is illustrated in (7.70), (7.71), and (7.72) with the alternation between the pronoun *no* 'first person plural' and its case marked form *noki* 'first person plural, accusative/dative'.

$$(7.70)$$
 A

1PL eat=NMLZ:P=REL 1SG:GEN lice

no pi=ni=ki

1PL eat=REMP=DEC:P

'After we ate it, we ate lice.' TXT 000:018

(7.71)
$$ha?ari$$
 $ka=no=ma=ni$ $mi-?-iwa$ $=y\acute{a}$

again go=HORT=NEG=INTER 2SG-EPEN-mother=COM

S

$$no$$
 $raka$ $i=yamit=(?)\acute{a}=kato=\acute{n}\acute{o}$

1PL live be=DISTP=NMLZ:P=REL=SPAT

'Let's go again where we used to live with your mother.' TXT 037:088

$$(7.72)$$
 P

no-kí pi=?ai=ka po?íko kiá

1PL-ACC eat=NMLZ:IPV=REL vulture REP

nɨa=roʔá miʃni ...

here=LIMIT small ...

'The vulture that eats us is this big no more, small.' TXT 058:365

7.2.2.1. Fronted-VP construction

When the VP is fronted {A,S} pronouns surface as nominative. In fronted-VP construtions with PVA constituent order, the case assignment facts are identical to those where both pronominal arguments precede the verb. Compare the examples in (7.73) with those in (7.66) above. Fronted-VP constructions are much more common with {A,S} pronouns than with full NPs.

(7.73) a.
$$mi$$
-a $ts\dot{a}ya$ tsi i $wa=ni=ki$
 $2sG$ -ACC see P5 $1sG$ $TR=REMP=DEC:P$

'I saw you.' $ELIC$

b. i -a $tsaya$ tsi mi $wa=ni=ki$
 $1sG$ -ACC see P5 $2sG$ $TR=REMP=DEC:P$

'You saw me.' $ELIC$

Examples of fronted-VP constructions with pronouns in A function are provided in (7.74), (7.75) and (7.76). Examples of fronted-VP constructions with pronouns in S function are provided in (7.77), (7.78), and (7.79).

(7.76) [
$$\bar{V}$$
] A

 $sino=ro2\dot{a}$ tsi i $wa=ni=ki$
 $enter=LIMIT$ P5 lsG $TR=REMP=DEC:P$

'I only started (lit. entered) (school, before quitting).' TXT 049:196

(7.77) [\bar{V}] S

 $toka$ tsi no $=ni=ki$
 do_like P5 lpL $=REMP=DEC:P$

'This is what we are like.' TXT 054:506

(7.78) \bar{V} S

 pai $ha2i$ $ho=wi$ i tsi $ha=ki$ i
 $Pa\ddot{e}$ what $come=IMPER$ say P5 $3=DAT$ lsG
 $=ni=ki$
 $=REMP=DEC:P$

'-Pa \ddot{e} !- what? $-come$! $-I$ said to him.' TXT 054:681

(7.79) [\bar{V}] S

 $ra-mo2i$ tsi $ki\dot{a}$ ha $=ni=ki$
 $ankle-move$ P5 REP 3 $=REMP=DEC:P$

'He moved his ankle.' TXT 034:064

To recap, in positions 2 and 7, accusative case assignment applies straightforwardly to $\{P\}$ pronominal arguments, while $\{A,S\}$ pronouns pattern the same in not receiving any

case marking. One complication in the nominative-accusative alignment of pronouns in positions 2 and 7, is that {A,S} third person pronouns (both singular and plural) surface as null in declarative clauses when they are given information. Third person pronouns thus display a partial neutral alignment when the information expressed by the {A,S} is given. When the VP is fronted as in (7.79) above, a null {S,A} pronoun is banned. Fronted-VP constructions *must* have overt {A,S} subjects. Another context where null {A,S} pronouns are banned is where there is an overt {P,T,R} argument. For instance, (7.80b) is ungrammatical. Overt dependents on the verb complex that are not {A,S} cannot surface without an overt {A,S} argument.

7.2.2.2. Post-clause-type/rank epenthetic case pronouns

Complications arise when we consider the realization of {A,S} pronouns in position 16 and the realization of pronouns in non-verbal predicate clauses. Nominative pronouns

surface with epenthetic case suffixes pronouns in position 16. Only the first person singular and the first person plural epenthetic case pronouns are phonologically distinct from accusative pronouns. The first person singular surfaces as /a/ when it occurs before =ki 'declarative, non-past' as illustrated in (7.81a). For some speakers, the first person singular also surface as =a before =ki 'declarative, past' as in (7.81b), but the usual pattern is the for the epenthetic case pronoun i-a to surface in this context. The first person plural epenthetic pronoun is distinct from its accusative counterpart. The accusative case morpheme for the first person plural is -ki, syncretic with the dative form. However, the epenthentic case suffix is -a for the first person plural pronoun as in (7.81c) and (7.81d).

(7.81) a. A
$$pi=ki=a$$
 eat=DEC:NONP=1SG

'I am eating.'

b. A A A $pi=ki=a$ / $pi=ki$ i-a eat=DEC:P=1SG eat=DEC:P 1SG-EPEN

'I have eaten.'

c. A
$$pi=ki$$
 $no-a$ eat=DEC:NONP 1PL-EPEN

'We are eating.'
d. A $pi=ki$ $no-a$ eat=DEC:P 1PL-EPEN

'We have eaten.' ELIC

Note that the epenthetic case pronouns occur obligatorily in subject-rigid clauses, because the subject obligatorily occurs in position 16 in such clauses as in (7.82).

(7.82) P A

hatsi
$$n \acute{a}mi$$
 $a(k)=ki$ no-a tia

then meat do/hunt=DEC:NONP 1PL-EPEN EPIS2

'Then, we may be hunting (lit. doing meat).' TXT 033:012

In non-verbal predication accusative case suffixes are assigned to pronouns in clause initial position, and the epenthetic case pronouns occur in the right-most position. This is illustrated in (7.83) with examples from elicitation. Text examples of this variation are provided in (7.84) and (7.85).

(7.83) a. no-kí tsi SO rani 1PL-ACC Р5 DEC happy 'We are happy.' b. rani tsi no-a ŞO P5 happy DEC 1PL-EPEN 'We are happy.' ELIC (7.84)ſino ima=?á=ro?á=bo tsi kiá no-a monkey roast=NMLZ:P=LIMIT=PL P5 REP 1PL-EPEN 'We were just like roasted monkeys.' TXT 061:243 (7.85)no-kí tsi mɨkɨ nia=ma=ʔái=na SO DEC 1PL-ACC/DAT Р5 murder=CAUS=NMLZ:IMPFV=SUB 'He (my father) encouraged (caused) us to kill people (or 'kill with us') ..., TxT049:287

Clause final pronouns surface as accusative or epenthetic case pronouns in non-verbal predicate constructions *except* when they are followed by the relativizing clitic =*kato*. Non-verbal predicate constructions can be in subordinate clauses. In cases where a pronoun occurs on the right side of a non-verbal predicate construction in a subordinate clause, the insertion of epenthetic case is blocked. This is illustrated in (7.86)

(7.86)
$$baki = y\acute{a}$$
 $mi = ka$ ha $ka?i = ki$ (*mia) child = COM **2sG**=REL 3 know=DEC(SF):PST 'He knew that you had a child.' ELIC

Much more common than speech-act-participant pronouns, third person pronouns occur before the relativizer =kato. Without the relativizer =kato preceding them these morphemes cannot surface in non-verbal predicate constructions.

3=REL

tell=NMLZ:REMP=REL

3=соміт

^{&#}x27;The one who told them was her (Ashina's) daughter in law.' TXT 081:037

An example with a first person plural pronoun where epenthetic case insertion is blocked by the relativizer *kato* is provided in (7.91) below.

this here, now we have lumber.'

I suggest that the blocking of epenthetic case assignment in these cases to be related to minimality. Recall from Section 6.3 that vowel lengthening of monomoraic verb roots is blocked by the occurrence of certain clitics. Conversely the process can be understood in terms of bimoraic minimality. Verb roots project a domain of bimoraic minimality. When monomoraic verb roots do not contain an affix or clitic that can

TXT 105:105

incorporate into their minimality domain, they must lengthen in order to satisfy bimoraic minimality. The same analysis can be applied to pronouns, except instead of lengthening they add a meaningless formative to meet minimality. Relative clause markers can be understood as incorporating into the minimality domain of pronouns, blocking the insertion of epenthetic case markers. Otherwise, pronouns surface with an epenthetic case. The difference between vowel lengthening and epenthetic case insertion is just that the form of epenthetic suffixes is not consistent across the segments. According to this analysis, epenthetic case suffixes are inserted by the following morphophonological rule.

(7.92) **Epenthetic case rule**: Post-clause-type/rank pronouns project a morphophonological domain of minimal bimoraicity. They can achieve bimoraicity by incorporating a relativizer =*kato* into their minimality domain. If they cannot achieve minimality in this fashion, they insert an epenthetic case suffix to meet minimal bimoraicity.

Apart from the blocking of epenthetic case, further support for the epenthetic case rule comes from the fact that case epenthetic case suffixes are assigned in non-verbal predicate constructions, where presumably case assignment is not an issue.

An alternative analysis would be to regard epenthetic suffixes as genuine markers of accusative case. This analysis has some prima facie plausibility because of the complexity of the epenthetic case rule provided above. The first problem with it is that it

is not clear what case is being marked; it would imply that nominative is unmarked in certain positions and marked with cases that are nearly identical to the accusative in other positions. One might resolve this by simply stating that the epenthetic case is really a default case assigned in cases where the verb is somehow unable to mark dependency. But in this case there is no explanation for why the epenthetic case does not occur in examples such as (7.85) in non-verbal predicate constructions. Actually, the evidence suggests that accusative is the default case, because the accusative forms are the ones that appear in elicitation (*noki* is the citation form for "we" rather than *noa*). Finally, any alignment based analysis of epenthetic case pronouns fails to account for the blocking of epenthetic case insertion found when such forms are left-adjacent to the relativizer. The morphophonological analysis is at least partially motivated based on the fact that minimality issues are relevant across Chácobo grammar.

7.3. OVERVIEW OF CODING AND BEHAVIORAL PROPERTIES

The sections above have been concerned with the alignment of coding properties; case and constituent order. Table 7.2 and table 7.2 provide overviews of the alignment facts according to the construction and the referential domain. Table 7.2 compares alignment across arguments in intransitive, monotransitive and neutral ditransitive constructions. Table 7.3 compares alignment across arguments in intransitive, monotransitive and direct/indirect ditransitive constructions.

As stated this chapter is concerned with coding properties; constituent order and case marking. But alignment systems can also be distinguished according to behavioral properties (Keenan 1976; Croft 2001; Witzlack-Makarevich 2010). Behavioral properties are treated in other chapters since they involve interaction with other parts of the grammar. The tables below also summarize alignment according to behavioral properties, corss-referencing other parts of the grammar where these topics are treated.

Table 7.2. Alignment across intransitive, monotransitive and neutral ditransitive verbs

| Chapter | Property | Referential domain | Morphosyntactic | Alignment set |
|---------|--------------|-----------------------|-------------------|-----------------|
| | type | | domain | |
| 7 | Coding (case | Pronouns (1sg 2sg 1pl | Before clause- | {A S} {P T |
| | marking) | 2pl 3pl) | type morpheme | R} |
| 7 | Coding (case | Pronouns (3sg) zero | Before clause- | $\{A S P T R\}$ |
| | marking) | marked | type morpheme | |
| 7 | Coding (case | Pronouns (3sg) overt | Before clause- | {A S} {P T |
| | marking) | marked | type morpheme | R} |
| 7 | Coding (case | Pronoun (1pl) | After clause-type | {A S} {P T |
| | marking) | | morpheme | R} |
| 7 | Coding (case | Pronouns (1sg 2sg 3sg | After clause-type | $\{ASPTR\}$ |
| | marking) | 2pl 3pl) | morpheme | |

Table 7.2, cont.

| 7 | Coding | Full NPs Pronouns | Position 2 and | {ASPTR} |
|----|--------------|-------------------|-------------------|------------|
| | (Constituent | | Position 7 | |
| | order) | | (before clause- | |
| | | | type morpheme) | |
| 7 | Coding | Full NPs Pronouns | Position 7 in | {A S} {P T |
| | (Constituent | | Fronted-VP | R} |
| | order) | | construction | |
| 7 | Coding | Full NPs pronouns | Reportative past | {A S} {P R |
| | (Constituent | | tense | T} |
| | order) | | | |
| 7 | Coding | Full NPs pronouns | After clause-type | {A S} {P T |
| | (Constituent | | morpheme) | R} |
| | order) | | | |
| 14 | Behavioral | Full NPs pronouns | Participant | {ASPTR} |
| | | | Nominalization | |
| 8 | Behavioral | Full NPs pronouns | Passivization | {P T R} |
| | | | Reflexivization | |
| 8 | Behavioral | Full NPs pronouns | Antipassivization | {P T R} |
| 11 | Behavioral | Full NPs pronouns | Telic/all | {S P T |
| | | | modification | R}{A} |

Table 7.2, cont.

| 17 | Coding | Full NPs pronouns | Spatial | $\{A\}\{S\}$ |
|----|--------------|-------------------|----------------|--------------|
| | (participant | | integration of | |
| | agreement) | | modifiers | |
| 18 | Coding | Full NPs pronouns | Clause- | {A}{S} |
| | (participant | | combination | |
| | agreement) | | | |
| 18 | Behavioral | Full NPs pronouns | Pivot in | {A S} {P T |
| | | | different-A/S- | R } |
| | | | syndetic and | |
| | | | asyndetic | |
| | | | coordination | |

Table 7.3. Alignment across intransitive, monotransitive and (in)direct ditransitive verbs

| Id | Type | Referential | Morphosynatetic domain | Alignment |
|----|--------------|----------------|------------------------|-------------------------|
| | | domain | | |
| 7 | Coding (case | Pronouns (1sg, | Before clause-type | ${A S}{P T}{R}$ |
| | marking) | 2sg, 1pl, 2pl, | morpheme | |
| | | 3pl) | | |
| 7 | Coding (case | Pronouns (3sg) | Before clause-type | $\{A S P T\}\{R\}$ |
| | marking) | zero marked | morpheme | |
| 7 | Coding (case | Pronouns (3sg) | Before clause-type | $\{A S\} \{P T R\}$ |
| | marking) | overt marked | morpheme | |
| 7 | Coding (case | Pronouns (3sg) | Before clause-type | ${A S}{P T}{R}$ |
| | marking) | overt marked | morpheme | |
| 7 | Coding (case | Pronoun (1pl) | After clause-type | $\{A S\} \{P T R\}$ |
| | marking) | | morpheme | |
| 7 | Coding (case | Pronouns (1sg | After clause-type | $\{A S P T\}\{R\}$ |
| | marking) | 2sg 3sg 2pl | morpheme | |
| | | 3pl) | | |
| 7 | Coding (case | Full NPs | Before clause-type | {A}{S P T R} |
| | marking) | | morpheme | |
| 7 | Coding (case | Full NPs | Before clause-type | $\{A\}\{S\ P\ T\}\{R\}$ |
| | marking) | | morpheme | |

Table 7.3, cont.

| 7 | Coding (case | Full NPs | After clause-type | {A S P T R} |
|----|--------------|----------|---------------------------|--------------------|
| | marking) | | morpheme | |
| 7 | Coding (case | Full NPs | After clause-type | $\{A S P T\}\{R\}$ |
| | marking) | | morpheme | |
| 7 | Coding | Full NPs | Position 2 and Position 7 | {ASPTR} |
| | (Constituent | Pronouns | (before clause-type | |
| | order) | | morpheme) | |
| 7 | Coding | Full NPs | Position 7 in Fronted-VP | ${A, S}{R}{P}$ |
| | (Constituent | Pronouns | construction | T} |
| | order) | | | |
| 7 | Coding | Full NPs | Reportative past tense | {A S}{P R T} |
| | (Constituent | pronouns | | |
| | order) | | | |
| 7 | Coding | Full NPs | After clause-type | ${A S}{P T}{R}$ |
| | (Constituent | pronouns | morpheme) | |
| | order) | | | |
| 14 | Behavioral | Full NPs | Participant | {ASPTR} |
| | | pronouns | Nominalization | |
| 8 | Behavioral | Full NPs | Passivization | {P R} {T} |
| | | pronouns | Reflexivization | |

Table 7.3, cont.

| 8 | Behavioral | Full NPs | Antipassivization | {P T} {R} |
|----|--------------|----------|-------------------------|---------------------|
| | | pronouns | | |
| 11 | Behavioral | Full NPs | Telic/all modification | {S P T R} {A} |
| | | pronouns | | |
| 17 | Coding | Full NPs | Spatial integration of | {A}{S} |
| | (participant | pronouns | modifiers | |
| | agreement) | | | |
| 18 | Coding | Full NPs | Clause-combination | {A}{S} |
| | (participant | pronouns | | |
| | agreement) | | | |
| 18 | Behavioral | Full NPs | Pivot in different-A/S- | $\{A S\} \{P T R\}$ |
| | | pronouns | syndetic and asyndetic | |
| | | | coordination | |

7.4. PREVIOUS ANALYSES OF CASE IN CHÁCOBO

As stated in the introduction aspects of Chácobo's alignment system have been treated in other works (Prost 1962; Valenzuela & Iggesen 2007; Córdoba, Villar, Valenzuela 2012). In these analyses Chácobo's alignment system contains the following properties; (i) Ergative alignment in noun phrases preverbally, accusative alignment in pronouns

preverbally; (ii) CV truncation as a marker of absolutive case (Prost 1962); (iii) Neutralization of case distinctions (ergative and accusative) postverbally including truncation on absolutive NPs; (iv) Ergative alignment split by a distinction between completive and incompletive aspect such that completive aspect is associated with an ergative alignment and incompletive is associated with a neutral alignment. These descriptive generalizations were not contexualized with respect to a full description of Chácobo's morphophonology, clause structure, or the (aspectual) semantics of the clauses that purportedly caused the split alignment. Table 7.4 provides a summary of the descriptive statements of previous author's with corresponding revisions or updates based on the more complete analysis presented in this dissertation.

Table 7.4. Analyses in other sources compared to the one of this thesis

| DESCRIPTIVE | Sources | COUNTER | REVISION / UPDATE |
|------------------|-----------------------|----------|-----------------------------------|
| STATEMENTS | | EXAMPLES | |
| CV truncation | Prost (1962: 111) | (6.135) | Apocoped forms surface |
| marks absolutive | Córdoba, Villar, | (6.136) | everywhere except left-adjacent |
| preverbally. | Valenzuela (2012: 47) | (6.137) | to functional high tone |
| | | (6.139) | morpheme or at the right edge of |
| | | (6.140) | a noun phrase in position 16 of |
| | | (6.141) | the sentence. |
| Neutral | Valenzuela & Iggesen | (7.44) | (i) Neutral alignment for NPs |
| alignment in | (2007: 190-191); | (7.45) | that follow the clause-type/rank |
| incompletive | Córdoba, Villar, | (7.46) | morpheme. (ii) Ergative case is |
| aspect | Valenzuela (2012:46) | (7.58) | not assigned to S arguments in |
| | | (7.59) | non-verbal predicate or auxiliary |
| | | | verb constructions. |
| Neutral | Valenzuela & Iggesen | (7.4b) | Ergative case assignment for A |
| alignment for | (2007:189, 192) | (7.5) | NPs prior to clause-type rank |
| post-verbal NPs | Córdoba, Villar, | (7.6) | morpheme. |
| | Valenzuela (2012:46) | (7.56) | |

Table 7.4, cont.

| Ergative | Correct except pre-clause | -type/rank | |
|---------------|---------------------------------|------------|--------------------------------|
| alignment for | morpheme rather than preverbal. | | |
| preverbal NPs | | | |
| Neutral | Córdoba, Villar, | (7.73) | Accusative case assignment for |
| alignment for | Valenzuela (2012:50) | (7.74b) | {P,T,R} pronouns everywhere; |
| post-verbal | | | Epenthetic case assignment to |
| pronouns | | | {A,S} pronouns after clause- |
| | | | type/rank morpheme (position |
| Accusative | Correct except pre-clause | -type/rank | 16 of the sentence) |
| alignment for | morpheme rather than preverbal | | |
| preverbal | | | |
| pronouns | | | |

Chapter 8.Valency

Valency morphemes change or modify the transitivity or alignment of verb complexes with which they combine. The basic correlates of transitivity are described in Chapter 4, and the basic alignment classes are described in Chapter 7. Valency morphemes can be classified into three types which are not completely mutually exclusive; (i) valency-assigning; (ii) valency-adjusting; (iii) valency-orienting. **Valency-assigning** morphemes assign a transitivity value to a root that is not specified for transitivity (Chapter 4). There are five valency-assigning morphemes as shown in Table 8.1.

Table 8.1. Valency-assigning morphemes

| Valency-assigning | |
|------------------------------|---------------|
| Intransitive | -0~-i~-i |
| Transitive | - a |
| Body-part prefix | <i>bi- ba</i> |
| Intransitive -deadjectivizer | -ná |
| Transitive-deadjectivalizer | -wa |
| | |

Valency-adjusting morphemes change the transitivity and/or alignment of a verb complex. There are seven valency-adjusting mechanisms in Chácobo as shown in Table 8.2.

Four of these are valency-reducing meaning that they reduce the number of arguments of a verb complex; (i) middle-passive, (ii) passive; (iii) result-passive and (iv) antipassive. Three of these are valency-increasing, meaning that they increase the number of arguments; (i) applicative-causative; (ii) causative (state-change); (iii) causative.

Table 8.2. Valency-adjusting morphemes

| Valency-reducing | | Valency-increasing | |
|------------------|-------|--------------------------|------|
| Middle-passive | -mɨ | Applicative-causative | -?ák |
| Passive | -?aká | Causative (state change) | -wa |
| Antipassive | -mis | Causative | =má |

Valency-(re)orienting morphemes do not change the transitivity or alignment of a verb complex. Rather they modify the relationship that participants have with each other in the situation denoted by the verb complex (e.g. by denoting that an {A,S} argument is in competition with an obliquely expressed participant).

There are three valency-orienting mechanisms as shown in Table 8.3.

Table 8.3. Valency-(re)orienting mechanism

| Valency-reorienting | _ |
|-------------------------|----------|
| Body-part prefix | bɨ-, ba- |
| | |
| Interaction-adversarial | -ná |
| Interactional | =bɨkí |
| | |

As I stated, the classes above are not mutually exclusive. Body-part prefixes are both valence-assigning and valency-(re)orienting morphemes. The suffix -wa is both valency-assigning (with adjectives) and valency-(re)orienting (with change of state verbs).

Valency-assigning morphemes are discussed first; transitive and intransitive affixes in Section 8.1; body-part prefixes in Section 8.2. Valency-decreasing morphemes are described second; the middle in Section 8.3; the antipassive in Section 8.4; the passive in Section 8.5. I then move on to valency-increasing morphemes. The applicative-causative is described in Section 8.6. Section 8.6.6 describes the de-adjectivalizing/verbalizing morphemes $-n\acute{a}$ 'deadj. intransitive' and -wa 'deadj. transitive, causative'. The morpheme -wa has a dual function as a transitive verbalizer of adjectives and as a causativizer on a specific semantic class of verbs. I assume that -wa is one polyfunctional morpheme and describe its two functions in Section 8.6.6. Section 8.8 describes the highly productive causative =ma. Chácobo has two interactional morphemes (e.g. Epps 2011); they are

described in Section 8.9. Section 8.10 provides an overview a summary of the transitivity, alignment and semantic properties of all of the morphemes discussed in this chapter.

8.1. TRANSITIVITY AFFIXES

This section is concerned with describing transitivity affixes; those affixes that assign a transitivity value to unspecified verb roots. As described in Chapter 4, unspecified verb roots do not have a transitivity value. Unspecified verb roots combine with $-i\sim-i\sim-o$ to become intransitive verb stems. The allomorphy of the intransitive suffix is not fully predictable based on phonological or semantic properties of the verb root (see Section 5.2.1.1 and 5.2.1.4 for discussion). For a given verb root unspecified for transitivity one cannot predict with complete certainty which allomorph -i, -i, or -o it combines with. The semantic range of intransitive verb stems varies from middle, reciprocal, passive and reflexive meanings.

Unspecified verb roots become transitive in combination with the transitive suffix -a. In this case the meaning is consistent across the forms where it denotes a prototypical transitive event where A corresponds to an agent and P corresponds to a patience. The alternation between intransitive and transitive verb complexes formed from transitivity-assigning suffixes is illustrated in (8.1) below.

(8.1)a. hasíni nɨs**-i**=kɨ tie-ITR=DEC:P currasow 'The currassow was tied (by someone).' 'The currassow got tied up.' 'The currassow tied itself' honi=' b. hasíni nɨs**-a**=kɨ man=ERG currassow tie-TR=DEC:P 'The man tied up the currassow.' ELIC

The intransitive verb stem formed with -i~-o~-i has one affected S argument (hasini 'curassow'); the precise type of intransitive situation (middle, reflexive, passive) depends on the semantics of the verb root and the context. The transitive verb stem formed with -a is a two place predicate with an A argument (honi 'man') and a P argument (hasini 'currassow'). Verb complexes headed by root-i/i/o combinations display all the properties of intransitive predicates; (i) lack of ergative and accusative case assignment; (ii) functional morphemes that display transitivity harmony occur in their intransitive allomorph. Verb Complexes headed by root-a combinations display all of the properties of transitive constructions; (i) they assign ergative and accusative case to A and P arguments respectively when these arguments precede the (position 14) clause-type/rank morpheme; (ii) functional morphemes that display transitivity harmony surface with their transitive

allomorph. There are no ditransitive verbs stems built directly from combination with the transitivity-assigning suffix -a (see Chapter 7 for a discussion of the ditransitive).

The syntagmatic, paradigmatic and phonological properties of transitivity affixes have already been described in detail in Section 5.2.1.1. This section is concerned with their semantics.

As I stated above, the intransitive stem can display a wide variety of semantic interpretations. These are defined below (based on Kemmer 1993; Dixon & Aikhenvald 2000).

- Middle: The agent acts on itself but is not affected by this action (e.g. the man stops himself); the agent is not temporally or spatially distinct from the patient.
- **Reciprocal**: Two arguments reciprocally act on one another.
- **Agentless passive**: The passive encodes that the identity of the agent in a transitive event is left unexpressed, even though its action over the patient is still part of the meaning of the event.
- Anticausative passive: passive encodes that the event is not carried out by an agent but instead by the patient itself.
- Reflexive: The agent acts on itself in such a way that the agent and patient can be understood as conceptually distinct even if it refers to a part-whole relation (e.g. the man combs his hair); the agent is spatially distinct from the patient.

The general meaning underlying all of these readings is that the S argument is affected. There are no cases of root-*i*/-*o*/-*i* stems that express cases such as 'run' or 'swim' where the S argument is not affected somehow. Such concepts are expressed by verb roots which are inherently intransitive and, therefore, do not combine with transitive-assigning affixes (see Chapter 6).

In what follows I provide examples from naturalistic speech of each of these meanings; Section 8.1.1 for middle; Section 8.1.2 for reciprocal; Section 8.1.3 for agentless passive; Section 8.1.4 for anticausative passive; Section 8.1.5 for reflexive.

8.1.1 Middle

Following Kemmer (1993) I define a middle situation as one where the agent and patient are not conceptually distinct. Root-*i/i/a* constructs are also compatible with translational motion semantics; one of the middle situations described by Kemmer (1993). This is illustrated in (8.2) with the verb *narab-i* 'go in circles'. Here the S argument is an agent. Compare this with the transitive version found in (8.3)

(8.2) bikiş narab-i=?ái=ka nobá hobo soh

in_front turn-ITR=NMLZ:IPV=REL 1PL:GEN testicles IDEO

'While he (the Chácobo man) was going in circles (around the tree) in front

(of the Maina) (the Maina shot) his (the Chácobo's) testicles (making the sound) "soh".' TXT054:553

8.1.2 Reciprocal

Some root-i/-i/-o complexes can express reciprocal situations. I illustrate this with the verb in sib 'roll up'. The transitive form of the verb with the suffix -a is illustrated in (8.4). The intransitive verb sib-i 'tie oneself, be tied, tie oneself with someone else' expresses either a reflexive (roll oneself up) or a reciprocal situation (roll oneself up with someone) situation. The reciprocal reading emerges when the S argument is plural. The reciprocal meaning is illustrated in (8.5).

8.1.3 Agentless passive

As noted above, verb-*i*/-*i*/-*o* complexes are compatible with a wide range of situation types that are not prototypically transitive (in the sense of Kemmer 1993). The example below illustrates that root-*i*/-*i*/-*o* constructs are compatible with passive situations whereby there is an understood agent that has acted on the S argument. The verb root *atf* 'grab' combines with -*i* to form an intransitive stem and -*a* to form a transitive stem. The intransitive verb stem *atf*-*i* is 'be grabbed'. Transitive and intransitive modifications of this verb root are illustrated in (8.6) below. In this case the protagonist is the understood agent in (8.6c), expressed in an earlier sentence in (8.6a).

$$(8.6)$$
 RAMI:

GËRË:

i-a

grab-ITR=DEC:P

ha

'She (the pigeon) had been caught (lit. grabbed).' TXT 054:043

Another clear instance of an acted upon participant expressed with S using a rooti/-i/-o complex is provided in (8.7). The verb root nis 'tie' combines with the intransitive suffix -i to form an intransitive stem found in (8.7a). The event expressed in (8.7a) has an understood agent that is expressed in the next sentence in (8.7b) using the same verb in combination with the transitive suffix -a.

(8.7) a.
$$tiski='$$
 tsi $ki\acute{a}$ $haw\acute{i}$ $wiko$ $nis-i=n\acute{a}=n\acute$

b. anomaria tsi şo naa kai= no-ki

bothersome P5 DEC DEM1 mother=ERG 1PL-ACC

nis-a=ni=na

tie-TR=NMLZ:REMP=EPEN

"This is bothersome that our mother tied us." (said the currassows)"

TxT061:816-817

8.1.4 Anticausative passive

Intransitive root-*i/i/o* constructs are compatible with agentless passive situations. For instance in (8.8), *tik-i* refers to a breaking event that is not conceptualized as having a distinct agent; the rifle breaks due to overuse and poor quality. It is therefore an example of an anticausative passive reading.

(8.8) $no2\acute{o}$ sar \acute{o} $tik-\acute{i}=ki$

1SG:GEN rifle **break-ITR**=DEC:P

'(I'm going to give my rifle to you to fix), my rifle broke.' TXT 109: 157

8.1.5 Reflexive

In naturalistic speech I do not have any reflexive interpretations of root-*i*/*o*/*i* combinations that do not include a body-part prefix. For stems that contain a prefix, root and intransitive suffix, reflexive interpretations are, however, the most common. This is demonstrated in Section 8.2 below.

To conclude, the intransitive suffix -i/-i/-o expresses a wide variety of situation types associated with intransitivity (cf. Kemmer 1993). The specific semantics of the complex is related to the semantics of the verb root and the context in which root-i/o/i complex appears. Future research needs to be conducted to determine the extent to which root-i/-o/-i complexes ambiguously encode reflexive, middle, passive and reciprocal interpretations or whether specific root-i/-o/-i combinations are restricted to one or the other type.

8.2. BODY-PART PREFIXES

Body-part prefixes are not fully productive in Chácobo, but still combine with a relatively large set of verb roots. When these verb roots are inherently unspecified with respect to transitivity they transitivize the verb complex (e.g. *ta-niş* 'tie someone's foot' is transitive from the unspecified root *niş* 'tie'). Otherwise, body-part prefixes have no affect on transitivity. Body-part prefixes divide into distinct classes in terms of syntagmatics; this is

described in Section 5.2.1.1 above. This section is concerned with how body-part prefixes on verbs relate to valency. Prefix-root combinations displays different degrees of lexicalization across verb stems. I also discuss how these different degrees of interact with transitivity, valency and arguments structure.

When body-part prefixes combine with verb roots, the transitive suffix -a is often not permitted. The alternation and interaction with transitivity-assigning suffixes is illustrated in (8.9) below. The examples below also illustrate that body-part prefixes associate with $\{S,P\}$ arguments.

(8.9) a.
$$ha?i$$
 $bi-t/iş-i=ki$
girl eye-cure-ITR=DEC:P

'The girl cured her own eye (lit. the girl eye-cured herself).'

b.
$$ha-2-iwa='$$
 $ha2i$ $bi-tfis=ki$

3-EPEN-mother=ERG girl eye-cure=DEC:P

'Her mother cured the girl's eye (lit. Her mother eye-cured the girl).' ELIC

The intransitive stem bi-tfis-i displays all the correlates of intransitive predicates; (i) it does not assign ergative or accusative case; (ii) functional morphemes surface in their intransitive allomorphs. The transitive stem bi-tfis 'cure someone's eye' displays all of the properties of transitive predicates; (i) it assigns ergative and accusative case to A (full NPs) and P (pronoun) arguments that precede the clause-type/rank morpheme, (ii) functional

morphemes surface in their transitive allomorphs. As discussed in Chapter 5 (Section 5.2.1.4 above), the form of the transitive stem suggests that the body-part prefix is a valency-assigning prefix. The body-part prefix does not have this function when it combines with intransitive stems (alternative analyses are discussed in Chapter 3).

Body-part prefixes also vary in terms of their productivity and lexicalization (Fleck *forthcoming*). On one extreme there are fully productive paradigms with compositional semantics. A full paradigm of compositional and productive body-part verb root combinations is illustrated in (8.10) below with the verb root $a \hat{l} i$ 'bathe'.

- (8.10) a. $b\dot{a}$ -2-a/i 'to wash one's arm/armpit'
 - b. bi-2-a/i 'to wash one's face'
 - c. $k\dot{a}$ -2- $a\dot{\beta}i$ 'to wash one's back'
 - d. t/i-2-a/i 'to wash one's buttocks'
 - e. há-?-asi 'to wash one's mouth'
 - f. $h\acute{o}$ -2-a/i 'to wash one's ankle'
 - g. $m\acute{a}$ -2-a/i 'to wash one's head'
 - h. mi-2-a/i 'to wash one's hand'
 - i. nó-?-asi 'to wash one's stomach'
 - j. $p\dot{a}$ -2-a/i 'to wash one's ear'
 - k. pi-2-a/i 'to wash one's wing'
 - 1. pí-?-a/i 'to wash one's rib (rib area)'

- m. ki-2-a/i 'to wash one's lips (or wash around the edge)'
- n. wi-?-asi 'to wash one's lower leg.'
- o. rá-?-asi 'to wash one's knee'
- p. ri-2-a fi 'to wash one's nose'
- q. $\int i-2-a fi$ 'to wash one's chest'
- r. $t\acute{a}$ - ∂ -a/i 'to wash one's cheek'
- s. ti-2-a/i 'to wash one's neck'
- t. ?si-2-a/i 'to wash one's teeth'

On the other hand, a number of prefix-root combinations are highly lexicalized. First, I describe the morphosyntax and semantics of the productive prefixes since they display the general tendency. Productive prefix-root combinations associate with S,T or R arguments discussed in Section 8.2.1, Section 8.2.2 and Section 8.2.3 respectively. Bodypart prefixes can co-occur with full body-part NPs; this issue is discussed in Section 8.2.4. Metaphoric extensions of body-part prefixes are described in Section 8.2.5. Finally, deviations from the morphosyntax and semantics of productive body-part prefixes related to lexicalization are discussed in Section 8.2.6.

8.2.1 Associated with S argument

Body-part prefixes limit the reference to a body-part of one of the core arguments of the verb or one of its oblique arguments expressed with the dative =ki or the spatial = no. In the examples below I underline the argument that the body-part prefix associates with. In intransitive verb complexes, the morphemes always associate with the S argument. This is illustrated in (8.11) and below.

'I'm still full, <u>I</u> am bloated from last night, uncle (lit. I am still full, I stomach-inflated last night, uncle).'

TXT 006:700

In the example above, the grammatical S is the first person singular i. The body-part prefix indicates that the referent of the subject is the body-part of the first person singular S argument. Another example of the body-part prefix associating with an S argument is illustrated in (8.12), where the body part prefix mi- 'hand' combines with the verb root nis-i 'tie oneself, be tied'.

(8.12) sawi nia mi-niṣ-i nia mi-niṣ-i

put_on here hand-tie-ITR here hand-tie-ITR

'(When the man received the leather wrist bands and put them on), Putting

it on, he (the man) tied it on one hand and then the other.' TXT 075:26-27

This example demonstrates that body-part prefixes typically contribute a reflexive meaning to a verb stem. The verb stem nig-i 'be tied' can also have passive interpretations as in (8.7), where the context and the translation reveal that the curassows where not the one's who tied their legs. Combination with the body-part prefix in this case restricts the meaning of the verb stem to a reflexive interpretation; mi-nig-i cannot mean 'be tied up in the hands by someone else'. The restriction to a reflexive interpretation in the context of a verb root that selects for an agent subject seems to be the general rule. I do not have any exceptions to it.

8.2.2 Associated with P argument

In combination with transitive verbs, body-part prefixes can delimit the reference of the P argument. This is illustrated in (8.13). The body-part prefix is in bold and the P argument that it associates with is underlined.

In naturalistic speech it is more common for the P argument that the body-part prefix associates with to have no overt realization. This is illustrated in (8.14) and (8.15). In other words a body-part prefix can delimit the reference of a zero argument. Translations of the zero arguments are underlined in the examples below.

8.2.3 Associated with R arguments

Body-part prefixes can semantically delimit R arguments (see Chapter 7). This is illustrated with the ditransitive verb stem ma?a 'put on top of something' in (8.16). The R argument is the fire which is found in the subordinate clause but not overtly expressed in the main clause. The body-part prefix does not associate with the T argument *pitiṣti* 'pot'.

Another illustration of a body-part prefix semantically associated with an R argument is provided in (8.17). The T argument is *maşaşa* 'the stone' and the body-part prefix does not associate with this argument. The R argument (underlined) is unexpressed but is recoverable from context.

(8.17)
$$mas\acute{a}sa$$
 ha ti -rota- $2a(k)$ = ni = ki stone 3 neck-hang-TR=REMP=DEC:P

'He (the jaguar) hung the stone around his (the man's) neck.' TXT 052:670

Another example where a body-part prefix associates with an R argument is provided in (8.18) below. The T argument is *naa taʔi* 'this foot' and the R argument (underlined in the free translation) is unexpressed in the Chácobo.

'(In the same way that) we (do it), they put their (lit. our) foot on someone's (the one's the jaguar has killed's) chest (it is said).'

TXT 034:274

Body-part prefixes only associate with oblique arguments in (transitive) transfer verbs. When a verb is intransitive, the body-part prefix must associate with the S, as described above. A body-part prefix cannot associate with an oblique argument (expressed or not expressed) in intransitive constructions. This is illustrated in (8.19) below. The prefix *ta*- 'ankle, bottom' semantically associates with the S argument *karáma hína* 'penis sheath' even when an oblique argument is present. In this example *ta*- 'ankle, bottom'

delimits the reference of penis sheath such that it refers to the bottom of the penis sheath that buckles around the anus. It does not delimit the reference of the oblique argument (*piași* 'vagina') that the penis sheath is pressing against.

To my knowledge body-part prefixes never associate with a T argument, however, I have not tested for this possibility systematically in elicitation.

8.2.4 Co-occurrence with full body-part nouns

Body-part prefixes are fully compatible with full body-part noun NPs. This is illustrated in (8.20) below. A full NP can be redundantly expressed with the body-part prefix.

(8.20) <u>táʔi</u> ha **tá-niṣ-ki**<u>foot</u> 3 **foot-**tie=DEC:P

'S/he tied his/her/its foot.' ELIC

While speakers accept such sentences in elicitation, I do not have any text examples where the expression of the body-part prefix seems to be genuinely redundant. In naturalistic speech, a verb complex with a body-part prefix combines with full NP body-parts in T function. However, the body-part prefix in such cases associates with an (unexpressed) R argument.

This is illustrated in (8.21). This example refers to an anaconda which grabs the ankle of the cow and folds it up so that it pressing against the cow's calf muscle. A semantically redundant version of the sentence below would contain the body-part prefix wi- 'lower leg' instead of ta- 'foot, ankle, talon, hoof'. In this example hawi wiko 'his lower leg' is in the P argument function and the prefix ta- associates with an R argument. It is important to point out that if the R argument were expressed it would be expressed in an oblique postpositional phrase headed by the spatial clitic = no. This means that in this sentence the body-part is associating with an unexpressed oblique argument.

Another illustration of the body-part prefix associating with an unexpressed oblique argument is provided in (8.22). In this example the body-part prefix ba- 'arm' associates with the possessor noun yoga 'woman' and not the T argument yoga poya 'arm'.

Co-occurrence of full body-part NPs with body-part prefixes are rare in texts and the semantics of such constructions are, therefore, not well understood. It is not clear whether there are circumstances where a body-part prefix must associate with an oblique or whether sentences such as those illustrated above are systematically ambiguous with respect to what argument the body-part prefix associates with.

Unlike some cases of incorporation or lexical affixation (Sadock 1980; Woodbury and Sadock 1986), body-part prefixes cannot function as heads of NPs. In Chácobo many of the dependents can function as full NPs without an overt head noun. However, adjectives cannot occur without an overt head noun. This is true regardless of whether the adjective could associate with a body-part prefix in the verb stem. This is illustrated in (8.23) below. This example shows that body-part prefixes cannot function as heads of NPs.

(8.23) a.
$$ta \partial i$$
 $tf \partial k i$ ha $atf - a = k i$

foot dirty 3 grab-TR=DEC:P

'He grabbed the dirty foot.'

b. * $tf \partial k i$ ha $ta - \partial - atf - a = k i$

dirty 3 foot-EPEN-grab-TR=DEC:P

'He grabbed the dirty foot.'

8.2.5 A note on metaphor

When either one of these grammatical roles is a human or animal they refer to that human's body-part. The Chácobo productively extend body-part concepts to a large repertoire of material objects in their natural environment (e.g. the tree branch is referred to as *hawi poyami* 'arm' and the stock of a rifle is referred to as *hawi tʃikáṣa* 'its buttock'). Body-part prefixes productively relate to such metaphorical extensions as well. Panoanists often

describe other locational concepts associated with body-part prefixes (e.g. "inside"). It is not always clear to me whether these other meanings can be derived from a creative application of metaphor to the natural environment or not. Stated in another way: it is not clear to me precisely how semantically compositional/opaque non-literal uses of body-part prefixes are. The ethnosemantics of body-part prefixes requires future research. In this section I focus on their core semantic functions and how they relate to the grammatical relations of the verb complex they combine with.

An example of a metaphoric extension is provided in (8.24) the prefix *ti*- 'neck' refers to a part of an arrow. The metaphorical extension here is from the neck of a human to the rim of the shaft where the arrowhead inserts.

In the example above, the metaphorical mapping seems to understand the shaft of the arrow as a human body and the arrowhead as a human head. Another apparent metaphorical extension is illustrated in (8.25). Here the middle of a stream is conceptualized as its navel.

- (8.25) a. pao **na**-is yáma kiá bɨnɨ wa=ní=kɨ stream **navel**-look NEG REP husband TR=REMP=DEC:P 'The husband didn't look in the **middle (lit. navel)** of the stream (right away)'
 - b. pao na-is=pama tsi kiá yoşa tsaya=ni=ki
 stream navel-look=CONCUR P5 REP woman see=REMP=DEC:P

 'When he did look into the middle (lit. navel) of the stream, he saw his wife

 (lit. woman).' TXT 058:108-109

In the sentence above, as in many cases with apparent non-literal uses, it is not clear to me what the direction of the metaphoric extension is. It seems possible that the core meaning of *na*- is 'middle' and the metaphoric extension is from the abstract topological relations to specific body-part. Currently I do not know how to resolve this problem. Tentatively, I will assume (as illustrated in the glossing practices), that the body is the source of all the meanings that body-part prefixes express (cf. Lakoff and Johnson 1999 for a general perspective on the issue of cognition and the body).

Another issue with respect to body-part prefixes is the extent to which the apparent metaphoric uses of body-part prefixes do not simply extent to all body-parts. It is not clear to me whether metaphor is a special property of body-part prefixes or body-parts in general. It is also possible that body-part prefixes are just more likely to involve metaphoric extensions than full noun body-parts. This topic requires more research.

8.2.6 Lexicalized forms

As noted above, body-part prefixes vary on a cline from productive-body part prefixes which occur in a full paradigm with a root and are highly compositional (see (8.10)) to those that are lexicalized and not as straightforwardly segmentable from the root they seem to combine with. These lexicalized combinations have one or more of the following properties (see Fleck *forthcoming* for a more detailed discussion of the facts in Shipibo).

- (i) They do not form part of a full paradigm of prefix-root combinations as in (8.10), rather the root can only combine with a subset of the prefixes (possibly only one).
- (ii) They have "idiosyncratic" or noncompositional meanings.
- (iii) The verb root is a cranberry morpheme in the sense that it does not clearly reoccur with the same meaning in other contexts.
- (iv) The body-part prefixes display irregular (ergative) alignment.
- (v) Unpredictable phonological form or morphophonology.

Some examples of lexicalized prefix-verb root combinations are illustrated Table 8.4. This table also contains a list of all of the body-part prefixes that combine with verb roots in Chácobo.

Table 8.4. Lexicalized prefix-verb root combinations

| PREFIX | MEANINGS | LEXICALIZED VERB ROOTS |
|--------|----------|---|
| ba- | arm | ba?awa 'make, construct' |
| baş- | armpit | |
| bi- | face | biso 'wake up', biki 'spy', bilo 'cry, shed tears'; |
| | front | bikáwa 'heavy eyed, ready to sleep'; biʔos 'close one's |
| | | eye' |
| ka- | back | kahtiro 'pass someone by going on distinct path' |
| tsi- | behind | tsikinia 'follow', tsitikiri 'recede', tsibita (verb |
| | | compound?) describes an animal shaking its feathers |
| | | tʃìʃʔari 'lifting the anus while one walks (of animals)', |
| | | tsita? 'follow behind someone' |
| | | tsìba 'chase'; tsìki 'follow' |
| tsi- | behind | tsipi 'fart' |
| ha- | mouth | hana 'vomit'; aisi 'burp' |
| | tongue | |
| hi- | tail | hiso 'urinate' |
| | penis | |
| ho- | ankle | |
| та- | head | maa |

Table 8.4, cont.

| hand | mɨto 'point'; mɨta 'swipe'; mɨso 'grab (grabbing |
|-----------|--|
| | motion)' |
| | mɨkɨ nia 'kill'; mɨbi 'help (lit. grab hand)'; mɨ-bi(k) |
| | 'hold in one's hand'; mɨni 'crawl' |
| border | |
| stomach | |
| ear | pasi 'be quiet'; paso 'listen' |
| wing | pɨrɨ 'fly' |
| shoulder | |
| shoulder | |
| anus | po?i 'defecate' |
| lips | kipi 'stand up against'; kibi 'open mouth' |
| border | |
| leg | |
| thigh | |
| lower leg | |
| knee | |
| nose | riso 'die'; ria 'fill'; risto 'echar brazas'?; riwi 'fill to |
| point | brim'; ritaşna 'put a feather on' |
| end | rinitsa 'put something in something head first' |
| | border stomach ear wing shoulder shoulder anus lips border leg thigh lower leg knee nose point |

Table 8.4, cont.

| ſì- | chest | |
|------------------|----------|--------------------------|
| ta- | foot | tapi 'march, walk' |
| | ankle | |
| ti- | neck | tistia 'cut throat' |
| | rim | tisina 'be thirsty' |
| ti- | shoulder | tima 'push'; tihi 'push' |
| Ş i - | teeth | |

As pointed out by Fleck (*forthcoming*) and noted for other Pano languages (Valenzuela 2003; Fleck 2006; Fleck & Zariquiey 2012), there are cases where more than one prefix appears on the verb root. In all such cases this involves a productive paradigmatic prefix stacked onto a lexicalized prefix-root combination. An illustration from naturalistic speech is provided in (8.26) with the verb *ma-bi-2os* 'cover one's head and face' and in

(8.27) with the verb wi-ra-?if 'be in pain in lower leg and knee'.

As shown above, productive body-part-prefixes display an absolutive alignment delimiting the reference of an $\{S, P, R\}$ argument. They do not delimit the reference of an A argument. However, there are some cases where lexicalized body-part prefixes associate with the A argument. An example is provided in (8.28) below. Notice that the mi- 'hand' on the root -bik 'hold' refers to an A argument's hand.

The root bi(k) 'hold, receive' can only combine with one body-part prefix. The stem mi-bi(k) 'hold in hand' is not a member of a full paradigm (e.g. *ma-bi(k) 'hold with head' does not exist). Lack of full paradigmaticity is another property of body-part prefixes.

The verb root -bik 'receive, hold' seems to be related to the verb root bitf 'receive, hold'. However, the latent consonant is different; /k/ instead of /tf/. The example above, therefore, also illustrates that body-part prefixes tend to display more irregularities compared with their productive counterparts.

Another example where a lexicalized body-part prefix displays irregular morphophonology compared to the productive form are a few combinations are ma-a 'place on top' and mi-a 'give (place in one's hand)'. Productive body-part prefixes insert a glottal stop between the prefix and the verb root when the verb too begins with a vowel. Also the verb root a 'transfer' in these examples comes from the verb root -a(k) 'give, do, with a latent consonant /k/. However, the lexicalized stems do not have this latent /k/; mia2aina rather than *miakaina) (see Section 6.1.2 above).

Lexicalized body-part prefixes occur with "cranberry roots" that have no discernible meaning. An example of such a prefix-root combination is the form *mito* 'point with finger' as shown in (8.29). In this case *-to* has no consistent meaning as a verb root.

'When he (Nahuapaxahua) grabbed (lit. received) it (the chive) and went, his wife pointed in the other (wrong) direction (so that the tapir would not know where Nahuapaxahua went).' TXT 034:096

Another example with a meaningless base is found with the verb tapi 'step' as shown in (8.30). The prefix seems to be ta- 'foot', but the formative pi has no consistent meaning as a verb root.

'While the grandfather (the agouti) was clearing (lit. cutting) the path on the go, so then he (the agouti) said "now put your foot here in the middle!"'
TXT 061:708

8.3. MIDDLE-PASSIVE -MF

There are a small number of inherently transitive verb roots in Chácobo that detransitivize in combination with the suffix -mi 'middle-passive'. These verbal roots encode an A agent that changes the posture or spatial orientation of their P object ("hang up"; "uproot"; "surround"; "fill up") without causing a change of state in the latter. The root-mi combinations are intransitive and the {P} role of the former transitive corresponds to an {S} role of the intransitive. The basic alternation is illustrated in the sentences in (8.31a-b) which show that stems formed with -mi 'middle-passive' do not assign ergative case, unlike the transitive stems out of which they are formed. (8.31c) illustrates that referring to -mi as a passive would not capture all of the semantics of this morpheme.

(8.31) a.
$$ni fi$$
 $honi'$ $rot a = ki$ $hiwi = 'no$

rope man=ERG hang=DEC:P branch=SPAT

'S/he hung the rope on the branch.'

b.
$$ni fi$$
 $rota-m i=k i$ $hiw i=no$

rope hang-MID=DEC:P branch=SPAT

'The rope was hanging on the branch.' ELIC

³¹ Comparison of the verb stems *na* 'die' and *nami* 'kill' suggest that *mi* can also encode a causative. However, *nami* 'kill' is the only instance where the formative *mi* occurs with a causative meaning.

Verb stems that combine with -mi are non-agentive in the sense that they can occur in predicate function of non-verbal predicate constructions without a verbal clause-type morpheme (Section 4.1.2.2 above on agentive vs. non-agentive verbs), as shown in (8.32).

In verbal predicate constructions, the semantics of the suffix *-mi* varies according to the animacy of the {S} argument. The interpretation is either an agentless passive (where {S} is inanimate as in (8.31b)) discussed in Section 8.3.1 below or a middle (where {S} is animate as in (8.31c) discussed in Section 8.3.2 below.

8.3.1 Agentless passive

An agentless passive refers to a passive where the agent is not expressed but is understood from context (Dixon and Aikhenvald 2000: 7). Agentless passive readings emerge from verb-mi constructions when the surface {S} argument is inanimate. Such an agentless passive reading is found in (8.33) below. The verb root ria 'fill up' is a two place predicate with A and P arguments. When it combines with -mi, the underlying A argument cannot be expressed and the underlying P argument is promoted to S. (8.33) below the underlying agent is Ashina (the goddess of the earth and evil). The agent is not expressed in the clause headed by riami 'be filled' below in (8.33). The underlying P argument is himi 'blood' which surfaces as an S argument.

(8.33)
$$pa?iti='$$
 $papá$ tsi $papá$ tsi $nia='=ka$
 $jug=SPAT$ chunk P5 chunk P5 here=SPAT=REL

 $pa?iti='$ tsi $kiá$ $himi$ $ria-mi=ni=ki$
 $jug=SPAT$ P5 REP blood fill-MID=REMP=DEC:P

'(After Ashina sat over the jug and menstruated into it) there were piles of distributed chunks here (from Ashina's vagina) and the blood filled the jug (lit. the blood filled into the jug) (it is said).' TXT 081:005-006

Another illustration of an agentless passive interpretation can be found in (8.32) above.

8.3.2 Middle

Following Kemmer (1993) I understand the middle voice to refer to situations that are conceptualized as a single entity which is both the actor and undergoer. Middle readings of the verb-*mi* constructions emerge out of cases where the surface S argument (underlying P) is animate. An example of a middle meaning associated with a verb-*mi* construct is provided in (8.34) below. In this example the anaconda is responsible for its own filling up. In the following folk legend the anaconda takes the form of a canoe to trick people into getting inside him.

The suffix -mi 'passive-middle' can combine with certain motion verbs. When it does, it removes the motion aspect of the verb and encodes a position for S conceptually analogous to the path of the motion verb.

For instance, the verb tia 'go around something, spin something around' expresses a motion event when it is unmodified by any suffixes. When tia 'go around, spin something around' combines with the suffix -mi it expresses a distribution of participants that corresponds to the path of the motion event encoded by the transitive verb, but it no longer encodes translational motion. This is illustrated in (8.35). This constitutes another example of a middle reading, because the the agent and the undergoer are the same actor. For contrast, compare the sentence in (8.35) those in (8.36) and (8.36) where the unmodified verb root tia 'go around something' refers to motion in a circular path 32

'They (the men) surrounded the house and at eleven a clock they started killing them.' TXT029:216-217

³² It can also mean "spin something around" the A argument need not be the one undergoing the movement.

A few more comments on the meaning of -mi 'middle-passive' can be found in Section 8.4.3 below, where I compare the meaning of this suffix to the meaning of another passive suffix.

8.3.3 A note on historical origins

The suffix -mi is not fully productive in Chácobo. In my corpus it only combines with a handful of verb roots. The homophone -mi 'reflexive' that combines with pronouns to express reflexive meanings is very plausibly diachronically related to the middle voice suffix. Apart from the semantic and phonological similarity (cf. Kemmer 1993 for the

relationship between middle and reflexive semantics), other Pano languages such as Kakataibo have verbal suffix *-mit* which combines with verb roots to encode a reflexive meaning (cf. Zariquiey [2012] for discussion).

8.4. PASSIVE -?AKÁ

The passive suffix -?aká combines with transitive (monotransitive and ditransitive) verb stems. It turns a transitive stem into an intransitive stem.³³ The original P argument becomes an S argument and the original A argument is obligatorily omitted. The basic syntax of the passive is illustrated in (8.38) below. In the following example the passive operation removes the A argument *yoşa* and promotes the P argument *hiwi* to an S role.

(8.38) a.
$$yosa='$$
 hiwi tik-a=ki kifi=ki woman=ERG stick break-TR=DEC:P thigh=DAT 'The woman broke the stick against her thigh.'

b. hiwi tik-a-?aká=ki kifi=kí
 stick break-TR-PASS=DEC:P thigh=DAT
 'The stick was broken against a (someone's) thigh.' ELIC

³³ There are a handful of cases where the passive combines with unspecified verb stems. These are discussed below.

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Passive constructions display all of the properties of intransitive clauses (Section 4.1.1.2 above for a description of these properties); (i) they do not assign ergative case (in the case of full NPs) or accusative case (in the case of pronouns); (ii) they condition the surfacing of intransitive allomorphs in morphemes that display transitivity harmony. Passivized verb stems are non-agentive (see Section 4.1.2.2 on non-agentive verbs) in the sense that they can function as predicates in non-verbal predicate constructions. This is shown in (8.39).

The fact that passivized verbs can occur as predicates in non-verbal predicate constructions is not indicative of nominal or adjectival status. Passivized verbs are distinct from adjectives in that they cannot occur in attributive function in an NP without being embedded under the relativizer =ka(to) as shown in (8.40).

Furthermore, passivized verb stems can combine with any of the functional morphemes restricted to verbal predicate constructions.

The passive in Chácobo is basically an agentless passive. It is not clear to me whether there is an anticausative reading of the verb-?aka constructions (defined in §8.1 and Dixon & Aikhenvald 2000: 7). This issue is discussed below. As stated above, Chácobo passives do not allow the A argument to be expressed, unlike "prototypical passives" (Sierwiska 2013).

8.4.1 Agentless passive

An example of the agentless passive is found in (8.41a). The passive suffix combines with the transitive verb root *kiyo* 'finish'. The underlying A argument refers to the firefly that murders a clan of people. The A argument cannot be expressed in the same sentence, but the narrator states who the agent was in the following sentence for clarification as shown in (8.41b). This example illustrates that there is an implied A argument in the passive construction in (8.41a). The underlying P argument *no?iria* 'people' surfaces as an S argument in this sentence.

'(After the firefly came), the people were all killed (finished).'

Another example of an agentless passive reading is provided in (8.42). The understood agent is a group of mosquitos, which are mentioned in previous discourse. The underlying P argument is the first person singular which surfaces as an S and is expressed by the pronoun =a.

(8.42)
$$ha-2-\acute{a}$$
 tsi $pi-2ak\acute{a}=tsi=k\acute{i}=a$ $biri$ $n\acute{i}$

3-EPEN-SPAT P5 eat-PASS=IMM:ITR=DEC:NONP=1SG clean INTER

 $osa=pari-ma$ i $i=ki=r\acute{i}$

sleep=first-NEG 1SG AUX=DEC:P=REG

((There are mosquitos everywhere) Lam being eaten in this place. I should

'(There are mosquitos everywhere), I am being eaten in this place, I should have slept first where it might have been clean (lit. is it clean? I regret not having slept there first).'

TXT 100:268

Another illustration of an anticausative passive is provided in (8.43) below from a folk story about the goddess Ashina. The story describes how villagers created a trapping pit in front of Ashina's porch to try to catch her to stop her from eating babies. The following sentence describes Ashina sweeping in front of her porch where the ground is described as having been dug out (literally "thinned") by the villagers. The Chácobo villagers are the understood agent. The passive suffix -2aká combines with the verb stem bispa-wa 'thin someone or something' removing the A argument syntactically.

(8.43) bawi=bina ha wa=?á=ka bispa-wa-?aká=ki kiá sweep=COMING:TR/PL 3 TR=NMLZ:P=REL thin-V:TR-PASS=DEC:P REP '(After the villagers had made the trapping pit) when she (Ashina) came sweeping (the front patio of her house), it (the ground) had already been made into a trapping pit (lit. thinned).' TXT113:181

Another example of an agentless passive is provided in (8.44). In this sentence, the agent is highly topical since it refers to the speaker, Nahuapaxahua. After transforming the tapir witch into an animal without magic powers, Nahuapaxahua explains that the tapir will be eaten for the rest of his life. The implied agent is the speaker; the underlying P argument is the addressee (the tapir), which surfaces as an S argument.

(8.44) habi níka tsi pi-ʔaká~pi-ʔaká=pao=sí=ki mí-a
surely like_so P5 eat-PASS~eat-PASS=HAB=REMF=DEC:NONP 2SG-EPEN

'(Having been transformed into an animal) surely in this way you (tapir)
will be eaten for the rest of your life (by Nahuapaxahua and his clan)' TXT

034:194

In the sentences provided in (8.41) and (8.42) the discourse context is such that the implied agent is not highly topical, which corresponds to the typical function of the passive cross-linguistically (Siewierska 2013).³⁴ Even though the agent cannot be expressed in passive sentences formed with -2aka 'passive', the implied agent is often highly salient. In most of the discourse in which the passive occurs in my corpus, the implied agent is a third person plural. The salience of this reading can be partially shown by the fact that speakers typically translate passive sentences with a third person plural subject in Spanish. This is illustrated in the text example below which was transcribed and translated completely by

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³⁴ (8.44) seems to partially be an exception to this in that the implied agent includes the speaker and his clan (which is presumably topical). The translation in parentheses is context that was provided by a Chácobo as he explained the meaning of the text. However, it is possible that the implied agent in this sentence should be understood as "people in general" and not specifically Nahuapaxahua's clan, and that the translation above reflects a textual interpretation rather than something that is strictly relevant for understanding the semantics or pragmatics of the passive.

one of my consultants. While the sentence is unequivocally grammatically passive, Paë Yaquë translated it with a third person plural subject.

(8.45) náama $ak-(?)ak\acute{a}=ki$

already kill-PASS=DEC:P

'(When we saw him in the den of the Maina), he had already been killed.'

'Speaker translation: "ya lo mataron"; "They already killed him"

TXT003:162

In fact the passive construction in Chácobo likely has its diachronic roots in a construction with a third person plural subject (see Section 8.4.5 for discussion). Nevertheless there are cases where the implied agent is a first person plural. An example of this is provided in in (8.46b) below. This sentence is uttered in the context of a speaker referring to seasonal harvests of various crops. Some of the relevant context of the passive sentence is provided in (8.46a). The implied agent for the verb complex pi=yama-2aka 'not be eaten' is the community of the speaker (Siete Almendros, Benicito river). The understood S argument of (8.46b) is the corn mentioned in (8.46a).

There are certain cases where the agent is indefinite and not mentioned in prior discourse. An example of this is provided in (8.47) below. The understood A argument is the merchants who sell clothes. They are not explicitly mentioned in the preceding discourse context. The underlying P argument is *osafa* 'American clothes' which surfaces in the S role in the passive verbal predicate headed by *inia-?aká* 'be sold'.

8.4.2 Anticausative passive

It is not clear to me whether anticausative readings are compatible with passive verb-?aka constructions. The few apparent examples all involve negative verbal predicates. In such cases it is not clear whether the interpretation is truly anticausative or whether this reading is just apparent because the understood agent is indefinite.

Perhaps the clearest case of an anticausative reading is found in (8.48). This sentence is from conversational data where a speaker is describing his (very old) rifle essentially falling to pieces because of overuse. He makes reference to the fore-end (a part of the rifle that is used to hold it steady), saying that this part did not break off. To express this he combines the verb stem *tsok-a* 'pull something out' with the passive *-?aká*. However, it is not clear that there is a recoverable or implied agent in this sentence since it is referring to the gradual wear of the rifle itself.

(8.48) **tsók-a-?aka**=yáma nɨpáş =ka pistia tsaya=?aí **loose-TR-PASS**=NEG middle=REL small see=INTER:NONP:2SG

'But it (the fore-end of the rifle) did not fall out (lit. was not pulled out), it was barely (lit. a little) stuck in the middle, you see (lit. do you see?).'

TXT 109:104

Other potential cases of anticausative readings associated with verb- ∂aka constructions are less clearly anticausative. For instance, in (8.49), no agent is mentioned or recoverable from discourse. In the next sentence in (8.49b), the narrator clarifies that, in fact, the motacusillo could be lifted by Caco and his sisters. The understood agent of the verbal predicate construction in (8.49a) could be other indefinite people who had tried to lift the motacusillo or the narrator could be conceptualizing this as a general property of the motacusillo. The difference between indefinite agentivity and anticausative interpretation seems to be too subtle to decide in this case.

'But Caco cut the bunch (of motacusillo) (it is said) and his two sisters caught them.' TXT 026:192

I conclude from the available data that the anticausative passive reading is not strongly associated with passive verb-?aka constructions. All of the contexts involve

negated predicates and in most cases except perhaps (8.48) it is unclear whether the reading is anticausative or there is an understood indefinite agent. Note that Chácobo has other constructions that it can use to express anticausative readings. For instance, verb-i/o/i constructs can express anticausative passive readings (§8.1). The distinction between verb-laka passive and other intransitive constructions that can also express passive meanings is discussed below.

8.4.3 Comparison with other passives

The suffix -2aká 'passive' can be distinguished from -mɨ 'middle-passive' in that -2aka is incompatible with middle readings. This is illustrated in (8.50) below.

- (8.50) a. rono rota-mi=ki
 snake hang-MID=DEC:P
 'The snake was hung (by someone).'
 'The snake hung himself.'
 b. rono rota-?aká=ki
 - snake hang-PASS=DEC:P
 - 'The snake was hung (by someone).'
 - *'The snake hung himself.' ELIC

While the suffix -mi 'middle-passive' is compatible with middle and passive readings, the suffix $-2ak\acute{a}$ 'passive' is only compatible with the passive reading. Apart from this, another difference between -mi and $-2ak\acute{a}$ is that $-2ak\acute{a}$ is completely productive (it combines with all transitive verb stems) whereas $-m\acute{i}$ only combines with a handful of forms.

The main strategy in Chácobo for expressing anticausative passive situations is with the verb-*i*/-*o*/-*i* verb constructions (Section 8.1.4) and not with -?aká constructions. Evidence for this comes from the response of Chácobo speakers to Bohnemeyer et al.'s (2001) cut and break videos. In cases where an object was shown breaking or being cut on its own accord, my consultants used intransitive versions rather than passive constructions as shown in (8.51) and (8.52) (see Bohnemeyer et al. (2001) for a detailed discussion). Note that passive constructions are available for these verbs, but the Chácobo never used them in spontaneous breaking and cutting video clips.

(8.51) Video 16: shows a stick which breaks in half without any agent

híwi tɨk-i=kɨ

stick break-ITR=DEC:P

'The stick broke.'

The data above show that intransitive verb-*i*/-*o*/-*i* constructs are the primary means of expressing situations where an agent is not implied semantically. As discussed above, verb- $\partial ak\dot{a}$ constructions usually involve an implied agent. Further evidence for the distinction comes from the results of elicitation of instrumentals based on the cut and break clips. While - ∂aka passives always allow expression of an instrumental = no 'by means of' as illustrated in (8.53a). This is not true of intransitive root-o/i/i constructions. My consultants (Caco Moreno, Paë Yaquë) judge verbal predicate constructions headed by root-o/i/i verb stems with instruments as shown in (8.53b) to be unacceptable or at least semantically odd.

(8.53) a.
$$ni fi$$
 $kiis-Pak\acute{a}=ki$ $poroma='no$

rope cut-PASS=DEC:P axe=SPAT

'The rope was cut by (lit. through /by means of) an axe.'

b. $??ni fi$ $kiis-i=ki$ $poroma='no$

b. ??ni/i $k \neq i = k \neq i$ poroma = no

'The rope was cut by (lit. through/by means of) an axe.' ELIC

The difference between intransitive root-o/-i/-i verbs and passive -?aka constructions provides further evidence that the distinction between these constructions with respect to passive readings can be roughly characterized as a difference between anticausative and agentless passives. An overt instrumental oblique is compatible with verb-?aka constructions because an agent is implied (agentless passive). However, the primary reading of kiis-i is not an agentless passive and, thus, adding an agent is semantically odd; there is no implied agent to use the instrument. Note, however, that text data still suggest that verbal predicates headed by root-o/-i/-i constructions are still compatible with agentless passive meanings (Section 8.1.3).

8.4.4 Ditransitives: derived and lexical

Passivization detransitivizes ditransitive constructions. However, whether the resulting construction is a one-place or a two-place predicate depends on whether the ditransitive verb is a derived ditransitive or a lexical one. Recall from Section 4.1.1.3 that a derived ditransitive construction is formed with the causative clitic =ma.

When the passive suffix -2aka combines with a derived ditransitive, the resulting structure allows one surface S argument; the surface S argument is ambiguous between two readings; whether it corresponds or refers to an underlying T or underlying R argument from the original ditransitive verb.

In Chácobo the T and R arguments are indistinguishable in terms of case marking and constituent order as shown in (8.54a); either $ha \mathcal{H}wa$ 'his mother' is interpreted as the T argument and baki 'child' as the R argument or $ha\mathcal{H}wa$ 'his mother' is interpreted as the R argument and baki 'child' as the T argument.

ELIC

As with monotransitives, when a derived ditransitive verb undergoes an -2aká passive operation the A obligatorily cannot occur (just like in other passives). The structure only allows one S argument, which ambiguously corresponds to the underlying T or underlying R argument as shown by the different possible interpretations provided in (8.54).

In naturalistic speech, the interpretation (R vs. T) can be discerned from context. The following sentence is about a man who is married to a fish and then is taken away by her. The shaman responsible for the marriage utters the passive sentence in (8.56). The underlying T argument sani 'fish' surfaces as the S argument; the man associates with the underlying but unexpressed R argument, a reading which can be inferred from context (the man is the topic of the story, and the shaman is addressing the man's wife).

(8.56)
$$sani$$
 $bi=ma-2ak\acute{a}=it\acute{a}=ki$ i tsi fish receive=CAUS-PASS=RECP=DEC:P say P5 $ki\acute{a}$ $y\acute{o}bi$ $=n\acute{i}=ki$

REP shaman =REMP=DEC:P

"(Your husband is never coming back, because he lives in the river) he (your husband) has already been married off to (lit. received by) the fish."

The shaman said (it is said).' TXT 068:161

I stated that the passive operation with $-2ak\acute{a}$ removes the A argument added by the causative =ma 'causative' and the underlying A argument from the argument bi- 'grab'. It thus removes two syntactic arguments from the verb complex.

However, it can only remove one argument from a verb root. When the passive combines with neutrally aligned lexically ditransitive verbs (those that case mark T and R as absolutive), then only the A argument is removed (see Chapter 7 on the distinction between direct/indirect and neutrally aligned ditransitive verbs). This results in an intransitive verb that selects for two arguments; an extended intransitive construction (Zariquiey and Valenzuela *forthcoming* for a review). Two examples of this are provided in (8.57) with the lexical ditransitive verb *taa* 'serve' and in (8.58) with the lexical ditransitive verb *ratsa* 'pin up'. Note that the passivized versions do not occur with the pleonastic *wa* which marks a transitive clause in fronted-VP constructions. Nevertheless they still have two arguments.

(8.57) *taa* 'serve'

- a. yoşa hini táa honi= wa=ki
 woman chicha serve man=ERG TR=DEC:P
 'The man served chicha to the woman.'
- b. yoşa taa-ʔaká hɨnɨ =kɨ
 woman serve-PASS chicha =DEC:P
 'The woman was served chicha.'

- c. hɨnɨ taa-ʔaká yoşa =kɨ
 chicha serve-PASS woman =DEC:P
 'The woman was served chicha.'
- (8.58) ratsa 'pin to, stick to'
 - a. hiwi foto ratsa honi= wa=ki

 stick picture pin_to man=ERG TR=DEC:P

 'The man pinned the picture to the stick.'

 'The man pinned the stick to the picture.'
 - b. hiwi ratsa-ʔaká foto =ki

 stick pin_to-PASS picture =DEC:P

 'The stick was pinned/stuck to to the picture.'

 'The picture was pinned to the stick.'
 - c. foto ratsa-?aka hiwi =ki

 picture pin_to-PASS stick =DEC:P

 'The stick was pinned/stuck to to the picture.'

 'The picture was pinned to the stick.' ELIC

8.4.5 A note on historical origins

The passive in Chácobo is nearly phonologically identical to a sequence of the applicative/causative suffix -2ak (described in Section 8.6) and the plural clitic $=k\acute{a}n$ (see

Chapter 7 and Chapter 15). The only difference is that the latter sequence of morphemes contains underlying /k/ and /n/ segments in coda positions. The /k/ will always be deleted in this sequence. The /n/ sequence is deleted in most morphosyntactic contexts.

The pathway from third person plural subject to passive marker is well attested cross-linguistically (Siewierska 2010; Auderset 2015), based on the pragmatic overlap between third person plural subject constructions and the semantics of the passive. The combination of the transitive and plural marker is, therefore, a plausible diachronic source for the passive morpheme. A precise account of the development of the passive will require greater development of knowledge of the history of Pano languages in general, however.

8.5. ANTIPASSIVE -MÍS

The suffix -mis 'antipassive' in Chácobo detransitives a verb stem. The underlying {P,T,R} arguments of the original transitive verb are obligatorily unexpressable. The basic syntax of the antipassive is illustrated in (8.59). The P argument of (8.59a), honi=bo 'the men' cannnot be expressed when tsaya 'see' combines with the antipassive morpheme -mis as shown in (8.59b).

(8.59) a. $h\acute{o}ni=bo$ $ts\acute{a}ya$ $polis\acute{i}a='$ wa=ki man=PL/ASS see police=ERG TR=DEC:P

'The police man looked at the men.'

b. tsaya-mis polisia = ki look-ANTIPASS police = DEC:P

'The police were looking (for anything/everything/in general).' ELIC

When the antipassive combines with monotransitive verb roots such as *tsaya* 'see' the P argument is unexpressable syntactically. It cannot be expressed in an oblique role, unlike many other languages with antipassive derivations (e.g. Kozinsky et al. 1988). A verb stem formed with *-mis* is intransitive; (i) it does not assign ergative or accusative case; (ii) functional morphemes that combine with it surface in their intransitive allomorphs (Chapter 4).

As in other languages with a similar valency-adjusting morpheme (cf. Janic 2013), the antipassive in Chacobo has other functions apart from detransitivization and removal of a {P,T,R} argument. It always seems to be pejorative and expresses habitual or often obsessive behavior on the part of the participant it encodes in an {S} role. It can combine freely with intransitive verb roots, where it has no detransitivizing function and instead only expresses the latter meanings. In my corpora it is most commonly found inside complexes deverbalized with the habitual nominalizer - sini.

8.5.1 Deverbalized constructions

While data gathered from elicitation suggest that *-mis* is fully productive, in naturalistic speech it is very rare to find the antipassive not embedded in a deverbalized clause. Most commonly stem-*mis* complexes combine with *-'gini*.

Despite the fact that *-mis* constructions cannot occur with an overt P argument in their clause, they can imply a definite and unexpressed P argument. This is illustrated in (8.62). The antipassive suffix *-mis* combines with the verb root *roa* 'threaten' in (8.62). The recipient of the threat is expressed in the second person singular outside of this clause.

(8.62)
$$roa$$
- mis - $gini$ = ka mi - a pi go naa threaten-ANTIPASS-DEVBLZ =REL 2SG-EPEN ANX DEC DEM1 'You always threaten me.' TXT061:319

8.5.2 Lexicalization

For most of my Chácobo consultants, the suffix *-mis* 'antipassive' has very salient derogatory connotations. For instance, Caco Moreno and Miguel Chavez translate the combination of *tfani* 'converse' and *-mis* 'antipassive' as 'to talk behind someone's back'. Associated with its derogatory connotation it also displays a number of more specific lexicalized meanings. For instance, the combination of the verb *raa* 'send' with *-mis* 'antipassive' means 'to scold' as illustrated in (8.63).

(8.63) a.
$$osa=pari=ki-a$$
 sleep=FIRST=DEC:NONP-1SG "I am going to sleep first." the sloth said.

b. *raa-mis=tɨkɨn=tsi=ikiá*

send-antipass=again=now:itr=rep

'It is said that he (Nahuapaxahua) was scolding him now.' TXT 061:760

Another important lexicalized root-*mis* combination is illustrated in (8.36). The combination of the verb *fina* 'think, plan' with the suffix -*mis* 'antipassive' refers to a more profound state of sadness than that expressed by the verb *koi* 'sad'.

8.5.3 Ditransitives

When an antipassive combines with a neutrally aligned ditransitive verb it removes the T argument. The R argument is still expressible but only with the dative case marker =ki. This is illustrated in (8.65) with the neutrally aligned ditransitive verb taa 'offer'.

- (8.65) a. híni yóşa táa=ki hóni chicha woman offer=DEC:NONP man 'The man offers chicha to the woman.'
 - b. *hɨnɨ/*yoṣa taa-mís=ki hóni
 *chicha/*woman offer-ANTIPASS=DEC:NONP man
 'The man offers constantly.'
 - c. yosa=ki taa-mis=ki hóni woman=DAT offer-ANTIPASS=DEC:NONP man 'The man offers to the woman (obsessively).'

8.5.4 Intransitives

The antipassive can combine with intransitive verbs as in (8.66a) below. For most speakers, antipassive constructions appear to be incompatible with clauses that have past tense marking as in the sentence in (8.66b) below.

(8.66) a. haba-mis=ki

run-ANTIPASS=DEC:NONP

'S/he always escapes.'

b. *haba-mis=ki

run-ANTIPASS=DEC:NONP

'S/he always escaped.'

Apart from the incompatibility with past tense clauses, the suffix *-mis* has two restrictions for which I do not have an explanation. As described in Chapter 5, the antipassive morpheme is incompatible with monomoraic roots. Another restriction is that it cannot combine with verb stems that contain the valency-assigning suffix *-a* 'transitive' (8.67b). It can combine with verb stems formed with the valency-assignin suffix *-i/-o/-i* (8.67a).

(8.67) a. *nɨṣ-ɨ-mis=ki*

tie-ITR-ANTIPASS=DEC:NONP

'He always ties.'

b. ?#*nɨṣ-a-mis=ki*

tie-TR-ANTIPASS=DEC:NONP

'He always ties'

Apart from the ban on combination with monomoraic root and root-a complexes, the suffix -mis is fully productive with all verb stems regardless of transitivity. It never combines with part-of-speech classes that are not verbs.

8.6. APPLICATIVE-CAUSATIVE -?ÁK

The suffix -2ak displays a variety of overlapping and syntactic and semantic functions associated with increasing transitivity. When -2ak combines with an intransitive verb root, it always results in a transitive verb stem. However, whether the resulting construction is applicative or causative depends on the verb root. The causative function of -2ak is illustrated in (8.68). This this example a causer A argument is added *honi* 'man (erg.)'. The underlying S argument tfi2i is demoted to a P argument in the causativized version.

(8.68) a.
$$tfi?i$$
 $b\acute{a}ha=ki$

fire brighten=DEC:P

'The fire provided light (lit. the fire brightened)'

b. $tfi?i$ $baha-?a(k)$ $honi='$ $wa=ki$

fire brighten-APPL/CAUS man=ERG TR=DEC:P

'The man stoked (lit. brightened) the fire.' ELIC

The applicative function of -2ak is illustrated in (8.69). In this sentence, the underlying P argument fino' 'monkey' of seen in (8.69a) is promoted to an A argument in (8.69b). A P argument is added to the applicativized construction in (8.69b).

When -?ak combines with a transitive verb root, the resulting construct has an increased transitivity (in the broad sense of Hopper and Thompson 1980), but precisely how the transitivity is increased depends on the verb root. Its function in this case ranges

from applicative, sociative causative to direct causative, depending on the semantics of the verb root (defined in the relevant sections).

In some cases it increases the affectedness on P. I describe the variable functions of -?ak below. Currently, I am unable to predict the precise type of transitivity increase that -?ak encodes; it appears to depend on the verb root in a fairly idiosyncratic way. The suffix -?ak is not fully productive. I do not know whether its productivity can be predicted from the semantic or other properties of the verb root it combines with.

The applicative/causative morpheme seems to be related diachronically to the transitive verb root ak 'make, do, hit'. The verb root ak 'do, make' is highly polysemous and combines with many nouns to form idiom-like N-V constructions. The Chácobo also use it productively to incorporate Spanish verbs into their lexicon. After providing a description of the semantics and morphosyntax of -2ak as a valency-chaning operation on verbs in Sections 8.6.1 through 8.6.5, I discuss the semantics and morphosyntax of ak 'do, make' in Section 8.6.6. Section 0 discusses some cases that could be regarded as intermediate between stem-2ak constructions and constructions with ak 'do, make'.

8.6.1 Applicative function

That the suffix -2ak has an applicative function is illustrated in (8.70), (8.71) and (8.72). The verb root 500 'breath, blow' refers to the process of catching someone's breath. The meaning of the verb root 500 'breath, blow' is illustrated in the sentence in (8.70).

'Then he (the jaguar) sat down and was out of breath (lit. he was blowing)

TXT026:082

When the suffix -2ak combines with the verb root 500 'blow' it has an applicative function. The resulting verb complex acquires a {P} argument in combination with the suffix -2ák. The {S} argument is promoted to an {A} argument who intentionally breaths or blows on the argument denoted by {P}. In Chácobo, the verb complex 500-2ák 'blow on, breathe on' is of special cultural significance since it can be used to refer to a specific type of black magic performed by shaman or even apprenticed witches. The applicatized verb complex is illustrated in (8.71).

(8.71)
$$kaşa-na=i$$
 tsi $ha-to$ $witsa$ anger-INTRC=SS P5 3-PL:ACC other $soo-2ak=k\acute{a}n=ki$

blow-appl/caus=3pl=dec:nonp

'When people are annoyed between each other, they can start to bewitch (lit. blow on) the other ones.' TXT 114:022

Another example of -2ak with an applicative function is provided below. The suffix -2ak has an applicative function in combination with kofo 'spit'. The resulting verb complex transitivizes, acquiring a P argument. The underlying S argument is promoted to an A argument in combination with the suffix -2ak. This is illustrated in (8.72) below.

8.6.2 Sociative causative function

In combination with certain verb roots the suffix -2ák appears to have a sociocausative function. In sociocausative functions, an A causer argument accompanies the affected P argument (Pradesh and Shibatani 2002). In combination with motion verbs -2ak adds a participant which also partakes in the motion event. The function of the suffix -2ak in such circumstances can be considered sociative causative because in such cases the A argument always accompanies the affected P argument. For instance the verb <code>gaha</code> 'ascend' illustrated in (8.73) becomes 'ascend and lift P' in combination with the suffix -2ak as illustrated in (8.74).

(8.73)hatsi saha kiá i=ni=kisaha tsi ha then 3 ascend ascend Р5 REP AUX=REMP=DEC:P 'Then he just kept ascending (it is said).' TXT 052:052 (8.74)saha-**?ak**=só papi=bayá=?ikiá carry=DO&GO:TR/PL=REP ascend-APPL/CAUS=PRIOR:A 'When he (the Maina) lifted (lit. caused to ascend) him (the Chácobo) he

TXT 054:560

carried him (the Chácobo) and left.'

The suffix -?ak has the same effect on all motion verbs with which it combines. Such cases seem to be ambiguous between an applicative analysis where a P is added, and S is promoted to A, and a causative analysis where S is demoted to P and A is added. The reason is that both arguments partake in the motion event denoted by the original verb root. Motion verb-?ak combinations, thus seem to be intermediate between applicatives and direct causatives.

Another example of an alternation with the applicative/causative that is intermediate between applicative and causative functions is the alternation between *riri* 'light oneself up' and *riri-ʔak* 'light someone up'. The source of the light or the participant initiating the lighting activity is the {A,S} argument. The participant being lighted is the {S,P} argument. This can be illustrated by comparing the examples in (8.75) and (8.76).

These examples illustrate another example of a sociative causative, because the A argument continues to light her/himself up throughout the activity.

8.6.3 Direct causative

There are also cases where -2ak has a clear direct causative function. An example of this is illustrated in (8.77) and (8.78). The verb root yaho 'shake' has a middle meaning where a subject causes herself to shake as illustrated in (8.77). In combination with -2ak the S

argument becomes an affected and unintentional P, and a causing A argument is added which causes the shaking event. This is illustrated in (8.78).

'He (Nahuapaxahua) moved around (shook himself) and then jumped (to shore) and went (away from the caiman).' TXT061:393

'He (the man) shaked it (the tree) and the paitamichi fruit fell with the sound "ririki" and they (the fruit) formed a large pile (lit. were put on top).' TXT 078:040

Another example of a direct causative interpretation of -2ak is in combination with the verb root $\int iri$ 'boil'. The verb root $\int iri$ 'boil' refers to an inchoative boiling process. The suffix -2ak transitivizes the verb complex and adds an A argument. This is illustrated in (8.79) below.

8.6.4 Increasing affectedness of P

In all of the cases described above, -?ak transitivizes an originally intransitive verb root. There are some instances where -?ak combines with a transitive verb. In such cases the suffix does not add a new argument, rather it increases the affectedness on P. For example, the verb too 'hit (for projectile)' encodes contact between the A and the P argument. This contact can involve damage or a change of state to the P argument, but it need not imply this. An example of this verb root is provided in (8.80).

When the verb root combines with the suffix -2ak the affectedness on the P argument is increased. The verb root *too* 'hit' becomes *too-2ak* 'hit and puncture', imlying a permanent change of state on the P argument. The increase in affectedness is illustrated with the sentence in (8.81) below, which describes the puncturing and/or lopping off of a monkey's testicle using a specialized ribbed arrow head (*tiopi*).

(8.81)
$$hobo$$
 tsi $ki\acute{a}$ $tiopi='$ ha testicle P5 REP ribbed_arrow=SPAT 3 $too-2a(k)$ ha $wa=n\acute{i}=ki$ fly_hit-APPL/CAUS 3 TR =REMP=DEC:P

'By means of the ribbed arrow he punctured the testicle (of the monkey).'

TXT 003:051

8.6.5 Semantic opacity

As stated above the suffix -2ak is not fully productive. Furthermore, the formative -2ak surfaces in a number of verb stems that are either extremely opaque semantically in the sense that it is unclear how their meaning can be derived from the meaning of their parts, or else they should not be understood as complex forms containing -2ak at all. Examples of such cases are provided in (8.82) and (8.83).

(8.82) a. baba 'tremble from fear'

b. baba-?ák 'touch P gently/ with caution'

(8.83) a. *tihi* 'be filled to the brim'

b. tihi-?ak 'push P'

8.6.6 The verb root ak 'do, make'

As stated above the verb root ak 'do, make' is likely diachronically related to the valency-adjusting suffix -2ak 'applicative, causative'. This section describes the semantics and morphosntax of the verb root ak 'do, make'. This verb root displays some important functions including being used to predicate certain ideophones and incorporate Spanish verbs into Chácobo.

8.6.6.1. NP-ak combinations

The verb root ak is highly polysemous. Its most common meaning is "make", illustrated in the exampless in (8.84), (8.85) and (8.86) from naturalistic speech.

AUX=REMP=DEC:P loin cloth

3

3

make=CONCUR:S

$$ak=(?)\acute{a}i=na$$

make=NMLZ:IPV=EPEN

'That is (made from) cotton, and (with this), she made the little thin strings and (with this), she made loin cloths.' TXT 060:052-053

The second most common meaning of ak 'do' is 'kill', illustrated in (8.87) and (8.88).

- (8.87) náama hiwi= a(k)=ki kiá tfostí= no

 already stick=SPAT kill=DEC:P REP wooden_hammer=SPAT

 'He (Nahuapaxahua) had already killed her (the anteater) with a stick.'

 TXT 050:923
- (8.88) $toa=s\acute{o}$ tsi $r\acute{o}?o$ no $a(k)=yam\acute{i}(t)=k\emph{i}$ DEM2=A P5 black_howler_monkey 1PL kill=DISTP=DEC:P

 'From there we killed some manechis.' TXT 099:010

It is also used for consuming beverages as in (8.89). The verb pi 'eat' is used for eating. For some activities related to consumption such as foraging ak 'do' is also used as in (8.90).

$$(8.89) hini a(k)=ki=a$$

chicha drink=DEC:NONP=1SG

'I am drinking (lit. doing) chicha.' TXT 052:358

$$(8.90) hono maniwa a(k)=?\acute{a}i haska-wa=ki=a$$

taitetu patuju do=NMLZ:IPV seem_to=DEC:NONP=1SG

'I thought it was a taitetu foraging (lit. doing) for patuju.' TXT 092:178

The verb ak 'do' is also used for activities that involve harvesting or gathering as in (8.91) and (8.92).

(8.91)
$$hatsi$$
 $ki\acute{a}$ $haw\acute{i}na=ba='$ $karo$ $a(k)=n\acute{i}=ki$

then REP relatives=PL=ERG lumber do=REMP=DEC:P

'Then the children gathered (lit. do) lumber.' TXT 068:130

$$(8.92) karapi=na a(k)=ki=a$$

plantain=POSS do=DEC:NONP=1SG

'I am going to harvest plantain (lit. that which has plantain)' TXT 002:149

When one catches a fish the verb ak is also used as in (8.93).

It can also function as a transfer verb meaning 'put' or 'send' as in (8.94).

(8.94)
$$hatsi$$
 $ki\acute{a}$ $\acute{a}wara='$ $ha=k\acute{i}$ $haw\acute{i}$ $gani$ then REP tapir=ERG 3=DAT 3SG:GEN pubic_hair $a(k)=n\acute{i}=k\acute{i}$ kill=REMP=DEC:P

'Then the tapir gave her his pubic hair.' TXT 052:712

The verb ak 'do' will also be used in interrogatives where the action is under question. In this case the verb ak 'do' combines with the constituent interrogative hawi 'what'. An example is provided in (8.95) below.

(8.95)
$$iw\acute{a}ti$$
 $yok\acute{a}$ naa $gin\acute{i}$ $ka=yamit=(?)\acute{a}=kato='$ gra_mo Yoca=VOC DEM1 ... season go=DISTP=NMLZ:P=REL=SPAT $haw\acute{i}$ mi $a(k)=yam\acute{i}t=(?)\acute{a}$ what 2SG do=DISTP=INTER:P

^{&#}x27;Grandmother Yoca, this season that went, what did you do?'

Txt 105:087

The verb ak 'do' in combination with the negative morpheme $y\acute{a}ma$ 'not' is used as a negative response to a polar question, as illustrated in (8.96). In the affirmative, the expletive haa 'yes' is used, however (Section 4.2.2 on interrogatives).

(8.96) QUESTION

- a. no?o tapa mi yoma=?á

 1SG:GEN almonds 2SG steal=INTER:P
 - 'Did you steal my almonds?'

ANSWER

- b. $a(k)=y\acute{a}ma=k\acute{i}=a$
 - do=NEG=DEC:NONP=1SG

'I haven't done it.' OBSV.

(8.97) yoanomanó tsi wistí oṣi=kiriki tsi kiá

after a long time P5 one month=AFTER P5 REP

hii hii a(k)=ni=ki

pant pant do=REMP=DEC:P

'After a long time, after one month, she (the jaguar) was panting.' TXT 042:031

8.6.6.2. Spanish verb-ak combinations

When Chácobo borrows verbs from Spanish they must combine with the verb ak 'do, make' in order to surface. Examples of the adaptation of Spanish verbs into Chácobo using the verb root ak 'do, make' are provided in examples (8.98) through (8.102).

This strategy is highly productive and to my knowledge can be applied to any Spanish verb without constraint. The transitivity of the resulting V-ak construct takes on the transitivity of the Spanish verb to my knowledge.

8.6.7 Lexicalized noun-?ak combinations, denominalization and some analytic considerations

There are a number of expressions using ak 'do, make' are not completely semantically predictable. For instance, the combination of the papi 'paper' and ak 'do, make' means to write a letter; but based on the meaning of ak 'do, make' described above its not clear why it does not mean to make paper. An example is provided in (8.103) with the combination $papi\ ak$ 'write a letter (lit. do paper)'.

officers will carry us off.' TXT 090:088

A few of the fixed expressions using ak are provided in (). Note that when the object noun is adjacent to the verb root a glottal stop is sometimes inserted (see Section 6.1.1 above

- (8.104) a. papi (?) ak 'write letter (lit. do paper)'
 - b. kɨni (?) ak 'shave (lit. do beard)'
 - c. hina (?) ak 'engage in sexual activity with a man (lit. do penis)'
 - d. po?iki (?) ak 'have sexual intercourse with anus (lit. do anus)'

Some of the more semantically opaque expressions cannot be interrupted. An example of this is with the form *kibitfi ak* ', blow someone, cast black spell on someone (lit. do lips)' as in the example below.

TXT 114:058

In this combination the noun stem and the verb root cannot be interrupted. In terms of constituency the difference between stem-2ak constructions and noun-ak constructions no longer exist. Therefore, such lexicalized cases of N-ak combinations could instead be viewed as stem-2ak constructions where the -2ak suffix has a denominalizing function. It is not clear to me that the latter analysis should be ruled out.

It is useful to consider some of the analytic consquences of assuming that the -2ak 'do, make' suffix and the ak 'do, make' verb root are really the same morpheme, which we could refer to as $_22ak$ using an underscore. This would mean that there is one verb root that combines with verbs (having a valency-adjusting function) and one verb root that combines

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 $^{^{35}}$ Recall that glottal stops are inserted at the boundary between N-N combinations (Section 6.1.1). Some of the variation in glottal stop insertion is not completely understood. More research into this topic might provide a clearer diagnostic for distinguishing between the verb root ak and the applicative -2ak to the extent that this distinction is valid at all.

with nouns. An important differences arises between these constructions in that ak requires a verb root to be adjacent but does not necessarily impose this requirement on noun stems or noun phrases that it combines with. In The $V_{-}(?)ak$ combinations the elements cannot be interrupted no matter what the combination. $N_{-}(?)ak$ combinations display a continuum of combinations from more compound-like, as in the examples in this section, to more verb phrase like expressions (see Section 8.6.6.1 above for examples). The combinations which are verb phrases (or verb phrase-like) can be interrupted and even some of the semantically opaque $N_{-}(?)ak$ combinations can be interrupted (such as $papi\ ak$ 'write a letter' as in (8.103)). Its not clear how to explain the difference in verb versus noun combination, except by stipulation. It should also be pointed out that V-V compounding in Chácobo is not a productive strategy (at least not synchronically).

Based on these considerations I will assume in this thesis that there are in fact two morphemes; an applicative/causative suffix and a verb root meaning ak 'do, make'. The former morpheme combines with verb stems and the latter morpheme combines with noun complexes on a continuum from stems to phrases. I do not regard it as unreasonable to think of these as really the same structurally and semantically versatile morpheme.

8.7. DEAJECTIVALIZATION AND CHANGE OF STATE -NA / -WA

The suffixes $-n\dot{a}$ and -wa productively combine with adjectives to form intransitive and transitive verb stems respectively (introduced in Section 3.3.2). In this function they are

valency-assigning morphemes. The suffix $-n\acute{a}$ adds an {S} argument, and -wa adds an {A} argument and a {P} argument. The alternation is illustrated in (8.106).

- (8.106) a. titikáa so raití
 long DEC clothes
 - 'The clothes are long.'
 - a. $titikaa-n\acute{a}$ raiti =ki long-V:ITR clothes =DEC:P

'The clothes lengthened.'

b. raiti titikaá-wa honi= wa=ki
clothes long-V:TR man=ERG TR=DEC:P
'The man lengthened the clothes.' ELIC

Verbal predicate constructions headed by adjective-*na* combinations display all of the properties of intransitive verbal predicates and those headed by adjectives-*wa* display all of the properties of transitive verbal predicates (Section 4.1.1.2). Intransitive verb stems formed with -*na* denote a change of state on the S argument. The transitive construction with -*wa* always denotes a causative event where the A argument causes a change of state in the P argument. A verb stem formed from an adjective with either of the suffixes -*na* or -*wa* functions like any other verb stem in being able to combine with all productive

valency-adjusting and valency-orienting morphemes. For instance, the transitive verbalized adjective *bispa-wa* combines with the passive suffix *-?aka* in (8.43) above.

The suffix -wa also has a transitivizing and causative function in combination with some verb roots. For instance, the verb root poro 'rot' is intransitive. It takes one S argument as shown in (8.107a), where it combines with the S argument naraha 'orange'. The suffix -wa transitivizes and adds an A argument when it combines with poro 'rot'. This is illustrated in (8.107b). The verb root poro 'rot' does not combine with the intransitive verbalizer -na.

In combination with verbs the suffix -wa has a valence-adjusting function rather than a valence-assigning function. The semantics of the alternations between adjective-na versus adjective-wa and verb(intr.) vs. verb-wa are similar, however, as will be discussed below.

8.7.1 Verbalization with -na and -wa

The basic semantics of the deadjectivizing suffixes -na and -wa are illustrated in examples in (8.108) and (8.109). The adjective *fini* means "red, brown". (8.108) shows that adjective-na constructs can express inchoative situations; the urucu colors on its own through exposure to the sun. (8.109) conceptualizes a similar event with an agent (no-a 'we') causing a change of state in the urucu.

Another illustration of the semantics of the deadjectivizers is provided with the adjective *hoşo* 'white, cooked' in (8.110), (8.111) and (8.112). In past tense clauses rootna constructs can have a inchoative or result interpretation. (8.110) provides consecutive sentences in discourse describing the process of making traditional Chácobo pottery. In (8.110a) the newly formed jug is dark, the color of the damp mud from which it was made.

Overnight it hardens and turns white; (8.110b) refers to the result state.

'After stoking the fire, they put the little jug on top of it (the fire).'

(8.111) illustrates another result state meaning of root-*na* constructs with two consecutive sentences in discourse. (8.111b) refers to the eyes of a the cutuchi snake after being boiled to death by his lover's mother.

'Then (it is said) she (his lover's mother) threw him (the cutuchi snake) into the boiling hot water, and then he (the snake) came out.'

Combination of the adjective *hoşo* with the causativizer -*wa* is illustrated in (8.112). This example shows that -*wa* can be associated with resultative semantics. It also shows that the A argument does not have to be an intentional agent.

(8.112)
$$p\acute{a} \slashed{sa=ro} \slashed{a} tsi ki\acute{a} fìn\acute{o} bari=' hoşo-wa=?\acute{a}=ka$$

raw=LIMIT P5 REP monkey sun=ERG white-V:TR=NMLZ:P=REL

 ha $pi=k\acute{a}n=pao=n\acute{i}=ki$

3 eat=3PL=HAB=REMP=DEC:P

'They only ate the monkey raw that the sun had dried (lit. whitened).'

TXT 113:19

The adjective *hia* 'good' combines with *-na* and *-wa* to mean 'prepare'. This is illustrated in the examples in (8.113) and (8.114).

In (8.113) the adjective *hia* 'nice, good' combines with the deadjectivalizer *-na*. The S argument of the verb stem *hia-na* is *riispitsi* 'arrow string'.

In (8.114) the same adjective combines with the suffix -wa below creating a transitive verb stem hia-wa 'to prepare something'.

As noted above, -wa also causativizes intransitive verb roots, which is discussed in the next section. The suffix -na does not combine with verb roots, however.

8.7.2 Causativization of intransitive verbs

The examples thus far show -wa in combination with adjectives. As stated above, the suffix -wa cannot combine with every verb root. The data suggest that the suffix -wa combines

with most intransitive verb roots that denote a change of state in S. In such combinations, -wa functions as a valency-adjusting morpheme adding a causing A argument and demoting S to P. From the data I have it seems that stem-wa combinations always encode indirect causatives in the sense that the causing event and the caused event are potentially spatiotemporally distinct. This section illustrates the range of the semantics of the verb roots that the causitizing -wa combines with.

The verb root *finá* 'become dry' encodes a change of texture for an S argument. The suffix -wa combines with this verb root, as illustrated in (8.115) adding an A causing argument and demoting the underlying S argument to a P role.

(8.115) moto mi nia=?ai=ka finá-wa=yáma=ki bari chive 2sG throw=NMLZ:IPV=REL dry-V:TR=NEG=DEC:NONP sun '(During the rainy season), the sun doesn't dry the chive that the you throw (out into the sun).' TXT 105:166

The verb *kaşa* 'get angry' encodes a change of emotional state for its S argument. The suffix -wa can combine with this verb root to add a causing A which causes a change the state on P such that P becomes angry. This is illustrated in (8.116).

(8.117) provides another example of -wa in combination with a change of state verb root.

(8.117)
$$bi=wi$$
 $papa$ $no-ki-ri$ $rani-wa=wi$ i $grab=IMPER$ $father$ $1PL-EPEN-AUG$ $be_happy-V:TR=IMPER$ say tsi $ki\acute{a}$ $no?\acute{o}$ $ha-?-ipa$ $=n\acute{i}=ki$ $P5$ REP $1SG:GEN$ $3-EPEN-father $=REMP=DEC:P$ "Grab it, father, make us happy" $said$ my $father$. TXT $68: 347$$

The verb root *habi* 'learn' refers to a change in the cognitive state of S. The suffix -wa can combine with this verb root as shown in (8.118b) below. The following sentences come from a story about how the captured Maina women taught Chácobo women how to make various cultural artifacts The suffix adds an A argument which is mai namakato

'those who live in the earth' in the example below. The understood P argument is not overtly expressed.

(8.118)
$$ka?i=y\acute{a}ma=kan=iki\acute{a}$$
 $h\acute{a}ma$ mai
 $know=NEG=3PL=REP$ but earth

 $nam\acute{a}=kato='$ tsi $ki\acute{a}$ $habi-wa=n\acute{i}=ki$

below=REL=ERG P5 REP learn-V:TR=REMP=DEC:P

"(It is said) that they (the Chácobo women) didn't know anything. But those who live below the earth (the Maina women) taught them (the Chácobo women) (lit. cause them to learn)'TXT 007:389-390

The suffix -wa can also combine with intransitive verb roots that designate a change in size. The root ani 'grow, widen' is an intransitive verb root that indicates a change of state in its S argument. When -wa combines with this morpheme it adds a causing A argument, demoting the underlying S to a P function. In the following examples the causing A argument is the thorn, and the ear is the P argument of ani-wa 'cause to widen'.

'Using a thorn they make a hole in the ear like this, and in there (in the ear) in this way its similar to the a nose ring hole, surely like this it (the thorn) goes as it (the thorn) widens the ear hole.' TXT115: 152

I stated above that -wa combines with nearly all change-of-state verbs. The exception to this is the verb root mani 'transform' (discussed in Section 8.8 below). However, -wa does combine with the verb habiti 'transform (on purpose)' to make the form habiti-wa 'bewitch', which is illustrated in (8.120).

(8.120) ...
$$to ?oti$$
 $nino=kan=\acute{a}$ tsi $ki\acute{a}$ gun point=3PL=NMLZ:P P5 REP

 $ha-t\acute{o}$ $habit\acute{i}-wa=k\acute{i}$ $ki\acute{a}$

3-PL:ACC $transform-V:TR=DEC:P$ REP

'When they (the carayana) pointed their guns, he (the shaman) cast a spell on them (causing them to freeze)' TXT 032:348

8.7.3 Overlap between adjectives and change of state verbs

In the data I have -wa combines with all adjectives and all intransitive verbs that denote a change of state in S. What is not completely predictable is whether a given concept will be lexicalized as an adjective or a verb root. For instance, tfomi 'very wrinkled' and mino 'become wrinkled' are near synonyms except that the former is slightly stronger than the latter, usually referring to the elderly rather than just mild (middle-aged) wrinkling. However, tfomi is an adjective and mino is a verb. Thus, tfomi combines with -na and -wa in order to head a verbal predicate construction while mino heads such a construction directly or combines with -wa for a causative construction. The difference is illustrated in the following examples below.

(8.121) a. *tfomi* 'very wrinkled'

b. *tfomi-na* 'become wrinkled'

c. *t/omi-wa* 'make someone wrinkle'

(8.122) a. mino 'wrinkle'

b. **mino-na*

c. *mino-wa* 'make someone wrinkle'

The semantic and morphosyntactic overlap between adjectives and intransitive change of state verbs has resulted in variation between speakers concerning which forms are coded as adjectives and which forms are intransitive change of state verbs. For instance, my consultants disagree on whether the *koi* 'sad' can function as an attributive adjective without modification.

8.7.4 Semantic opacity

Generally the semantics of root-wa combinations are fairly transparent; indirect causation and change of state on P caused by A. However, there are few lexicalized combinations. For instance, when tfama 'be strong' combines with the suffix -wa it has a much narrower reading than one would expect (e.g. 'cause to become strong'). It denotes that A protects P, which presumably will make P stronger in the distant future, but the narrowness of the reading does not follow from the semantics of its parts. An example of the verb complex

tfama-wa is illustrated in (8.123) below. The story refers to the shaman Tashi who was able to protect people from death.

In general combinations with *-wa* are fairly transparent. The few exceptions I have to transparency are listed in (8.124) below.

8.7.5 Combination with nouns

There are two types of exceptions to the description of -wa above; that it encodes a change of state on an added P argument. There are a handful of roots that are lexically flexible

between nouns and verbs; *hoi* 'speech, speak, language'; *mai* 'dirt, ground, throw dirt'. Examples of such N/V-wa combinations are illustrated in (8.125) and (8.126) with the stems *hoi-wa* 'greet' and *mai-wa* 'bury' respectively.

It is not clear in such cases whether the -wa is verbalizing a noun stem, or adding an applicative function to an intransitive verb. Combination with lexically flexible N/V roots seem to be the only exception to the generalization that -wa has a causativizing function.

8.8. CAUSATIVE =MA

The causative clitic =ma combines with intransitive and transitive verb stems. It adds a causing A argument. The clitic =ma transitivizes intransitive verb stems as shown in the alternation in (8.127). For intransitive verb stems, the original S argument of the intransitive is demoted to a P argument, and a causing A argument is added.

(8.127) a. honi pab
$$i=ki$$

man dance=DEC:P

'The man danced.'

b.
$$hiri=$$
 honi $pabi=m\acute{a}=ki$

Gere=ERG man dance=CAUS=DEC:P

'Gere made the man dance.'

Those verbal predicates formed with =ma display all the properties of transitive verbal predicates (Section 4.1.1.2). Unlike, the causative deadjectivalizer -wa, the clitic =ma combines with transitive verb stems as shown in (8.128). When the clitic =ma combines with a transitive verb stem, the result is a neutrally aligned ditransitive verb (see Section 4.1.1.3 for the distinction between neutrally aligned ditransitive verbs and direct/indirect ditransitive verbs); that is a ditransitive verb where the T and R arguments

are coded the same (absolutive). Only the added causing A argument receives ergative case as in *kako* in (8.128b).

(8.128) a.
$$tafi='$$
 hawi pia $ts\acute{a}ya=ki$

Tashi=ERG 3SG:GEN arrow see=DEC:P

'Tashi saw his arrow.'

b. $kako='$ hawi pia $tafi$ $tsaya=m\acute{a}=ki$

Caco=ERG 3SG:GEN arrow Tashi see=CAUS=DEC:P

'Caco showed Tashi his arrow.'

(also 'Caco showed Tashi to his arrow', given the appropriate context)

ELIC

This morpheme is fully productive in the sense that it can combine with any verb stem. The only exception is that it cannot combine the change of state verb roots described in Section 8.7.2 (those that causativize with -wa) unless they have already combined with the causative -wa. For instance, =ma cannot combine with rani- 'be happy' (*rani=ma is unacceptable) until this morpheme has already been transitivized with the causative suffix -wa (rani-wa=ma 'make someone make someone happy' is acceptable).

For causative constructions it is typical to refer to two A arguments; one which is the causer and one which is the causee. In the following description I will refer to the causee as the A argument and the causee as the T_A argument. This is done to make the description

of ditransitive causative constructions consistent with the general description of transfer ditransitive constructions (see Section 4.1.1.3). I add a subscript A so that the reader understands that the T_A is not semantically the same as the T in transfer verb constructions. T refers to a notional theme. T_A refers to an argument that is a causee in a causative construction, but that does not necessarily display any of the alignment facts associated with A arguments. Following this convention I will refer to the patient in a ditransitive causative construction as R_P to index its structural identity to R arguments in transfer verb ditransitives. The use of this terminology is illustrated below.

(8.129)
$$R_P$$
 A T_A

$$fin\acute{o} no ina a=m\acute{a}=i i=pao=n\acute{i}=ki$$

$$monkey 1PL dog kill=CAUS=SS AUX=HAB=REMP=DEC:P$$
'We used to have our dog kill the monkey.' TXT 032:149

In its productive use, =ma encodes a semantic space that covers sociative causation and indirect causation (Shibatani & Pradesh 2001). These concepts are defined below.

- **Indirect causation**: The causing event and the caused event are in principle spatially and temporally distinct.
- **Sociative causative:** The causing and caused events are spatially and temporally distinct but where the causer accompanies the causee throughout the event.

The specific type of sociative causative that =ma tends to encode is that of **supervision** (Shibatani & Pradesh 2001: 101), where the causer is in physical proximity to the causee but the causer and causee are not acting jointly. There are some exceptions to these semantic statements; cases where =ma 'causative' is associated with direct causation of joint-action/assistive causation. They are generally not as prominent as the supervisory meanings which are ubiquitous in naturalistic speech.

Another property of modification by =ma is that it tends to not condition any change of state in P/R_P unlike the P arguments in causative constructions formed with -wa. The P/R_P argument is only weakly affected for verb complexes with =ma. An arguable exception to this is where =ma combines with transformation verbs such as mani=ma 'transform T_A into R'. Another semantic property of =ma causatives is that the A argument need not have control over the event. The causing event could have been carried out by accident. These semantic details are described below.

8.8.1 Indirect causation

Instances of prototypical indirect causation using =ma are provided in (8.130). This is a case of indirect causation because in principle the caused act of smelling is temporally and spatially distinct from the causing act.

go=PRIOR:A P5 REP pumpkin chicha 3

\$\siti=ma=ka(n)=ni=ki\$ naa \$\siti=wi\$

\$\small=CAUS=3PL=REMP=DEC:P\$ DEM1 small=IMPER

'After he goes (comes) they (the Nahuapaxahua) made him (the tapir witch)

\$\smell\$ the pumpkin chicha "Smell this" [they said].' TXT. 34:191

Another example of an indirect causative is provided in (8.131). The falling of the monkey is temporally and spatially distinct from it being shot.

One consequence of the indirect causative function of =ma is that it is typically used for acts of witchcraft. Examples of this are provided in (8.132), (8.133), and (8.132). (8.132) below is from a folk story about Ashina describing how she created mosquitos.

(8.132) $noya = ma = y\acute{o} = it\acute{a} = ki$ tsi kiá hawí fly=CAUS=CMPL=RECP=DEC:P Р5 3sg:gen say REP baki awi =ni=kidau in law =REMP=DEC:P '(After the Chácobo complained about the mosquitos), Ashina's daughter in law said "She (Ashina) made all of them (the mosquitos) fly." TXT 081:035 (8.133)komawa ha

(8.133) $tsimo=?\acute{a}$ komawa ha $noya=ma=n\acute{i}=ki$ become_night=NMLZ:P partridge 3 fly=CAUS=REMP=DEC:P $ho=y\acute{a}=ki$ $bakitf\acute{a}$ come=PERF at_night

'When it became night, he caused the partridge to fly.' (turned a piece of wood into a partridge, but by night he had already arrived.' TXT 054:689

(8.134)tʃaʔitaṣɨni t[a?itasɨni yo/i hiwi koaif wind/spirit big tree big IDEO koaif = katipas=ma=kas=i=nakoaif koaif IDEO IDEO IDEO =REL murder=CAUS=VOL=CONCUR:S=EPEN 'The wind arrived knocking down big trees with the sound "koaish koaish koaish", he (the tapir witch) was attempting to cause them (the trees) to kill him (Nahuapaxahua).' TXT 034:111

The clitic =ma also expresses "let" semantics, where the causing A argument does not have control over the situation. This is illustrated in the example in (8.135) referring where the speaker criticizes one of her siblings for not watching over the family's captive badger.

Another example of =ma construction with a non-controlling causing A argument is provided in (8.136). This is from the same narrative above. The speaker uses =ma to refer to their lack of control over T_A .

8.8.2 Sociative causative

The causative clitic $=m\dot{a}$ is not a dedicated sociocausative morpheme (in the sense of Guillaume and Rose [2010]), however, it has a semantic range that extends over sociocausative situations. It is used in cases where the A argument is helping the P or T_A argument carry out an action. Illustrations of causative =ma constructions where the A argument has a supervisory and/or helping role are provided in (8.137) and (8.138). In (8.137) the verb complex $pi=m\dot{a}$ refers to a situation where the referent of the A argument invites the referent of the T_A argument to eat with her. The causee A does not physically control the action of the T_A participant which is why this is not a direct causative.

(8.137)
$$tfos-a=so$$
 ha $ak=2a$ tsi $no-ki$ ha $crush-tr=prior:A$ 3 $do=nmLz:P$ P5 $1pL-ACC$ 3 $pi=ma=ni=ki$ $tso2i=so=na$ $aro=ya$ $eat=CAUS=REMP=DEC:P$ $fry=prior:A=EPEN$ $rice=COM$

'When they crushed them, from there she fed us / invited us to eat that which was fried with rice' TXT 102:050

Another example of a sociocausative use of =ma is provided below. (8.138) refers to a a hypothetical situation where the addressee A argument (a caiman) would ferry the addressee (Nahuapaxahua) in the T_P role across a river.

(8.138)
$$hatsi$$
 $ki\acute{a}$ $no?iria$ $=ro?\acute{a}$ $=s\acute{o}$ $i-a-r\acute{i}$ then REP people $=$ LIMIT $=$ A $1sG-EPEN-AUG$ mi $fita=ma=ki\acute{a}=ki$ $1sG$ cross=CAUS=CNTFCT=DEC:P 'If you were only like a person you would be able to help me cross.'

TXT 061:268

The examples of sociocausative situations above involve supervisory or helping types of relations. Another type of sociocausative situation is joint action on the part of the referents of the A and T_A arguments. This is a much less common use of the causative =ma construction (typically joint action is expressed with interactionals; see Section 8.9). An example of a joint action is the verb nika=ma 'ask' which combines nika 'listen' with the causative =ma, illustrated in (8.139). Since the prototypical act of asking involves listening on the part of both the causee and the causer, the following example can be understood as a case of a joint-action sociocausative.

$$i$$
 ha $=ka=ni=ki$ $kafi=nori$
say 3 $=3PL=REMP=DEC:P$ bat=IMAG

'Everyone came and he asked them (about it), "We don't know anything."

They said, but it was the vampire.'

TXT 034:207

The participants of joint-action sociocausatives can be expressed with comitatives as in (8.140) below.

The verb complex afi=ma 'bathe, make someone bathe' is ambiguous between direct and indirect causation. It could mean that the causer physically acted on the causee, or it could mean that the causer prepared a bath for the causee. An example of the latter meaning is provided in (8.131)

8.8.3 Direct causation

The verb complex afi=ma 'bathe, make someone bathe' is also used to refer to cases where parents bathe their children, which shows that =ma complexes are compatible with situations that involve direct causation, even if verb=ma combinations always allow indirect interpretations.

In general verb=ma combinations encode indirect causation. There is one verb stem which presents an exception to this pattern This is the verb stem ni=ma 'put', illustrated in (8.142). This is the only case where a verb=ma combination obligatorily expresses direct causative semantics.

(8.142)
$$ka = s\acute{o}$$
 tsi $wai = '$ $p\acute{t}r\acute{t} = k\acute{t}$

go=PRIOR:A P5 farm_plot fly=DEC:P

 $n\acute{t}p\acute{a}s$ tsi ni - ma =? $iki\acute{a}$ $tfapo_biw\acute{t}so$

middle P5 stop-CAUS=REP cricket

'When he came, he flew into the middle of the farm plot. It is said that the cricket planted it (corn) in the middle.'

TXT 074:024

The verb complex nima 'put' is exceptional for other reasons, however; (i) unlike productive uses of =ma the verb root and the causative cannot be interrupted by the negative morpheme $y\acute{a}ma$; (ii) the verb root ni is realized as nii in all other contexts. This

suggests that *nima* is a lexicalized construct. This might explain why this form displays semantics that are distinct from the general pattern.

In general =ma does not express a change of state on P or R_P. Rather causative change of state situations are expressed using the suffix -wa described in Section 8.7.2 above. One potential exception to this is the verb mani 'transform'. An example is illustrated in (8.143).

(8.143) hawi=bo hiwi ha mani=ma=?a=ka boh

thing=PL/ASS stick 3 transform=CAUS=NMLZ:P=REL IDEO

'He transformed the stick into something (a type of insect) with sound

"boh" Txt 032:282

8.8.4 Ditransitives

The causative clitic =ma can combine with lexical (neutral) ditransitives that mark their T and R arguments as absolutive. In such contexts the clitic =ma adds an A causing argument and demotes the original A argument to a causee T_A argument role. The resulting construction contains three arguments in the absolutive as illustrated in (8.144) below.

(8.144) honi=bo hini honi_baki taa=má=ki ha-?-ipa

man=PL/ACC chicha boy serve=CAUS=DEC:P 3-EPEN-father

'His father sent the boy to serve chicha to the men.' ELIC

Cases of ditransitives with all overt arguments are unattested in my corpus.

8.9. Interactionals -NA and =BHKI

Chácobo has two morphemes that I refer to as "interactionals". These morphemes encode the mutual involvement of two or more participants (e.g. Epps 2011). They can combine with intransitive or transitive verb stems. They do not affect the transitivity of the verb stem they combine with. This is illustrated with a transitive verb stem *tsáya* in (8.145) below.

(8.145) a.
$$tafi='$$
 yo?ina $ts\dot{a}ya=ki$

Tashi=ERG animal see=DEC:P

'Tashi saw the animal.'

b.
$$tafi='$$
 $kako=ya=só$ $yo?ina$ $tsaya=biki=ki$

Tashi=ERG Caco=COM=A animal see=INTRC=DEC:P

'Tashi and Caco saw the animal together.' ELIC

When the interactional clitic =biki combines with the verb stem $ts\dot{a}ya$ 'see', the transitivity of the verbal predicate does not change. This is shown by the fact that in (8.145b), the A argument tafi 'Tashi' is assigned ergative case, and the oblique argument $kako\ y\dot{a}$ 'with Caco' receives a participant agreement marker $=g\dot{a}$ which is reserved for transitive clauses.

Interactionals do not transitivize intransitive stems, as shown in (8.146) below where the interactional clitic =biki combines with the intransitive verb stem yonoko 'work'. If the resulting verb stem was transitive then yonoko=biki 'work together' would assign ergative case in (8.146b), but it does not. Furthermore, the participant agreement marker $=2\dot{a}g$ 'S' occurs on the oblique comitative argument $pai=y\dot{a}$ 'with Paë'. The participant agreement clitic $=2\dot{a}g$ 'S' can only mark a dependency relation to intransitive verbal predicates.

Gere work=DEC:P

'Gere was working.'

Gere Paë=COM=S work=INTRC1=DEC:P

'Gere was working with Paë.' ELIC

In the examples above the interacting participant is expressed with an oblique comitative phrase ($pai=y\acute{a}$ 'with Paë'). In interactional constructions, it need not be, however. For instance, in (8.147a), the interacting participants are expressed with a plural noun phrase $yo_5a=bo$ rather than the addition of a comitative phrase. In cases where the S argument is inanimate and singular, the interactional =biki can function as a dual marker as in (8.147b).

One of the primary functions of interactionals is to express reciprocal situations. The examples above illustrate that this is not a necessary function of the interactional =biki, however. The situation encoded by interactionals can be such that more than one participant is involved in performing the action denoted by the verb without necessarily implying that these participants reciprocally interact with each other.

In the examples above I have made reference only to the interactional =biki. This clitic is fully productive and can occur on all verb stems for all speakers. The interactional

suffix -na is different in this respect. It is more limited in its distribution across verb stems and across speakers. To my knowledge the suffix -na displays the same basic syntax as the interactional clitic =biki above with respect to alignment. This question requires future research, however.

Often the suffix -na and the clitic =biki occur together in one verb complex and it is not clear whether they should be regarded as distinct morphemes in all circumstances. The clearest difference between these morphemes is that -na is strongly associated with adversative or competitive semantics, while =biki is neutral in this regard. The adversarial/competitive semantics of -na can only be found when this morpheme occurs without =biki. The interactionals can combine together where the neutral meaning associated with =biki takes priority (see (8.158b) and (8.159b) below). I still do not understand what the semantic difference is between -na=biki and =biki. Mutually contrastive examples from elicitation suggest they are the same.

For all speakers of Chácobo =biki 'interactional' is fully productive in the sense that it can combine with any verb stem. For most dialects of Chácobo -na is limited in its combination to a small number of verb roots. However, for speakers of the Xaxobo dialect the morpheme is fully productive and in its non-lexicalized always encodes competition between the participants involved in the event.³⁶

³⁶ The Xaxobo dialect is the dialect spoken by the Roca family that is considered divergent by many of the Chácobo in the central communities such as Alto Ivon.

As stated above the interactionals do not have an effect on the transitivity of the verb complex they combine with. They are also not valency-adjusting in the sense that they do not add, remove, promote or demote the arguments of a verb. They have an affect on the semantic roles expressed in oblique relations, however. Oblique relations expressed by comitative or dative postpositional phrases are normally neutral with respect to the animacy of the participants they refer to. However, in the presence of *-na* and/or *=biki* these comitative phrases and in some circumstances dative marked noun phrases explicitly indicate that the mutually involved participants are animate. If the oblique comitative or dative arguments are not expressed they are necessarily understood as such. It is for this reason that I consider the interactionals to be valency-orienting modifications rather than valency-adjusting ones, as discussed in the introductory paragraphs of this Chapter.

8.9.1 Reciprocal situations with =biki

An example of the interactional combining with an intransitive verb is provided in (8.148). The involvement of more than one participant is encoded by the plural clitic =kan.

$$(8.148) yosa=biki=k\acute{a}(n)=ki$$

annoy=INTRC1=PL=DEC:NONP

'They are annoyed with each other.' TXT 100:029

As stated above, the interactional =biki can combine with transitive verb stems as in (8.149) and (8.150).

TXT 067:165

The clitic =biki can be used to express strong reciprocity in the sense that all the participants are mutually acting on one another in the same way (Majid et al. 2011:31). This is illustrated in (8.151) below, which describes three people (one man and his two wives) reciprocally heating each other up by snuggling.

'But they both (the women) heated each other up the same and they were happy.' TXT 100:032

Another example of strong reciprocity is provided in (8.152). This was said by one of my consultants to his daughters after I left the recorder on at his house and I explained that they should have a dialogue with one another.

The clitic =biki can also be used to express an asymmetric reciprocal situation where a number of participants surround one participant and act simultaneously on this participant (Majid et al. 2011). This is illustrated in (8.153).

8.9.2 Adversarial semantics of -na

The semantics of =biki are neutral with respect to whether the mutually involved participants are cooperating or not. This also appears to be true of cases where -na and =biki occur together. However, when only the interactional -na is present (and not =biki), the relationship between the mutually involved participants is adversarial. For instance, in the following example -na expresses that the men were racing each other in competition to arrive at the location of the women.

(8.154)
$$toka \ ha \ yoa=ka(n)=ki$$
 $tsi \ kara' \ toa \ yoşa$ like_so 3 $tell=3pl=prior:D\{A,s\}$ p5 $epis1$ $dem 2$ woman $=tiki(n)=ka$ $ti2i$ $ro2a'$ toa $honi=bo$ pa $=again=rel$ $conj$ $limit$ $dem 2$ $man=pl/ass$ mir $ka-na=yo=ni=ki$ $go-intrc2=cmpl=remp=dec:p$

'After they (the men) said this, the (other) men (in surprise and <u>in</u> <u>competition</u>) went to where there were perhaps only women.' TXT 012:62

The suffix -na combines with the verb root haba 'run' to encode mutual and competitive chasing between participants as illustrated in (8.155) below.

Another example of -na encoding adversarial semantics is provided in (8.156) below. The verb nia 'throw' combines with -na to form a lexicalized expression nia-na 'to fight'.

Nevertheless combination with -na does not always express competition but could just encode mutual interaction. This is illustrated in (8.157) where -na expresses a reciprocal and cooperative relation between two participants, holding hands.

The question of what precisely the difference is between -na and =biki still requires future research. In certain contexts speakers judge that the addition of =biki adds no semantics to a verb stem that already contains the interactional -na. For instance, my consultants judged the following sentences the same for a description of two people that mutually exchange each other's glasses.

(8.158) a.
$$biro$$
 $atf-a=ma=ti$ $rari-na=ka(n)=ki$ glasses grab-TR=CAUS=PURP change-ITRCT2=PL=DEC:NONP 'They exchanged their glasses.'

The same is true of another situation where participants are all laughing simultaneously with one another. Expression with *-biki* or *-nabiki* is considered equivalent. My consultants found certain cases with only *-na* to be semantically odd however. In this case, I suspect it is because it is difficult to conceptualize laughter being a competitive type of interaction. However, this would not explain why speakers regard (8.158a) and (8.158b) as equivalent descriptions.

8.9.3 A note on other reciprocal strategies

The previous examples show that -na and =biki constructions constitute productive strategies for expressing reciprocal situations. They are not the only strategies, however. Other expressions in Chácobo can also express reciprocal situations; for instance, hato witsa 'each other' can often be used by itself to express a reciprocal situation as in (8.160) below.

(8.160)
$$ara$$
 ha $=2\acute{a}=ka$ ha -to $witsa=k\acute{i}$ tsi $ki\acute{a}$ cry 3 $=$ NMLZ:P=REL **3-PL** other=DAT P5 REP ha $kiso=ka(n)=n\acute{i}=ki$ 3 criticize=3PL=REMP=DEC:P

'When she (the girl) was crying, they (the community) started criticizing each other.' TXT078:006

8.9.4 Comitative or dative obliques

When a mutually involved participant is expressed it is either expressed in a dative postpositional phrase or a comitative postpositional phrase. The distinction appears to be lexically conditioned. For instance the verb complex *rani-na* 'caress' requires a dative

postpositional phrase, but the verb complex *şiko-na* 'embrace (mutually)' requires a comitative phrase as illustrated in (8.161).

That verb-na combinations select for specific postpositional phrases, headed by either $=y\acute{a}$ 'comitative' or $=k\acute{i}$ 'dative', suggests that it is a simplification to regard the latter as obliques. The question of what precisely the distinction is between arguments and obliques in Chácobo still requires future research (see Zariquiey [2017] for a new approach to this question in Kakataibo).

8.10.OVERVIEW

Table 8.5 provides an overview of all of the valency-assigning and valency-adjusting morphemes of Chácobo. It contains the following parameters.

- Selected root/stem: The category that the valency-assigning/adjusting suffix/clitic can combine with.
- Transitivity of complex: When the transitivity of the construct that results from combination of the selected root/stem and the valency-assigning/adjusting suffix/clitic.
- Arguments added/removed: The arguments that are present in the valency of the underived stem that are obligatorily added or removed from the valency of the complex.
- **Arguments promoted/demoted**: Arguments that are not removed but change their role after the valency-adjustment.
- **Productivity**: Refers to whether the suffix/clitic can combine with all verb stems of the specific class specified in the selected root/stem column or some subset of them. In cases where the subclass is not known

Table 8.5. Valence-assigning and valence-adjusting morphemes in Chácobo that have an affect on transitivity.

| Могрнеме | SELECTED | TRANSITIVITY | ARGUMENTS | ARGUMENTS | PRODUCTIVITY |
|----------------|---------------------------|--------------|-----------|--------------------|-----------------|
| | ROOT/STEM | OF COMPLEX | ADDED/ | PROMOTED/ | |
| | | | REMOVED | DEMOTED | |
| | unspecified | | | | Combines with |
| -i~-i~-o | verb | intransitive | | | all unspecified |
| 'intransitive' | VCIU | | +{S} | | verb roots |
| | unspecified | | | | Combines with |
| <i>-a</i> | verb | transitive | | | all unspecified |
| 'transitive' | verb | | +{A,P} | | verb roots |
| | unspecified | | | | Combines with |
| | verb | transitive | | | all unspecified |
| | | | +{A,P} | | verb roots |
| | transitive verb | transitive | | | Medium |
| | | | | | |
| BODY-PART | intransitive intransitive | | | Medium | |
| PREFIX | verb | miransitive | | | |
| -mɨ | transitive | | | | Low |
| 'middle- | | intransitive | | | |
| passive' | verb | | -{A} | $\{P\} \geq \{S\}$ | |

Table 8.5, cont.

| | | | | | High: combines |
|---------------|-----------------------|--------------|---------------|------------------------|------------------|
| | intransitive verb | intransitive | | | with all non- |
| | | | | | monomoraic |
| | | | | | verb roots |
| | | | | | High: combines |
| | transitive | intransitive | | | with all |
| -mis | verb | intransitive | | | transitive verb |
| 'antipassive' | | | -{P} | $\{A\} \geq \{S\}$ | roots |
| | | | | | High: combines |
| | unspecified verb root | intransitive | | | with all |
| | | | | | unspecified verb |
| | | | +{S} | | roots. |
| | | | | | High: combines |
| | transitive | intransitive | | | with all |
| -?aka | verb | miransitive | | | transitive verb |
| 'passive' | | | -{A} | $\{P\} \ \Box \ \{S\}$ | roots |
| | intransitive | transitive | $+\{P\}_{i},$ | $\{S\} \ge \{A\}_i$ | Medium |
| | verb | uansinve | $+\{A\}_{j}$ | $\{S\} \geq \{P\}_j$ | |
| -?ak | transitive | transitive | | | Medium |
| 'applicative/ | verb | uansinve | | | |
| causative' | noun | intransitive | +{S} | | Low |

Table 8.5, cont.

| | adjective | | | | High: combines | |
|---------------|---------------------------|----------------|--------|-------------------|--------------------|--|
| | | intransitive | | | with all | |
| | | | +{S} | | adjectives | |
| | intransitive verb root | intransitive | | | Low: Only with | |
| -na | | | | | some verbs, | |
| 'intransitive | | | | | highly | |
| verbalizer' | | | +{Obl} | | lexicalized | |
| | adjective | transitive | | | High: combines | |
| | | | | | with all | |
| | | | +{A,P} | | adjectives | |
| | intransitive verb | transitive | | | Medium: | |
| | | | | | combines with | |
| -wa | | | | | most change-of- | |
| 'transitive | | | | | state intransitive | |
| verbalizer, | | | +{A} | $\{S\} > \{P\}$ | verb roots | |
| causative' | noun | transitive | | | Low | |
| | intransitive | transitive | | | High: combines | |
| | | | | | with all | |
| | | | | | intransitive verb | |
| | | | +{A} | $\{S\} > \{P\}$ | roots | |
| | transitive | (di)transitive | | | High: combines | |
| | | | | | with all | |
| =ma | | | | $\{A\} \ge \{T\}$ | intransitive verb | |
| 'causative' | | | +{A} | $\{P\} > \{R\}$ | roots. | |

The valency-reorienting suffixes and clitics are listed in Table 8.6. The table contains the following additional parameter.

• **Semantic adjustment / encoding of oblique relations:** Refers to the adjustment in *semantic* participants encoded by the valency-reorienting.

Table 8.6. Valence-(re)orienting suffixes/clitics.

| | | Г | |
|-----------------|--------------|--------------|--|
| | SELECTED | TRANSITIVITY | SEMANTIC ADJUSTMENT/ |
| Могрнеме | ROOT/STEM | OF COMPLEX | ENCODING OF OBLIQUE RELATIONS |
| | intransitive | | |
| | verb | intransitive | Locative: {S} |
| body-part | transitive | | |
| prefix | verb | transitive | Locative: {P,T} |
| | intransitive | | |
| -na | verb | intransitive | |
| 'interactional/ | transitive | | |
| adversarial' | verb | transitive | |
| | intransitive | | Adds another semantic participant which |
| | verb | intransitive | occupies the same semantic role as the |
| | transitive | | {S,A}; expressed as an oblique relation or |
| =bɨki | verb | transitive | through plural marking |

Chapter 9. Tense: Past, non-past and relative tense

This chapter is concerned with describing the basic categories in tense in Chácobo. A basic

distinction between past and non-past is encoded in the clause type/rank morphemes. In

Chácobo, the basic distinction is complicated by the fact that the tense encoding clause-

type/rank morphemes are polysemous between absolutive and relative tense interpretations

in a way that makes a straightforward designation of "past" versus "non-past" problematic.

Some terminological comments are, therefore, in order before moving on to the description.

Absolute tense is defined as a **relation** between the moment of speech (S) and the

time of the situation or event (E). There are three types of relations; before, after and

simul(taneous). There are three basic types of absolute tense based on the three types of

relations.

(9.1)a.

Present: *E* simul *S*

b.

Past: E before S

c.

Future: E after S

d.

Non-past: E simul S or E after S

Relative tense establishes a relation between E and a further temporal reference point R.

(Comrie 1980:124). The concept of a relative past is important for the description of

Chácobo. It refers to a case where a reference time R occurs after the event time E. The

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relative past can combine with the tenses above to form the following complex tense relations.

- (9.2) a. **Past of the past (pluperfect):** E before R before S
 - b. Past of the present (perfect): E before R simul S
 - c. **Past of the future (future perfect):** E before R after S

In the theoretical and typological literature there is a debate concerning whether a distinction should be made between the anterior (past of the present/past) and the perfect (Klein 1994 *versus* Bohnemeyer 2014). It is not clear to me whether this distinction is relevant in Chácobo. Since I do not have a clear reason to make such a distinction, in this description I will tentatively refer to the past of the present as the **perfect**, the past of the past as the **pluperfect** and the past of the future as the **future perfect** (roughly following Comrie 1980).

The clause-type/rank clitics =ki 'declarative, non-past', =?ini 'interrogative non-past', =?ái 'interrogative non-past, second person singular' are polysemous between present, future, and perfect future interpretations. They can, therefore be characterized as non-past in the sense that they typically do not refer to events in the past. However, in negative clauses they are compatible with experiential present perfect readings (e.g. "I have never done it") (see Section 9.4.1 below for the definition of "experiential perfect" used in this thesis).

The clause-type/rank clitics =ki 'declarative past', =2i 'interrogative past' are polysemous between past, pluperfect and present perfect interpretations. They cannot be straightforwardly associated with a past tense because they are used to express present perfect meanings, where the reference time of the discourse is the same as the speech time. These morphemes cannot be described simply as perfect morphemes because they are also used to express (discontinuous) past meanings and they cannot be used for future perfect readings. The polysemy poses some descriptive difficulties because linguists disagree on whether relative tense relations and/or the perfect should be regarded as tense or aspectual (cf. Bohnemeyer 2014). Descriptive problems aside, the existence of a tense-aspect morpheme that is ambiguously anterior or past should not be surprising given that there is a known diachronic link between perfect/anterior and past tense semantics (Bybee et al. 1994). Unlike =ki 'declarative past' and =2i 'interrogative past', the morpheme =2i 'nominalization past/anterior' is able to express past of the future events, if it occurs in the context of a main clause marked as non-past.

Finally, the clause-type/rank clitics = ?ái 'nominalization imperfective' and = ikiá 'reportative' are tenseless; clauses modified with these morphemes receive their temporal interpretation from discourse context. All non-verbal predicate constructions are tenseless in so far as they do not contain a clausal nominalization. Figure 9.1 summarizes the absolute and relative tense relations of clause-type/rank morphemes in Chácobo representing them on a semantic map from the past to the present to the future (adapted

from Croft 2012: 143). Notice that the past event time morphemes and the non-past tense morphemes overlap semantically on the past of the present relation (perfect) relation.

Table 9.1. Basic absolute and relative tense concepts expressed by Chácobo clause-type/rank morphemes

| CATEGORIES | TENSELESS VERBAL PREDICATE: | | | | | | | | | |
|------------|---|--|---------------|---------------------------|-----------------|-------------------------|--------|--|--|--|
| | =?ái 'nmlz. imperfective' | | | | | | | | | |
| | =?á 'nmlz. relative past' | | | | | | | | | |
| | =ikiá 'reportative' | | | | | | | | | |
| | TENSELESS NON-VERBAL PREDICATE: | | | | | | | | | |
| | so 'declarative' / ní 'interrogative' / kiá 'reportative' | | | | | | | | | |
| | PAST EVENT TIME: | | | | NON-PAST TENSE: | | | | | |
| | =ki 'declarative' =2á 'interrogative' | | | =ki 'declarative' | | | | | | |
| | | | | =iní ~?aí 'interrogative' | | | | | | |
| | | | | | | | | | | |
| ABSOLUTE | PAST | | PRESE | NT | PRESENT | PRESENT/FUTURE | FUTURE | | | |
| | (PAST E | | ENT) | | | | | | | |
| RELATIVE | RELATIVE | | RELATIVE PAST | | | RELATIVE PAST OF FUTURE | | | | |
| | PAST OF PAST | | OF PRESENT | | | (FUTURE PERFECT) | | | | |
| | (PLUPERFECT) | | (PERFECT) | | | | | | | |

Note that the depiction above is simplified in few respects; (i) there are a number of distinct "perfect readings" that need to be distinguished (Givón 2001: 293; Matthewson 2016); (ii) non-past can express habitual and narrative/historical present readings where the event does not literally take place before the speech time (Comrie 1976). These details will be discussed below.

In what follows I provide a description of when the different interpretations arise for each of the clause-type/rank morphemes described above. In some cases they can be understood as construals derived from certain construction types and in others they arise out of specific discourse contexts. Section 9.1 describes the basic distinction between past and non-past across the clause-type/rank morphemes. Section 9.2 discusses the narrative present and Section 9.3 discusses the narrative habitual. Section 9.4 provides a detailed description of the perfect and pluperfect, with some tentative comments on the future perfect. The discussion of perfect and relative tense readings continues into Chapter 10, which focuses on temporal distance morphemes.

9.1. PAST AND NON-PAST

9.1.1 Declarative (=ki versus =ki)

Declarative main clauses are coded with the clause-type/rank morphemes =ki 'declarative, past' and =ki 'declarative, non-past'.³⁷ Past tense is coded with the clause-type/rank morpheme =ki. In past tense narratives this morpheme is repeated through every verbal predicate construction redundantly. I will refer to the property of redundant repetition in discourse as **discourse perseverance**. This is illustrated in the following text from a hunting narrative.

(9.3) a.
$$hakiriki$$
 tsi no $tapa=\underline{2\acute{a}i}=ka$ after_this P5 1PL gather_almonds= $\underline{NMLZ:IPV}$ =REL no $ka=n\acute{i}=k\emph{i}$ 1PL go=REMP= $DEC:P$

'So, we went to the jungle picking up almonds.'

³⁷ Prost (1962), Zingg (1998), Valenzuela & Iggesen (2007) Córdoba et al. (2012) gloss =ki and =ki as completive and incompletive respectively, but provide no evidence nor argumentation for this gloss. Tallman and Stout (2017) demonstrate that this analysis does not capture the semantics of these morphemes to the extent that the completive-incompletive categories are meant to refer to an aspectual distinction related to imperfectivity.

The description of events that are concurrent with the speech time will always be marked with the clause-type/rank morpheme =ki 'declarative, non-past' in any verbal-predicate construction. This is illustrated in the following text example from a fishing trip. A Chácobo is explaining how the noise of my audio recorder is likely scaring the fish away. Notice that =ki 'declarative, non-past' is repeated throughout the discourse redundantly.

(9.4) a.
$$hap\acute{a}$$
 $hini$ = $k\acute{i}$ nia = $k\acute{i}$ = a

3-MIR water =DAT throw_out=DEC:NONP=1SG

'I am going to throw your thing (audio recorder) in the water.'

b.
$$ha$$
-sa roo i = ki

3-EXCL IDEO:noise AUX=DEC:NONP

'Ugh! Its still making noise!'

catch=NEG=DEC:NONP

'It (the fishing line) is not catching anything.'

d.
$$witi$$
 $atf-a=yáma=ki$

hook grab-tr=neg=dec:nonp

'They (the fish) are not grabbing the hook.' TXT109:059-060

The clitic =ki 'declarative, non-past' is also used outside of narrative contexts to describe events concurrent with the speech time. This is illustrated with the sentences in (9.5) and (9.6) from participant observation. (9.5) was uttered as a pig was running away after stealing almonds stored in a house. (9.6) was uttered as a monkey was attempting to type on my computer while I was working.

The clitic =ki is also used for future plans. The following excerpt is from a personal narrative where the speaker describes their future plans; =ki is repeated throughout the discourse. It shows that =ki is used for future tense events and displays discourse perseverance in narratives just as =ki 'declarative past' for past time narratives.

- (9.7) a. wiaki nia=fari=ki=a i-a=ri

 next_day be_here=CRAS=DEC:P=1SG 1SG-EPEN=AUG

 aros tis-a=fari=ki=a

 rice pull_out-TR=CRAS=DEC:NONP=1SG

 'The next day [tomorrow], I, myself, am going to be here; I'm going to harvest rice (tomorrow).'
 - b. hɨná-wa=só i tɨs-á=na
 do_how-v:tr=A 1sG harvest-tr=EPEN
 'How am I going to harvest?'
 - c. $y\'{a}ma$ go $no-ki=r\'{i}$ $pi=\underline{?\'{a}i}=na$ NEG DEC 1PL-EPEN=AUG eat=NMLZ:IPV=EPEN

 'We don't have any food.'

1PL-EPEN

'After dicing up (the yuca) we want to go to Alto Ivon.' TXT 095:097

9.1.2 Reportative

Unlike the clause-type/rank morphemes =ki 'declarative, non-past' and =ki 'declarative, past', the reportative $=?iki\acute{a}$ does not appear to encode a tense relation. The event encoded by the verb it combines with can be understood as past, present or future depending on the discourse context. Two examples of sentences that have present/future tense interpretations are illustrated in the conversation below between Shëcara his daughter (Yolanda) and his wife (Jenny). In (9.8a) Yolanda directly quotes something her daughter has repeated to her on multiple occasions, and in (9.8b) she conveys that information again with the reportative clause-type using $=?iki\acute{a}$. This shows the use of $=?iki\acute{a}$ in the context of present tense event.

(9.8) Yolanda:

a.
$$i$$
- a = ri $sawi$ = kas = ki = a $y\'ama$ $g\'ata$ 1 SG-EPEN=AUG put on=VOL= DEC :NONP= 1 SG NEG tooth

i=?ikiá

say=REP

"I want to put in (it in), there's no teeth [I have no teeth]" she (my daughter) said (it is said)."

JENNY:

YOLANDA:

- b. oro a=si=ki=a mi=agold put=REMF=DEC:NONP=1SG 2SG=EPEN

 'You are going to put gold in (addressed to young girl).'
- c. papi tsi so ka-pará

 child P5 DEC back-flat

 'My child has a flat back (lit. is a flat-back) (addressed to child)'

naa no?ó=na háska=ka sawɨ=kats**=?ikiá**

d. naa no?ó=na háska=ka sawi=kats=?ikiá naa sita

DEM1 1SG:GEN=POSS similar=REL put_on=VOL=REP DEM1 tooth

'She sais the wants to put in teeth here the same as mine.'

Another example of $=2iki\acute{a}$ used for a present tense event is found in the same conversation. In (9.9b) Shëcara addresses me and asks whether I am going to my house. After I respond, Yolanda asks for clarification using the non-past interrogative $=2in\acute{i}$ in (9.9c), and Shëcara responds uses a reportative clause-type in (9.9d) and (9.9e) because he

is referring to what I communicated to him. These examples also show the use of $=2iki\acute{a}$ in the context of present tense events.

(9.9) <u>Shëcara</u>

- a. $t\acute{t}r\acute{t}=ki$ $ha=n\acute{t}$ $ho=k\acute{a}s=k\emph{i}$ $o\acute{t}$ thunder=DEC:NONP 3=INTER come=VOL=DEC:NONP rain 'It's thundering isn't it? The rain is coming (lit. the rain wants to come).'
- b. oá =parí tsi mi sóbo =kí ka=?aí

 DEM3 =FIRST P5 2SG:GEN house =DAT go=INTER:NONP:2SG

 'Are you going over there to your house first? (addressed to Adam)'

 ADAM:
- c. ahá

yes

'Yes.'

YOLANDA:

- d. hɨni=ʔiní papa=´
 - do_how=INTER:NONP father=VOC
 - 'What does he want father (lit. what is he saying?), father?'

SHËCARA:

e. *wɨstí óra tsi tʃani-na=bɨkí=ʔikiá*one hour P5 speak-INTRC=INTRC=**REP**

'(He (Adam) said that we should) speak for one hour together.'

f. hátsi hawi góbo =kí =parí ka=**?ikiú**then 3sG:GEN house =DAT =FIRST go=**REP**'Then he (Adam) said that he (Adam) is going to his house first.' TXT

115:001-010

The reportative can also be used for verbal predicates that designate past tense discourse. This is illustrated in (9.10c).

- (9.10) a. hatsi kiá poa ha bo=kan=ní=ki
 then REP bachi 3 take_away:TR/PL=3PL=REMP=DEC:P
 'After this, they took away the bachi (type of fruit) (it is said).'
 - b. maniwa şɨrɨkɨ kiá ha oṣa=ni=kɨ
 pataju inside REP 3 sleep=REMP=DEC:P
 'Amongst the pataju fruit, they slept (it is said).'
 - c. habi oka=no maniwa pi-pi=kán=ikiá

 surely happen=CONCUR pataju eat-eat=3PL=REP

 'And surely while doing this (it is said) they are/were eating pataju.'

 TXT 067:010-012

9.1.3 Interrogative (=?á versus =?iní~?aí)

To my knowledge $=2\acute{a}$ 'interrogative, past' and $=2ini\sim=2ai$ 'interrogative, non-past' are interrogative counterparts to =ki and =ki with respect to their encoding of tense relations. An example of =2ini in present tense discourse is provided in (9.9d) above. Note that 2ini can also be used in the narrative present, and thus describing it as non-past is an oversimplification (see Section 9.2 for details). More examples of the use of $2ini\sim2ai$ from participant observation are provided in (9.11) and (9.12). The morpheme =2ai is used for the second person singular in the non-past, and the form =2ini is used for all other person and number (see Section 4.2.2 above).

That = $2\dot{a}$ codes past tense interrogatives is illustrated in (9.10) and (9.14).

(9.13) hawiniá tsi nato ka=tiki(n)=itá=?a sá
where P5 Nato go=AGAIN=RECP=INTER:P EXCL
'Where (in the hell) did Nato go off to again?' TXT 109: 264

(9.14) mi tsaya=**?á**2sg see=INTER:P

'Did you see him?' OBSV

9.1.4 Nominalization (=?á versus =?ái)

The morphemes = 2ai 'nominalization, imperfective' and = 2ai 'nominalization, anterior' are both compatible with past and non-past discourse. An example of = 2ai in the context of past time discourse is in (9.3a) above (tapa2ai 'gathering almonds') and (9.15b). An example of this morpheme used in present time discourse is provided in (9.7c) above.

The morpheme $=2\acute{a}$ can be used in future time discourse. This is illustrated in (9.15a). The clause marked by $=2\acute{a}$ 'nominalizer, anterior' is embedded in a non-past sentence marked by =ki in this sentence. In this sentence the $=2\acute{a}$ clause expresses a past of the future (future perfect).

(9.15) a.
$$karo = ki$$
 i $ka = 2i = ka$ tsi $ho = si$ $lumber = DAT$ 1SG go=NMLZ:P=REL P5 come=PRIOR:A tsi naa $wini='$ $i-a=ri$
P5 DEM1 patio=SPAT 1SG-EPEN=AUG $a(k)=tiki(n)=\int ari=ki=a$ $do=AGAIN=CRAS=DEC:NONP=1SG$

'When I've gotten lumber and when I have arrived I am going to do the patio tomorrow.'

The clitic $=2\dot{a}$ is commonly the only marker of tense relations in the sentence. In such cases it seems that it always encodes a past tense, as is illustrated in (9.16c), where there is no main clause verbal predicate. If $=2\dot{a}$ was simply an anterior marker as suggested by the fact that it can encode past of the future, one would expect to find a perfect interpretation in (9.16c), but instead $=2\dot{a}$ carries on the past tense of the discourse encoded in $=k\dot{a}$ 'declarative, past' from the previous sentences. It is for this reason that I consider $=2\dot{a}$ 'nominalization, anterior/past' to be polysemous between a past tense meaning shown below and an anterior meaning illustrated in (9.15a). The precise environments in which this morpheme encodes anterior semantics vs. past tense semantics requires future research.

- (9.16) a. hátsi kai tſábo=kí ka=?ita=ki
 then mother Chabo=DAT go=RECP=DEC:P
 'So, his mother went to Chabo.'
 - b. hátsi tſábo=kí kará hɨni há =itá=kɨ tiá
 then Chabo=DAT EPIS1 do_how 3 =RECP=DEC:P EPIS2

 'Then she probably said something to Chabo (who knows what?)'
 - c. hakiriki wiaki tsi rais =ki ba?i kai

 after_that next_day P5 in_law =DAT Bahi mother

 bo=ita=?a=na

bring=RECP=NMLZ:P=EPEN

'And then the next day mother brought Bahi to her father in law.'

TXT 019:036-038

It is notable that the forms and semantic of the past and non-past interrogative are respectively to the past/anterior and imperfective nominalizers. The similarity is form and function makes a diachronic link between these morphemes plausible. For instance, the past/anterior nominalizer $=2\acute{a}$ is similar (or identical) in form to the past interrogative

 $=2\dot{a}$. The imperfective nominalizer $=2\dot{a}i$ has identical segmental phonology to the non-past second person interrogative $=2\dot{a}i$. One explanation for this is that the interrogatives were formed nominalizations in complement clauses and some type of cleft or copula construction (Bruil 2014: 307-308). I am not aware of a clear source construction synchronically present in Chácobo that could have served as a basis for such a reanalysis, however. The issue, thus, requires future research and a better understanding of comparative Pano morphosyntax.

9.1.5 Non-verbal predicate construction

Tense marking by clause-type/rank morphemes does not occur in non-verbal predicates.

The tense relation of non-verbal predicate clauses is inherited from surrounding discourse, but not coded by any individual morpheme or construction.

³⁸ They are not identical morphophonologically. The interrogative projects a long-distance-tone-sandhi rule domain and the nominalizer does not (see Section 6.2.4).

³⁹ Furthermore, the interrogative non-past =2ini looks like a combination of the concurrent same-subject morpheme =2i and the non-verbal predicate interrogative marker ni (see Tallman 2018 for an analysis that breaks this morpheme into these two part, reanalyzing constructions with =2ini as non-verbal predicate constructions).

after_that 1PL go=AGAIN=RECP=DEC:P Cachuelita=SPAT

'After this, again we left to arrive at Cachuelita.'

- b. toá tsi iwatí Yoni

 DEM2 P5 gra.mo Yoni
 - 'Grand mother Yoni was there.'
- c. tfáni Adám grabár_ak=?itá=ki
 story Adam record_do=RECP=DEC:P
 - 'Adam recorded her story.' TXT 020:006-008

9.2. NARRATIVE PRESENT

The morpheme =ki is only compatible with events that are before the speech time. However, Chácobo speakers can use the non-past =ki for a historical or narrative present (cf. Comrie 1976:73-76 for discussion; Givón 2001: 298-299). The contexts where narrative present is used suggest that the non-past morphemes give a sense of immediacy to a description of a past event. Uses of the narrative present are highly correlated with discourse contexts where a speaker acts out a conversation in a narrative, not expressing who says what, but allowing that to be inferred from context. The narrative present is also much more common for directly observed events. A preliminary observation from the distribution of the use of narrative present in my texts suggests that it is limited to speakers of Central communities (in particular Alto Ivon) who have the most contact with Spanish

speaking Bolivians. I have not been able to observe the use of narrative present for speakers in more remote communities on the Benicito and Yata rivers.

An illustration of the use of a historical present in the context of directly observed events is provided in (9.18) below where a Chácobo speaker recounts his encounter with an anaconda that killed a cow and the events leading up to this encounter. The narrative actually takes place in the past, which is coded by =ki in (9.18a). What follows is a string of direct quotations without any expression of who the speaker is in (9.18b-e). This is a common rhetorical strategy in the Chácobo in the central communities that seems to be associated with vividness as the speaker attempts to imitate the pace of the conversation by not using reportatives or expressing the the fact that these are examples of quoted speech. The speaker then uses the narrative past in (9.18j) and (9.18k) to describe the situation that he observed directly after the acted out conversation found in the previous discourse context. In this case the narrative tense is used to describe the most climactic and quick moving aspect of the story; his directly observing the cow being captured by an anaconda.

- (9.18) a. niá-ma no nika=ní=ki no?ó tʃá?i wara =yá
 here-NEG 1PL hear=REMP=DEC:P 1SG:GEN uncle Huara =COM
 'From far away, we heard it, with my uncle Huara'
 - b. hoon tsi ní waka

 IDEO:yell P5 INTER cow

^{&#}x27;- Is that a cow yelling? - (someone said)'

- c. hawi ni ronoa= ak=ái=na
 what INTER cicuri=ERG do=NMLZ:IPV=EPEN
 - '- What is the cicuri killing? (someone said)'
- d. hawi ní toa waka ak=ái=na
 what INTER DEM2 cow do=NMLZ:IPV=SUB
 - '- What is he doing to the cow? (someone said)'
- e. ka=so no tsaya= $2\acute{a}$ tsaya= $p\acute{a}$ go=PRIOR:A 1PL see=NMLZ:P see=IMPER:MIR
 - 'When we went and we saw it look! (someone said) '
- f. atf-a=pi=so hawi wiko ta-nis=ki grab-TR=ANX=PRIOR:A 3SG:GEN lower_leg foot-tie=DEC:P 'When he grabbed him, he had tied his leg.'
- hɨnɨ ak=ái=ka hawí mɨkɨ tsi g. drink=NMLZ:IPV=REL water 3sg:gen P5 arm atſ-a=só naa tsi ta-nɨs-ɨ Р5 foot-tie-ITR grab-TR=PA DEM1
 - 'Taking in water, he (the cow) had been grabbed on his arm, and also (this one) was tied by his leg.'
- h. ronoa= 'ta-niş=**ki**cicuri=ERG foot-tie=DEC:P

'The cicuri had tied his foot.'

- i. tio-ria =ka ronoa =rákanabig-AUG =REL cicuri=CERT/VIS'The cicuri was so big.'
- j. tsaya=pá ma?itsa ronoa siri=kas=ki

 see=IMPER:MIR in_vain cicuri pull=VOL=DEC:P

 ' look! (someone said) and the cow is trying to pull (away from) the cicuri.'
- k. atſ-a=tsi=só hawí hawí mawi 3sg:gen horn grab-TR=P2=PRIOR:A 3sg:gen kini =kitsi bo=kás**=ki** cave =DATР5 carry=VOL=DEC:NONP 'He (the cicuri) grabs his (the cow's) horn wanting to pull (the cow) into his
- 1. ma tsaya=?aí tio-ria=ka=rákana

 2pl see=INTER:2SG big-AUG=REL=CERT/VIS

(the cicuri's) cave.'

'-Do you see him? The cicuri is huge! -' TXT 116:022-034

Another illustration of the use of the narrative present in the context of directly observed events is provided in (9.19). In this story a Chácobo relates how he managed to kill a caiman. The speaker uses an introductory sentence coded with the past tense =ki 'declarative, past' in (9.19a) which is followed by a recounting of events that were directly

experienced by the speaker. The most intense and gripping part of the narrative, the description of the caiman biting him, is coded with the narrative present using =ki 'declarative, non-past'. All of these events were directly observed by the speaker.

- (9.19) a. toka i kápiti a=ní=ki
 like_so 1sG caiman kill=REMPST=DEC:P

 'I killed the caiman as follows (like this).'
 - b. pa?i=?áş=ka kapiti go a=yáma=?ái=na drunk=S=REL caiman DEC bite=NEG=NMLZ:IPV=EPEN 'The caiman was drunk and he really didn't bite at all.'
 - c. ifima $tfaki \sim tfakisa=bona=tsa=ki$ slow bite \sim bite=GOING:PL/TR=IMM:TR/PL=DEC:NONP 'He starts biting slowly as he moves (out of the water).'
 - d. ... yáma a(k)=yáma=ki
 ... NEG do=NEG=DEC:NONP
 'He doesn't do anything else.' TXT 116:153-157

As noted above, in most cases where the narrative present is used, the events described were directly experienced. Nevertheless, there are a few cases where speakers might be using the narrative present for reported narratives. Interestingly, the reportative morpheme is not needed in narrative present contexts that involve reported events, as in

the following excerpt from a Chácobo folkstory from (9.20). Notice that, following the tendency I mentioned above, the narrative present is used in conjunction with an acted out dialogue.

'- Is this your corn? - (one of them said)'

yes 1sg:gen=poss dec dem1

'- yes this is mine- (the other said)'

c.
$$pi=kas=kan=\acute{a}i$$
 tsi $bik\acute{a} \sim bika=?\acute{a}$ tsi

 $eat = VOL = 3PL = NMLZ: IPV \quad P5 \qquad wrap \sim wrap = NMLZ: P \qquad P5$

wɨtsí tsi pɨ bi=kás**=ki**

one P5 ANX grab=VOL=DEC:NONP

'(Then) he goes off wanting to eat the corn, he wants to grab one while he wrapped it up.'

d.
$$obi$$
 tsi $bi=ka(n)=ki$

there P5 come:TR:PL=3PL=DEC:NONP

'Over there they are coming now.'

go=PRIOR:A P5 DEM1 one grab=IMPER

'After going – grab one of them! – (he said).' TXT 060:051-055

Interrogative verbal predicate constructions also occur with tensed morphemes. =2i 'interrogative, past' only codes past tense semantics (Section 9.1.3). While the past interrogative =2i always codes that the reference time is prior to the speech time, the nonpast has uses that are similar, to an extent, to the narrative present described for the main clause declarative enclitic =ki 'declarative'. As discussed in Chapter 1, Chácobo folk story telling involves active participation from the interviewer, asking for clarification of certain issues in the story or sometimes just parroting information in the story with interrogatives. In fast moving parts of a narrated folk story, an interviewer may code an interrogative as a non-past as in (9.21b), which described a climactic part of an origin myth where some humans that had recently transformed from monkeys by eating corn come across their parents. Notice that in the response in (9.21c), the non-past reportative is used, showing that both these forms; the interrogative =2ini and the reportative $=2iki\hat{a}$ display a narrative past meaning.

(9.21) a. NARRATOR:

nɨka=pama hawɨ́ sokobo his=ikiá

do_this=CONCUR 3SG:GEN child see=DEC:REP

'He (the monkey) does this motion (turns), and sees his child (it is said).'

b. INTERVIEWER:

run=AGAIN=IMM:ITR=INTER:NONP

'Is he (the monkey) running again now?'

c. NARRATOR:

$$his-a=baya$$
 tsi $haba=?iki\acute{a}$ $ha-?-ipa$
 $see-EPEN=DO\&GO$ P5 $run=REP$ 3-EPEN-father
 $habi$ $b\acute{+}a$ \sim $b\acute{+}a$ tsi $ki\acute{a}$

surely hobble \sim hobble P5 REP

'When he sees him it is said that his father surely runs away hobbling off (like a monkey).'

TXT 063:120-122

One difference between the declarative narrative present and the interrogative narrative present is that there is no sense in which the event could be understand as being directly observed by the speaker in the interrogative. In contrast for declarative sentences, directly observed events are most commonly coded in the narrative present.

9.3. NARRATIVE HABITUAL

Constructions marked by the C-rigid morpheme =ki can also encode habitual readings which are not temporally located with respect to the speech time since they refer to

habitual happenings that have occurred in the past but will continue to occur in the future. Chácobo contains a dedicated habitual morpheme =pao (Section 11.4). The description of typical scenarios of instructions, however, can be marked just by using the declarative non-past =ki. I will refer to this use as the **narrative habitual**.

Two types of habitual readings in narratives are illustrated below. In one case, the speaker describes a typical scenario involving the teaching and use of witchcraft that has occurred in the past but continues to occur contemporaneously to the speech time. The morpheme =ki is used throughout the narrative in (9.22).

(9.22) a.
$$nika=it\acute{a}=ki$$
 $r\acute{a}ni$ tsi so $haboki$

listen=RECP=DEC:P happy P5 REC now

 $ki-bitf\grave{i}$ $t\acute{o}a$ yo_sa

border-skin DEM2 woman

'She listened (learnt) and now she is happy, that woman has the *quebichi* (black magic)'

'But when there is a problem (when people are angry with each other), they can blow (in the sense of bewitch) each other.'

- c. biro=só soo-2ak=yáma=ki honi=so=na in_view=A blow-TR=NEG=DEC:NONP hide=A=EPEN 'They don't blow (bewitch) in view, but rather hidden.'
- d. ... hatsi iki=ki
 ... then be_sick=DEC:NONP

'Then someone gets sick.' TXT: 114:20-24

The narrative habitual use of =ki 'declarative, non-past' is also used for instructions. The following sentences in (9.23) are an excerpt on how to make a bow and arrow; the morpheme =ki is used throughout because it is refers to habitual events that are still performed today (at least in communities of the Benicito and Yata rivers).

- (9.23) a. paka mira=ta(n)=so tsi hawi tsamiti $arrow_head$ $look_for=Go&DO=PRIOR:D\{A,s\}$ P5 3sG:GEN stick $am\acute{a}=k\emph{i}$ no-a put=DEC:NONP 1PL-EPEN 'When we look for paka (type of tree used for arrow heads), then we put it on the stick.'
 - b. risísi mɨrá=ki no-a
 string look_for=DEC:NONP 1PL-EPEN
 'We look for string.'

c. páka tsamití a-ma ti-?-osta=**ki**arrow_head(tree) stick put neck-EPEN-collocate=**DEC:NONP**no-a

1PL-EPEN

'Then we put it (the string) on the arrow head and the stick.'

TxT089:011-013

The morpheme =?ai 'imperfective, nominalizer' is also used for habitual readings, as in the example from an interview with Miguel Chavez.

(9.24) yáma tsi mi ni naama=**?ái**=ka witsa

NEG P5 2SG INTER dream=**NMLZ:IPV**=REL other

'Is there not something else you dream of?' TXT 101:127

9.4. Perfect readings across C-flexible clauses

In the introduction, the morphemes =ki and $=2\acute{a}$ were described as polysemous between past tense and perfect. In Chácobo different types of perfect readings are associated with these clause-type/rank morphemes as a function of the position of the $\{S,A\}$ argument with respect to the clause-type/rank morpheme. This is a complex issue that requires some discussion.

There are many definitions of the perfect cross-linguistically. This description follows approaches that understand the perfect as a clustering of properties that includes anteriority, perfectivity, counter-sequentiality and lingering relevance. As noted by Givón (2001: 293) and taken up by a number of detailed semantic studies (Matthewson et al. 2015; Matthewson 2016), for a given language, these properties or readings do not necessarily line up around one construction or morpheme. The structure of Chácobo illustrates this insight (Tallman and Stout 2018).

A cluster of perfect readings are associated with constructions where the $\{A,S\}$ argument occurs after the clause-type/rank morphemes (position 16 of the sentence) in C-flexible constructions; those marked by =ki and $=2\acute{a}$. I refer to such constructions as C- $\{A,S\}$ constructions, to emphasize the position of the clause-type/rank morphemes with respect to the $\{A,S\}$ arguments.

The past tense and the "universal perfect" (e.g. he has been V-ing) are associated with constructions where the {S,A} argument occurs anywhere else (positions 2 and 7 of the sentence). I will refer to such constructions as {A,S}-C constructions.

Since the meanings discussed are rather subtle much of the data in this section of the data are introduced using elicitation and storyboards (see Sections 1.8.2 and 1.8.3 and the sources cited therein). The discussion of perfect constructions continues into Chapter 10 in the context of a description of temporal distance morphemes. In Chapter 10 examples of perfect readings arising out of more naturalistic speech are copiously exemplified, but the facts are complex since they interact with the dimension of temporal distance. This Section presents a more simplified introduction relying on elicitation and storyboards.

9.4.1 Properties of {A,S}-C constructions relating to the perfect

Typically {A,S}-C constructions are associated with discontinuous (non-perfect) semantics. In past time narratives repeated {A,S}-C constructions express in-sequence readings of events as in (9.3) above. The {A,S}-C construction is also associated with two types of perfect readings; (i) experiential readings; (ii) universal perfect readings.

An **experiential reading** expresses that the event was performed at least once in the past but that it is not ongoing during the temporal reference time or relevant to the temporal reference time (see Matthewson 2014; Matthewson et al. 2015: 6). It is referred

to as "experiential" because it expresses the idea that one of the participants experienced the event.⁴⁰

Clear cases of the emergence of an experiential perfect reading are found when a speaker begins narrative summarizing the main plot line or premise of the story (e.g. "well, one time we killed a badger"). In the following example, Paë Yaquë is interviewing his sister Choca Yaquë in Cachuelita. After Choca and Paë have had a conversation about what they did the last few weeks, Choca asks Paë whether she needs to keep talking in (9.25a). Paë (jokingly) tells her that they've only been talking for 8 seconds after looking at the recorder (it had actually timed 8 minutes). After laughing at Paë's response, Choca initiates another story about the one time she caught a badger in (9.25c), an event that is not ongoing and not relevant to the temporal reference time of the discourse. This sentence illustrates that {A,S}-C constructions are associated with experiential perfect readings.

⁴⁰ A reasonable question arises as to why the experiential reading (as it is described above) is considered a perfect reading at all. The reason for this is primarily typological in that constructions that encode other perfect readings cross-linguistically can sometimes also encode an experiential reading (Matthewson 2016). For Matthewson et al. (2016), therefore, it is an "expected" reading of the perfect. In the context of this dissertation, one might just as well consider it a reading associated with the "discontinuous past". Future research might reveal that this association is more salient cross-linguistically and that, therefore, perhaps it is innapropriate to consider the experiential reading as a type of perfect reading. The important point for this description is not whether the experiential reading is a "perfect reading" or not, but rather that this reading does not arise with C-{A,S} constructions.

(9.25) CHOCA YAQUË:

- a. ha?ari pɨ náama
 still ANX already
 'Still or are we done? (lit. still or already)'
 PAË YAQUË:
- b. habokí otfo segundo tsi
 now eight seconds P5

 'It's been eight seconds just now.'

CHOCA YAQUË:

c. ... $ka=yamit=\acute{a}=ka$ fifa **no** atf-a=yamit=ki [laughing] go=DISTP=PAS:P=REL badger **1PL** catch-TR=DISTP=**DEC:P** '(Laughs) well we did (once) kill a badger a few months back.' TXT 095:101-103

P

Α

V

 \mathbf{C}

Another frequent case where experiential readings are found are in responses to some of the the interviews that were conducted with Chácobo speakers to try to elicit personal narratives (see Section 1.8.4 on dynamic interviews). One of the questions is "Have you ever seen an anaconda?"; an example of this question and its corresponding answer are provided in (9.26) below. Paë Yaquë is conducting an interview with Bosi Peralta in Cachuelita. I ask Paë to ask Bosi whether she has ever seen an anaconda. Paë

relays the experiential perfect question to Bosi producing a $\{A,S\}$ -C construction. Bosi correspondingly responds with an $\{A,S\}$ -C construction. Both of these sentences illustrate that $\{A,S\}$ -constructions are used for experiential perfects.

- a. ronoa mi tsaya=ní tiáro?a=só=na =ikiá

 cicuri 2sG see=INTER:REMP yata_river=A=EPEN =REP

 'Have you ever seen an anaconda on the yata river? (he (Adam) asks).'

 BOSI PERALTA:
 - S V C
- b. hatsi papa =yá no ka=ní=ki

 then father =COM 1PL go=REMP=DEC:P

 'Well one time we went with my father' TXT 94:99-100

I do not have any clear cases where C-{A,S} constructions are used for experiential perfect readings arising from naturalistic speech, story boards or elicitation. That {A,S}-C is associated with experiential perfect readings is further supported with the results from a storyboard meant to elicit perfect constructions. The storyboard involves the teacher of a class (Miss Sanchez) asking a class of students if any had the experience of climbing a

mountain.⁴¹ In this case, the translation of the response induces a clause with the {A,S} prior to the clause-type/rank morpheme in (9.27b). Cases where the {A,S} argument followed the clause-type/rank morpheme were considered infelicitous or dispreferred. The pattern was corroborated with three speakers (Caco Moreno, Miguel Chavez and Paë Yaquë).

According to Caco Moreno, Paë Yaquë and Miguel Chavez use of a C-{A,S} in this circumstance is not felicitous since it would imply that Boca is on the mountain as he is speaking or that he has just come down from the mountain at the time of speech.

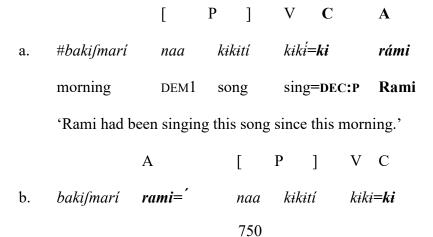
749

⁴¹ The storyboard is based on Matthewson's (2014) "Miss Smith's bad day".

The second aspectual reading associated with {A,S}-C constructions is the universal perfect reading. The universal perfect reading refers to one where the event is ongoing at the temporal reference time. In what follows I show that {A,S}-C constructions are associated with universal perfect readings, and that such readings are not associated with C-{A,S} constructions. I use storyboards to establish this because most examples of universal perfect readings from spontaneous speech make use of TDMs and will thus be discussed in Chapter 10.

In the following sentence, only the {A,S}-C construction can be used felicitously in the context specified in (9.28). Caco Moreno and Miguel Chavez judged the C-{A,S} construction found in the sentence in (9.28a) to be infelicitous, commenting that this sentence would only be felicitous if Rami has finished singing while it is uttered. The same consultants comment that for the felicitous sentence in (9.28b), the speaker expects Rami to keep singing.

(9.28) Context: You are annoyed because Rami has been singing the same song for a long time, she is still singing as you say:



morning Rami=ERG DEM1 song sing=DEC:P

'Rami had been singing this song since this morning.' ELIC

Another universal perfect context is prompted by the question in (9.29) below. Changing the constituent order such that the {A,S} argument follows the clause-type/rank morpheme as in (9.29b) results in a past perfect interpretation, and is infelicitous in the context because the sentence does not imply that Caco was continuously sick from Monday until the speech time. The (9.29a) construction is considered appropriate in this context, showing that only this construction is compatible with universal perfect interpretations.

(9.29) Context: Spoken on a Thursday, Caco's sickness began on a Monday, and he was not sick before this. He is still sick now.

S V C

a. lunes bari=ro?á káko iki=?itá=ki

Monday day =LIMIT Caco be_sick=REMP=DEC:P

'Caco has been sick since Monday (and is still sick).'

V C S

b. #lunes bari=ro?á iki=?ita=ki káko

Monday day =LIMIT be sick=REMP=DEC:P Caco

'Caco had been sick by Monday (may or may not still be sick).'

As shown in Section 9.1 {A,S}-C constructions are also compatible with non-perfect readings. In narratives this is the most common interpretation of {A,S}-C clauses. A common way that perfect readings emerge in narratives is through "TDM-switch contexts", which always induce a perfect reading (see Chapter 10).

9.4.2 Perfect properties of C-{A,S} constructions

In contrast to $\{A,S\}$ -C constructions, perfect readings always emerge from $\{A,S\}$ -C constructions. Absolutive or discontinuous past tense readings are incompatible with $\{A,S\}$ -C constructions. It is for this reason that I consider the C-flexible clause-type/rank morphemes =ki 'declarative, past' and $=2\acute{a}$ 'interrogative, past' to be polysemous between past tense and perfect. As pointed out in the introduction, an important caveat in this description must be added. These morphemes are also incompatible with readings where the event occurs after the speech time. This is makes it problematic to consider them strictly relative tense encoding morphemes. This section is concerned with showing that C- $\{A,S\}$ constructions display three properties associated with the perfect cross-linguistically.

Experiential and unviersal perfect readings discussed above in §9.3.1 do not arise from the C-{A,S} construction. C-{A,S} constructions encode result state readings and lingering relevance to the temporal reference time. C-{A,S} constructions also display restrictions in terms of their combinations with temporal frame adverbs. As we will show

here this is not the case with {A,S}-C clauses. In the following discussion I describe the perfect properties of the C-{A,S} constructions.

One perfect property noted in Matthewson et al. (2015) is that the **result state must** hold at the temporal reference time. In the context stated in (9.30) below the temporal reference time is the speech time. The minimally contrastive sentences in (9.30a and (9.30b) illustrate that for C-{A,S} constructions the result state of an event must hold at the temporal reference time (speech time in this case) but that this is not true for {A,S}-C constructions. I interpret the infelicity of (9.30b) as judged by my Chácobo consultants as follows; the {A,S}-C construction strongly implies that Jema still has the new motorcycle that she bought at the speech time, the result state of the proposition denoted by the start of the sentence, and thus (9.30b) sounds contradictory.

(9.30) Context: Someone asks you if Jema can come to your house. This person thinks Jema has a motorcycle, you know that she doesn't have one anymore.

A [P] V C

hɨma kópi=**ki** a. motó pása hama moto=yama Jema motorcycle new buy=DEC:P motorcycle=NEG but SO habokí DEC now

'Jema bought a new motorcycle, but she doesn't have a motorcycle right now.'

[P] V C A

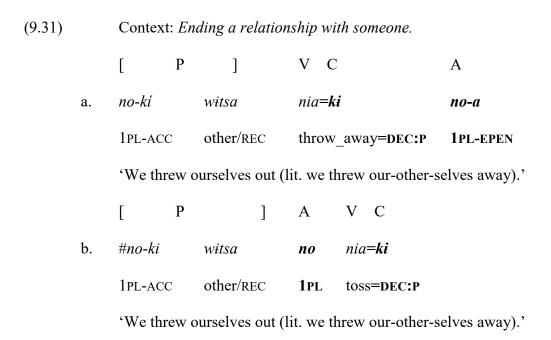
b. #motó pása kopí**=ki** hɨma háma móto=yáma motorcycle new buy=DEC:P Jema but motorcycle=NEG habokí ŞO DEC now

'Jema has bought a new motorcycle, but she doesn't have a motorcycle now.'

ELIC

C-{A,S} constructions are also associated with **lingering relevance interpretations** (cf. Givón 2001: 293). Evidence for this comes the elicited sentences in (9.31). These sentences contain the common metaphorical expression for ending a romantic

relationship in Chácobo (lit. "we threw us out") in C{A,S} and {A,S}-C constructions. For Caco Moreno, the C-{A,S} construction is the most appropriate construction for when a Chácobo wants end a relationship with someone or reaffirm that a relationship is over, a case where lingering relevance to the present time is necessary (cf. Matthewson et al. 2015 on this test).



Another illustration of the lingering relevance reading is provided in

(9.32). In the context of a folk story about a cultural hero which has no present tense relevance, we find mirror image felicity judgements; C-{A,S} is felicitous, but C-{A,S} is not, further showing that C-{A,S} clauses *require* lingering relevance.

(9.32) *Context: Telling a story about Nahuapaxahua, a Chacobo folk hero.*

A V C

a. *nawapasáwa hawí sobo =kí ka=ní=ki*Nahuapaxahua 3sG:GEN house =DAT go=REMP=DEC:P

'Nahuapaxahua has gone to his community.'

V C A

b. #hawi sobo =ki ka=ni=ki nawapasawa

3sg:GEN house =DAT go=REMP=DEC:P Nahuapaxahua

'Nahuapaxahua has gone to his community.'

A common property of present perfects cross-linguistically is that they cannot combine with certain temporal frame adverbs. This cannot be tested directly in Chácobo because all clauses with the past tense =ki and $=?\acute{a}$ can encode a pluperfect (past in the past) interpretation. One way of performing this test in a way that is relevant to languages like Chácobo where past event clauses are systematically ambiguous between absolute tense and and absolute-relative tense is to consider whether for a given construction type a present perfect interpretation is compatible with a temporal frame adverb, or whether the presence of a temporal frame adverb conditions a past perfect reading obligatorily (cf. Tallman & Stout 2016). In Chácobo $\{A,S\}$ -C constructions are compatible with temporal frame adverbial expressions as in (9.33) below.

[ADV] S V C
$$ka=2ita=2\acute{a}=g=ka \qquad bari \quad kako \quad ho=2it\acute{a}=ki$$
 go=RECP=NMLZ:P=PA:S=REL day Caco come=RECP=DEC:P 'Caco (has) arrived yesterday.' ELIC

However, we find that when C- $\{A,S\}$ constructions combine with a temporal adverbial expression, they obligatorily receive a past perfect interpretation. The combination of the temporal expression ka ita ita it 'yesterday' with the recent past time TDM = it which encodes a temporal distance from one to three days prior, a C- $\{A,S\}$ clause forces an interpretation whereby the TDM encodes a past perfect.

[ADV] V C S
$$ka=2ita=2\acute{a}=g=ka \qquad bari \quad ho=2it\acute{a}=ki \qquad k\acute{a}ko$$

$$go=RECP=NMLZ:P=S=REL \quad day \quad come=RECP=DEC:P \quad Caco$$
'Caco had arrived by yesterday (one to three days prior).'
'Caco has arrived yesterday.' ELIC

Further evidence for this difference in interpretation can be seen from the examples below. Caco Moreno and Miguel Chavez judge Gere (in a C-{A,S} clause) to arrive before Caco (in a {A,S}-C clause), because Gere arrives in the past of the past; a necessary interpretation of {A,S}-C construction in combination with temporal frame adverbial

expression. These examples provide further evidence that temporal adverbials are incompatible with a present perfect interpretation of C-{A,S} clauses.

9.4.3 Summary of perfect properties

The perfect properties of each of the construction types are summarized in Table 9.2.

Table 9.2. Tense and perfect properties associated with C- $\{A,S\}$ and $\{A,S\}$ -C constructions coded by =ki 'declarative, past/anterior' and =2i 'nominalization, anterior'

| | READINGS | C-{A,S} | {A,S}-C |
|----------------|------------------------|----------|----------|
| ABSOLUTE TENSE | (DISCONTINUOUS) PAST | × | √ |
| | EXPERIENTIAL READING | * | ✓ |
| | UNIVERSAL PERFECT | × | ✓ |
| RELATIVE TENSE | RESULT STATE READING | ✓ | * |
| | LINGERING RELEVANCE | ✓ | * |
| | ADVERBIAL RESTRICTIONS | √ | * |

The tense and perfect readings presented in Table 9.2 are in complementary distribution. Despite the fact that both construction types encode certain types of perfect readings, there is a sense in which the C-{A,S} construction should be understood as a dedicated perfect construction, while the {A,S}-C construction should not. First, the C-{A,S} construction requires a perfect reading, whereas the {A,S}-C construction is compatible with normal past tense interpretations. The second reason is that the perfect readings of {A,S}-C constructions all appear to be associated with specific discourse contexts. These discourse contexts are related to the use of TDMs and are thus discussed in Chapter 10.

It is for this reason that in the case of C-{A,S} constructions it is appropriate to refer to its perfect semantics as **perfect properties** *encoded* by the construction. In the case of the perfect semantics of the {A,S}-C construction it is more appropriate to say that this construction has associated **perfect readings** that *emerge* out of certain discourse contexts (e.g. the TDM switch context or the initiation of a new narrative). Tallman and Stout (2016) provide more data and discussion concerning these constructions. The distinction between C-{A,S} and {A,S}-C constructions will continue to be important throughout this Chapter.

9.4.4 Perfect readings in C-rigid constructions

Affirmative C-rigid clauses are not associated with perfect interpretations. In Chácobo, subject-fixed clauses with the non-past declarative =ki receive perfect interpretations only when they are negated and the verb root is an accomplishment or activity verb. This is illustrated in (9.36b).

(9.36) a.
$$no?\acute{o}$$
 awini $miki_n\acute{a}=ro?a=n\acute{o}$ tsi $ma-to$ $=k\acute{i}$

1SG:GEN woman kill=LIMIT=SS P5 2PL-EPEN =DAT

 i $bi-rabi=ki\acute{a}=ki$

1SG face-embarrass=CNTRFCT=DEC:P

'If I had killed my wife, I would have been embarrassed around you (pl).'

b. $a(k) = y \acute{a} m a = k \acute{i} = a$ no? \acute{o} awini

wife=NEG=DEC:NONP=1SG 1SG:GEN wife

'But I have not killed my wife.' TXT 061:167-168

Another example of a negated C-rigid clause that expresses a perfect reading is provided in (9.37).

- (9.37) a. no?o awi = ki i = ba = ri risisi ak = wi1SG:GEN wife =DAT 1SG=BENEF=AUG bow_string make=IMPER

 'To my wife [I say], make a bow string for me!'
 - b. pia $\acute{a}k=no$ \acute{i} $=pao=n\acute{i}=k\acute{i}$ arrow make=HORT 1SG =HAB=REMP=DEC:P "I am going to make an arrow" I used [to say]."
 - пого kai yona=yáma=ki=ac. 1sg:gen mother work=NEG=DEC:NONP=1SG risís ak=?ái=na mi awí SO 1sg:gen wife bow string make=NMLZ:IPV=EPEN DEC 'I haven't made my mother work, my wife is the one who makes the bow string.' TXT089:069-071

Another example of the perfect reading in a C-rigid construction is provided in (9.38) in the context of a folk story about Caco and his brothers who eat their grandparents. At the time their mother asks them not eat their grandfather, they have already done so; which is why they defensively respond in the present perfect using a negative construction in (9.38c).

(9.38) a.
$$tfa?ita$$
 $pi=y\acute{a}ma=go=w\acute{i}$ i $ki\acute{a}$ $kako=k\acute{i}$ gra_fa $eat=NEG=REM=IMPER$ say REP $Caco=DAT$ $iw\acute{a}ti$ $=n\acute{i}=k\acute{i}$ $gra_mo=REMP=DEC:P$

"Don't eat grandfather!" their grandmother said to Caco."

b.
$$hat\acute{o}$$
 $iwati$ $h\acute{a}$ $=k\acute{t}$
 $3PL:GEN$ gra_mo 3 $=PRIOR:D\{A,S\}$
 $pi=y\acute{a}ma=ki$ $no-a$ $kai='$
 $eat=NEG=DEC:NONP$ $1PL-EPEN$ $mother=VOC$
 $his=\acute{a}ma=ki$ $no-a$ $tfa?ita$
 $see=NEG=DEC:NONP$ $1PL-EPEN$ gra fa

'When she [said] this [they responded] "We haven't eaten him, mother!"

We haven't seen grandfather' TXT028:009-011

However, not all negative clauses marked with =ki receive a perfect interpretation. If the verb is stative, no perfect reading is associated with negative C-rigid constructions as in (9.39).

9.4.5 Future perfect readings

An example of a future perfect reading was already illustrated in (9.15) (§9.1) using a nominalized past/anterior clause semantically subordinated under a non-past clause marked with =ki. The used of subordinate clauses constitutes the primary strategy for encoding future perfect readings in Chácobo.

An example of a perfect future reading using the imperfective nominalizer is provided in (9.40) below in the context of a narrative about future plans.

- (9.40) a. hatsi i-a=rí kuatro sinko i-a=rí awás then 1sg-acc=aug four five 1sg-epen=aug wolf fish $ak=(?)\dot{a}$ bi=só i=yami(t)=kipí-ria do=NMLZ:P bring=PRIOR:A eat-AUG be=DISTP=DEC:P
 - 'Then I as well took out four or five wolf fish, brought them and ate them.'
 - b. ka=?i=ma tsi i ita=?a=na dos bari tsi go=CONCUR:S=NEG P5 1SG RECP=NMLZ:P=EPEN two day P5 no $pi=y\acute{a}ma=ri=?ai=na$
 - 1PL eat=NEG=AUG=NMLZ:IPV=EPEN
 - 'I didn't go yesterday, it will be two days since I will have not eaten.'
 - c. *i-a-rí* tsi wiaki ka=ſari=kí-a

 1sg-epen-aug p5 next_day go=CRAS=DEC:NONP-1sg

 'Tomorrow I will go.' Txt 094:058-060

Chapter 10. Temporal distance and remoteness

Chácobo has 7 temporal distance morphemes (TDMs). All TDMs occur in position 13 of the sentence directly before the clause-type/rank morpheme (see Section 5.2.3). TDMs occur with a subset of clause-type rank morphemes. The semantics of temporal distance morphemes are not the same as those of tense nor of temporal frame adverbs (Botne 2012; Cable 2013; Mucha 2015). TDMs display absolute and relative tense functions (see Chapter 9 above for definitions of these concepts). In their absolute tense function they modify the relation between an event and the speech time by specifying a temporal distance between these two points. In their relative tense function they modify the relationship between the event time and some temporal reference time distinct from the speech time (e.g. in sentences with pluperfect interpretations). Furthermore, their interpretation interacts with the distinction between {A,S}-C and C-{A,S} constructions described in Section 9.4 above. In C-{A,S} constructions, they only encode the temporal distance between the ending of an event and some temporal reference time (either R or S). In {A,S}-C constructions they relate to the time span of an event is more variable. Their interpretation as either modifiers or absolute or relative tense relations depends on the construction type in which they occur (C-{A,S} vs. {A,S}-C) and whether they occur in a specific type of discourse context (see Sections 10.2.2 and

An overview of the TDMs in Chácobo is provided in Table 10.1, which also contains all sections where each of these morphemes are discussed in this chapter. A few comments about the overview provided in Table 10.1 are in order. TDMs do not contribute

a fixed quantity of temporal distance (e.g. exactly three days). Rather they occur for a time span with a **minimum** and a **maximum** distance. For instance, the recent past time =*ita* typically describes an event which occurred yesterday or up to three days prior to yesterday from the speech time in an absolute tensed clause. In such a situation I describe its minimum as one day before and its maximum as four days before.

Although Chácobo speakers regularly translate TDMs with fixed minima and maxima, discourse evidence suggests that they are not so closely tied to a mind-external clock time. While they seem to have default interpretations that relate to the way the Chácobo count sleep cycles, seasons and calendar time, most of them can **stretch** or **shrink** according to the **temporal scale** in which they are embedded (cf. Botne 2012). For instance, the minimum of =*ita* 'recent past' is usually one day before the speech time, but discourse context can cause the minimum to shrink to the same day in the morning of the temporal reference time or stretch to a few weeks before the temporal reference time.

Not all TDMs strictly encode temporal distance. In some cases they overlap with perspectival meanings (particularly modality and mirativity). For instance the clitic $=y\dot{a}$ encodes that an event occurred surprisingly soon (mirative). This TDM conditions C-{A,S} ordering and the clause type that receives an obligatory perfect interpretation. The clitic $=g\dot{i}$ refers to the future, but the speaker is actually uncertain about when; rather than strictly encoding a particular distance, therefore, $=g\dot{i}$ usually indicates a lack of knowledge about when an event will occur or lack of commitment about when it should occur (in the case of imperatives).

Table 10.1. Temporal distance morphemes in Chácobo

| Section | Form | Tense | Gloss | Minimum | Maximum |
|---------|--------------------------|-----------------|--------------|--------------|--------------|
| | | combination | | distance | distance |
| 10.1 | =ni | past | remote past | One year ago | Unspecified |
| 10.2 | =yamit~=yami | past | distant past | Five days | One year ago |
| | $\sim = imit \sim = imi$ | | | ago | |
| 10.3 | =itá | past | recent past | Yesterday | Four days |
| | | | | | ago |
| 10.4 | =yá | past | mirative | Unspecified | Unspecified |
| | | | perfect | | |
| 10.5 | Ø | past | | Day of | Unspecified |
| | | | | speech | |
| | | | | before | |
| | | | | speech time | |
| 10.6 | $=_{\mathcal{S}}i$ | non-past | indefinite | Day after | Unspecified |
| | | | future | tomorrow | |
| 10.7 | =fari | non-past | crasternal | Day after | Day after |
| | | | (tomorrow) | time of | time of |
| | | | | speech | speech |
| 10.8 | $=tsi\sim=tsa$ | past / non-past | immediate | Time of | Unspecified |
| | | | | speech | |
| 10.9 | Ø | non-past | | Time of | unspecified |
| | | | | speech | |

The clitic $=tsi\sim=tsa$ is the most divergent TDM for a few reasons. While it encodes temporal locality, it is the only TDM which is compatible with past and non-past

clauses. Furthermore, it displays more freedom in its ordering which means that structurally it is closer to some of the temporal/aspectual enclitic. $=tsi\sim=tsa$ can occur in more positions apart from position 9 of the extended verb phrase, a property that is not true of any other TDM. $=tsi\sim=tsa$ is also the only TDM that can combine with other TDMs.

Another issue addressed in this chapter is whether TDMs should be treated as auxiliaries in certain circumstances (Córdoba et al. 2012; Tallman and Epps *forthcoming*). According to the definition of auxiliary verb constructions adopted in this thesis (obligatory subordination, noncompositional meaning), overall, the behavior of TDMs suggests that they should not be treated in this fashion. There are a few interesting exceptions to this, however, which will be discussed below.

The final section discusses the interpretation of constructions without TDMs. For ease of exposition such constructions will be referred to as zero TDM constructions. Zero TDM constructions are represented with \emptyset in the Table 10.1. Zero TDM constructions have specific interpretations with respect to temporal distance.

10.1. REMOTE PAST TIME =NI

By default, the remote past =ni encodes that an event occurred approximately one year or more ago from the speech time. However, in certain contexts =ni 'remote past' appears to take on a more epistemic modal function in that it is associated with a lack of knowledge concerning the speech time or whether an event occurred at all. This section will describe

three properties of this morpheme that require attention; (i) discourse perseverance; (ii) polysemy in clause-type functions; (iii) and the temporal distance or remoteness according to different contexts.

10.1.1 Remote past - Discourse perseverance

The morpheme =ni displays discourse perseverance just as =ki 'declarative, past tense' does (section 9.1.1) such that it is repeated redundantly throughout remote past discourse on every clause that involves verbal predication. It occurs even where the time that the event took place is not important (see Cable [2013] on this issue generally) and cannot be dropped in remote past discourse. An example where =ni is repeated in every sentence is provided in (10.1) from a folk story about the goddess Ashiná.

(10.1) a.
$$afina=$$
 ' $hawi$ $baki$ tsi kia ha

Ashina= ERG 3SG:GEN child P5 REP 3

 $ko=ma=ni=ki$

be_born-CAUS=REMP=DEC:P

'Ashina gave birth to her child (it is said).'

'When her child was coming out, Ashina put (lit. caused it to stand) it in a jar/container.'

c.
$$pa?iti='$$
 $ni-ma=?ás$ tsi $kiá$ $afiná='$ container=SPAT stand-CAUS=PRIOR:S P5 REP Ashina=ERG

leg-open-TR=REMP=DEC:P

'In order to put it in a container she opened her legs (over the container).'

TXT 081:001-003

ki-t/-a=ni=ki

10.1.2 Remote past - Deviations from biuniqueness in the tense group

In the example above =ni combines with the clause-type/rank morpheme =ki 'declarative past', which follows from the fact that it occurs in position 14 of the sentence (Chapter 4). The remote past morpheme =ni does not co-occur with the clause-type/rank morphemes =?ai 'nominalizer, past/anterior' and =?ai 'interrogative, past'. This constitutes a gap in the paradigm of TDM-clause-type/rank combinations, since all other past TDMs do combine with these morphemes (see Section 5.2.3.15.2 for a discussion in the context of constituency in the verb complex). The paradigm is illustrated for interrogative forms in (10.2).

```
(10.2) a.
              ka=?á
              go=INTER:P
              'Did s/he go?'
        b.
              ka=ita=?á
              go=RECP=INTER:P
              'Did s/he go (yesterday)?'
        c.
              ka=yamit=(?)\acute{a}
              go=DISTP=INTER:P
              'Did s/he go (about a week ago)?'
        d.
              ka=ni
                                  *ka=ni=?a
              go=INTER:REMP
              'Did s/he go (a year or more ago)?'
```

There are two ways of representing this situation. One way would be to posit that there is a morphophonological rule such that $=2\acute{a}$ drops just in case it is before the remote past morpheme $=n\acute{a}$. The other way is to consider $=n\acute{a}$ to be an exponent of interrogative clause-type. I follow the latter analysis, which is reflected in my glossing practices throughout. One result of this analysis is that the morpheme $=n\acute{a}$ is polysemous between a remote past, remote past interrogative and a remote past nominalizer. A nominalizer version of $=n\acute{a}$ is illustrated in (10.3) and (10.4). (10.3) provides an example of $=n\acute{a}$ found

in a relative clause construction. (10.4) provides an example of this morpheme in a complement-like construction.

- (10.3) binohirahirawa ha-tó kiyo=pao=ni=f=ka tsi kiá toa

 vampire 3-PL kill=HAB=NMLZ:REMP=A=REL P5 REP DEM2

 'That is the bat which killed them.' TXT 034:240
- (10.4)Iba mi-á nika=kás=ki по-а hariaparí naa Iba 2sg-acc listen=des=dec:nonp 1pl-epen first DEM1 mi tſani siri mi-ʔ-ipa $=y\dot{a}$ mi yonoko=?i 2sg 2SG-EPEN-father=COM 2SG work=CONCUR:S i=ni=namitsaya=?i i=ni=nabe=NMLZ:REMP=EPEN or 2SG see=CONCUR:S be=NMLZ:REMP=EPEN 'Iba, we want to listen to you, first this; your old story about how you went to work with your father and how you used to see your father.' TXT 101:001-003

That =ni is used for a remote past interrogative is illustrated in (10.5) below.

'And they were eating patuju fruit, so of course they suffered.'

INTERVIEWER:

b.
$$binia$$
 tsi $ha = kan = ni$

suffer
$$P5$$
 3 =PL=NMLZ:REMP

'They were suffering?' TXT 063:106

10.1.3 Remote past - Temporal distance and remoteness

As stated in the introductory sentence of this section, =ni tends to encode that an event took place a year or more ago. In elicitation contexts, Chácobo teachers (e.g. Caco Moreno and Miguel Chavez) insist that =ni encodes a year or more ago. This translation follows the description in Zingg (1998).

(10.6)
$$pabi=ni=ki$$

dance=REMP=DEC:P

'He danced / was dancing (a year or more ago).' ELIC

While the year-ago intuition seems to be roughly correct for most uses of =ni, in the context of interrogatives =ni seems to imply a general lack of knowledge concerning when the event took place rather than any commitment to its taking place one year ago. For instance, in March (2015) a speaker asked me if I had gotten drunk on new years eve (December 2014).

It is possible that in questions, however, lack of knowledge is more important than temporal remoteness is *per se* and thus the speakers question could be reflective of the fact that he did not want to communicate that the knew specifically about the time of the specific event of me getting drunk that he was asking about (see Cable [2013] on the relationship between remoteness and lack of knowledge).

Some evidence for this comes from a personal narrative of a speaker who reflects on her thought process as she was taking care of one of her babies. She reflects that she doesn't know whether the baby had been fed or not. Interestingly, in this case the remote past is used in (10.8). Given that the speaker presumably knows that it would be impossible for her baby to be alive if she hadn't eaten for a year or more, =ni cannot possible have the

interpretation that some Chácobo speakers normally insist on in elicitation. In this case =ni seems to encode that the speaker simply lacks knowledge concerning when the event might have taken place.

- (10.8) a. ha=ki pi $sipo_poi$ nia atsa=bo ha=ki nia dos bari 3=DAT ANX $yuca_dough$ put yuca=PL 3=DAT throw two day tsi ha $oriki=y\acute{a}ma=n\acute{i}=ki$
 - P5 3 nourish=NEG=REMP=DEC:P
 - 'I threw the yuca dough and I threw the yuca on it because it had been two days since we had eaten.'
 - b. hakiriki tsi tonia pifa =ka paşná anoma-riá kinia=ki
 after_that P5 EPIS small=REL hungry many-AUG lack=DEC:NONP
 tsi ha pi=yama=ní
 - 'After this, he is a little hungry, he lacked much, it's possible that he ate.

(lit. did he not eat?)' TXT 095:147-148

eat=NEG=INTER:REMP

Р5

3

A more subjective and mind-internal understanding of the temporal remoteness is what one would expect from the typological literature on this topic, however, the data I have do not reveal this systematically, because typically remote past narratives are a year or more ago in the past. Some elicitation data may be revealing in this regard. According

to Caco Moreno, the following sentence is felicitous and not semantically anomolous if a speaker is trying to *emphasize* that one month is a long time to stop dancing.

All the example above involve =ni in the context of a $\{A,S\}$ -C construction. They are all examples of absolute tense as well. C- $\{A,S\}$ constructions with =ni very rarely occur in my corpus. One example is provided in (10.10d) from a folk story about a vampire that contains a conversation between a vampire and some villagers. here the C- $\{A,S\}$ construction because the fact that the vampire killed the villagers has obvious relevance to whether the villagers will let him in their village.

b.
$$hin\acute{a}-wa=k\acute{i}$$
 tsi $no-k\acute{i}$ $m\acute{i}$ $ak=(?)\acute{a}i=na$ $do_how-V:TR=CONCUR:A$ P5 1PL-ACC 2SG kill=NMLZ:IPV=EPEN "Why are you killing us?" [the villagers said]"

d. hátsi kiá tóa no-kí siri

then REP DEM2 1PL-ACC long_time

$$a \sim ? \sim a = pao = ni = ki$$
 mi-a

kill~EPEN~kill=HAB=REMP=DEC:P 2SG-EPEN

"Then you had been killing us for some years now." (the villagers

10.2. DISTANT PAST TIME =YAMHT

responded)' TXT 061: 089-102

The distant past time enclitic $=yamit \sim =imit \sim =imit$ typically encodes that an event took place between five days ago (minimum) and one year (maximum) from the time of speech or some reference time. This section describes three properties associated with this morpheme (i) discourse perseverance; (iii) relative tense and perfect interpretations; (iii) its time span.

10.2.1 Distant past - Discourse perseverance

In distant past narratives (those that are between four days and one year from the speech time) =yamit modifies an absolute tense relation encoding the temporal distance between event time and speech time. In such cases this TDM displays discourse perseverance in that it repeats redundantly throughout the discourse. Examples of narratives where =yamit is repeated throughout discourse are found in (10.11) and (10.12).

(10.11) a.
$$t \circ ka = pao$$
 $ha = yamit = (?)a = kato = '$ tsi

do_like ~ do_like=HAB 3 = DISTP=NMLZ:P=REL=SPAT P5

 $dos \quad osi \quad tres \quad osi \quad haboki \quad tsi \quad ha \quad paki = yami(t) = ki$

two month three month now P5 3 fall=DISTP=DEC:P

'When it was (closed) like this, between two and three weeks ago from now he (my badger) went outside (lit. fell).'

- b. ha-mɨ paki=?á his=áma ha tsi tsi 3 fall=NMLZ:P 3-REFL Р5 P5 see=NEG wa = vami(t) = ki1s_G TR=**DISTP**=DEC:P
 - 'When he (the pet badger) went out by himself, I didn't see him anymore.'
- c. yakata i ka=ki tsi bitf-i=ma=ri i ka=ki tsi town 1sG go=D{A,} P5 grab-iTR=NEG=AUG 1sG go=D{A,S} P5

kiá tſiba=ya=só tabina=' paki=ma=ʔa=ka ha

REP Chiba=COM=A Tabina=ERG fall=CAUS=NMLZ:P=REL 3

noʔití noʔití atʃ-a=yami(t)=ki

difficult difficult grab-TR=DISTP=DEC:P

'When I went to Riberalta and when I went in vain with Chiba, Tabi let him

- 'When I went to Riberalta and when I went in vain with Chiba, Tabi let him (the badger) escape but with much difficulty I caught him.' TXT 095:153-155
- (10.12) a. $h\acute{a}a$ $kok\acute{o}=?i$ ha $ka=yam\acute{\iota}(t)=ki$ yes hunt=CONCUR:S 3 go=DISTP=DEC:P 'Yes, and while he was going hunting....'
 - ka=kia / i = yam i(t) = kib. háa tsi tsóboko $go=D\{A,S\}$ 1s_G naked bathe=DISTP=DEC:P yes Р5 habí tsi tsóboko aſi=?ái tsaya=?aí bathe=NMLZ:IPV surely Р5 naked see=INTER:NONPST:2SG 'Yes, when he went to hunt, I bathed naked just like one normally bathes naked.'
 - c. *i-mi i tsóboko=yo=yami(t)=ki*1SG-RFLX 1SG naked=CMPL=DISTP=DEC:P

 'I myself took off all my clothes.' TXT 024:021-024

10.2.2 Distant past - Temporal distance and remoteness

In elicitation contexts =yamit is translated as encoding between a week and a year from the speech time. However, it can encode more lengthy temporal distances given an appropriate discourse context. This is illustrated in (10.13) below. The following example is from a Chácobo folk story about a group of children whose mother was killed by a jaguar. After a while the family forgets why they left the place where they used to live with their mother. The context makes clear that it must have been years before. In this case =yamit 'distant past' is used anyways in (10.13b).

- (10.13) a. yoanoma nobá rikibo raká ka?i=na

 for_long_time 1PL:GEN ancestors EPIS know=EPEN

 'After a long time, our ancestors forgot about it.'
 - b. haʔarí ka=no=maní mi-ʔ-iwa =yá no raka=ʔi

 still go=HORT=CONJ 2SG-EPEN-mother=COM 1PL stay=CONCUR:S

 =yamit=(ʔ)á=kató=no i=ikiá bini

 =DISTP=NMLZ:P=REL=SPAT say=REP husband

 "We're going where we lived with your mother" said her husband."
 - c. hawi şokobo naa topo=ka=bo hawi ha?i=bo

 3SG:GEN children DEM1 size=REL=PL/ASS 3SG:GEN girl =PL/ASS
 - 'The children were the same size as these girls here.' TXT 037:087-089

Switches from one TDM to another across sentences in consecutive discourse typically encode a relative tense perfect reading (which I will turn to in Section 10.2.2). However, there are some cases where the switching of a TDM across sentences in consecutive discourse does not result in a relative tense perfect reading.

This is where a speaker tells a story the timeline of which extends past the minimum limit of the temporal interval encoded by the clitic =yamit. Specifically, if a speaker tells a story that begins in the distant past (four or more days ago) but continues after this until it reaches into the time span of the recent past (up to three days before the speech time), then a switch to a recent past TDM can occur without the speaker expressing out-of-sequence events.

Such a switch a more remote to a less remote TDM is illustrated in (10.14) where Choca Yaquë (Cachuelita) discusses the story of her pet badger, who she found a few weeks prior to the time of speech, where most of the narrative takes place, but only lost it a few days prior, which is in the time frame of the recent past, not the distant past.

'After this "Here is your badger" said the child of Tohi.'

- b. $ha-2-\acute{a}$ tsi $ka=s\acute{o}$ i $bi=yam\acute{i}(t)=k\acute{i}$ 3-EPEN-SPAT P5 go=PRIOR:A 1SG receive=DISTP=DEC:P 'And there when I went I picked up the badger.'
- c. $ka=s\acute{o}$ $bi=?\acute{a}=ka$ $dos\ bari\ nia\ ha\ i=yam\acute{i}(t)=ki$ go=PRIOR:A grab=NMLZ:P=REL two day here 3 be=DISTP=DEC:P 'When I went when I grabbed him I spent two days here.'
- d. tabla kia=só \dot{t} hana=?á=ka sipo po?i table edge=A 1sg leave=NMLZ:P=REL yuca dought pi ~ pi=?á hana=?á=ka tsi wistí bari leave=NMLZ:P=REL eat ~ eat=NMLZ:P Р5 day/sun one tsi tonia dos bari ka=?i yáma tsi tsi P5 **EPIS** two day go=CONCUR:S Р5 NEG P5 ha =ita=ki \dot{t} yopa=**itá**=ki 3 =**RECP**=DEC:P 1sg miss=RECP=DEC:P

'I left it on the edge of the table where I also left the yuca dough and when we were eating one day two days ago I looked and didn't find him.' TXT 095:169-174

10.2.3 Distant past - Relative tense and perfect readings

In the examples above =yamit 'distant past' modifies an absolute tense relation placing the event in the distant past from the speech time. The modification of the absolute tense

relation (a relation between the event time and the speech time) occurs in in-sequence events as in the examples above. The clitic =yamit can also modify a relative tense relation; a relation between an event time and a reference time distinct from the speech time. This interpretation arises out of a specific discourse context I refer to as intrasentential-TDM-switch.

Intrasentential-TDM-switch refers to a relationship between two sentences in discourse such that one sentence S_i contains a TDM distinct from that found in the following sentence sentence S_j . In such cases the TDM of S_i encodes the temporal distance between the event time E_i and the utterance time, but the TDM of S_j encodes the temporal distance between an event time E_j and a temporal reference time R, where $R = E_i$ and E_j is prior to E_i . The event encoded by S_j will be out-of-sequence in the discourse context and a perfect reading will arise. Which specific perfect reading arises will depend on whether S_j is a C- $\{A,S\}$ or $\{A,S\}$ -C construction (see 9.4 above).

An illustration of the perfect emerging out of intrasentential-TDM-switch is provided in (10.15) which consists of a narrative in the remote past, as one can see from the fact that =ni occurs in (10.15a) and (10.15b). In (10.15c) the speaker switches to using a distant past marker =yamit in a remote past narrative about the arrival of the Pacahuara to Alto Ivon. The speaker expresses that by the time the Pacahuara (Xaco and Baji) arrived the Chácobo had already been wearing clothes for some time (clothes they received from the missionaries). In this case the distant past marker encodes the temporal distance between a temporal reference time in the remote past (encoded in (10.15a-b)) and the event

time. This perfect reading below results from intrasentential-TDM-switch from the remote past =ni in (10.15b) to the distance past =yamit in (10.15c).

(10.15) a.
$$h\acute{a}tsi$$
 $ni\acute{a}$ $no-ki$ $habi=kas=kan=(?)iki\acute{a}$ then here 1PL-ACC be_accustomed=VOL=PL=REP i ha $=ka(n)=n\acute{t}=ki$ say 3 $=3$ PL=REMP=DEC:P

"It is said they want to live with us here." they said (in the remote past)."

b. ha-2- \acute{a} tsi pi $n\acute{a}a$ kai $s\acute{a}ko$ i kai bahi 3-EPEN-SPAT P5 ANX DEM1 mother Xaco and mother Baji ho=tiki(n)= $n\acute{a}$ =na

come=AGAIN=NMLZ:REMP=EPEN

'Its for this reason that mother Xaco and mother Baji came again (in the remote past)'.

'Yes, all the other associated people (as in those that lived in Alto Ivon at the time) of Alto Ivon had put on clothes some time before this.'

TXT 117:236-238

Recall from Section 9.4 that one difference between {A,S}-C and C-{A,S} constructions is that in the latter construction encodes perfect properties obligatorily while the former only has certain perfect readings associated with it, which emerge from specific discourse contexts. (10.15c) is an example of a C-{A,S} construction and would encode the perfect and an absolute-relative tense even if it was not a TDM switch sentence.

{A,S}-C constructions encode (discontinuous) past tense relations by default, but have perfect readings associated with them (Section 9.4). The perfect readings of the {A,S}-C emerge out of intrasentential-TDM-switch.

An example of a $\{A,S\}$ -C construction in a TDM switch context is provided in (10.16a-e). (10.16) consists of an excerpt of the story of the moon woman. The discourse is in the remote past time as can be seen from (10.16a); the appropriate TDM is underlined. A shaman tells the moon woman to stop putting dirt in men's penises (a practice she undertakes to punish adulterous men who are not loyal to their wives) in (10.16c). The moon woman retorts that she has never done such a thing in (10.16d). In the next sentence, the narrator uses an intrasentential-TDM-switch to explain that she had been doing this for some time prior to the remote past reference time of the discourse. Notice that a perfect reading emerges out of the intrasentential-TDM-switch from (10.16a) coded with the remote past =ni to (10.16e) coded with the distant past. The specific perfect reading that emerges is the universal perfect reading because the construction in (10.16e) is a $\{A,S\}$ -C construction. The narrator implies that the moon woman continues the practice of putting

dirt in men's penises up until the temporal reference time of the narrative (see Section 9.4.1 on the universal perfect reading and {A,S}-C constructions).

- (10.16) a. $to2\acute{a}=yo=s\acute{o}$ tsi $ki\acute{a}$ haska=ka=bo ha stir=CMPL=PRIOR:A P5 REP same=REL=PL/ASS 3 $bina=n\acute{l}=ki$... call=REMP=DEC:P ...
 - 'When she (a woman) stirred it (the chicha), she called everyone who was the same (age)...'
 - b. $raka=kan\acute{a}$ tsi $ki\acute{a}$ $hat\acute{o}$ $hina=k\acute{l}$ tsi mai $lie_down=GOING:ITR:SG$ P5 REP 3PL:GEN penis=DAT P5 dirt $riwi=?iki\acute{a}$... fill up=REP ...
 - 'While they (the adulterous men) were all lying down drunk (lit. while they were lying around about to go) (from chicha) she (the moon woman) put dirt in their penises....'
 - c. toa mi yoyo=yáma=şo=wí ható hina=kí

 DEM2 2SG cause_mischief=NEG=REMF=IMPER 3PL:GEN penis=DAT

 mai riwi=?ai=na i=kiá

 earth fill=NMLZ:IPV=EPEN say=REP

'(Then a shaman came and scolded the moon woman); "You will no longer do this mischief, filling their penises with dirt" he (the shaman) said'

d.
$$i=y\acute{a}ma=k\acute{i}-a$$
 $i=tsi=iki\acute{a}$

do:ITR=NEG=DEC:NONP-1SG do=IMM:ITR=REP

"I have never done that." [he moon woman] said in that moment (it is said)'

[V] S C

e. $oka \sim oka$ $ha = pao=yamit=(?)\acute{a}=ka$...

cause_problem \sim cause_problem $3 = HAB=DISTP=NMLZ:P=REL$

'But she had been accustomed to causing problems for some time now.'

TXT 063:279-289

The interpretation of TDMs is yet more complicated when one considers how they interact with the distinction between {A,S}-C and C-{A,S} constructions. In {A,S}-C constructions a TDM encodes the temporal distance between the initiation of an event. This can be observed in (10.16c). The narrator expresses that the moon woman *began* to put dirt in men's penises in the distant past or some time prior to the distant past.⁴²

⁴² Based on this statement, one might suspect that the TDM encodes a type of inchoative aspect in {A,S} - C constructions. However, the inchoativity of an event emerges out of the universal perfect reading of the

However, in C-{A,S} constructions, regardless of discourse context, TDMs modify a relation between the end of an event and some temporal reference time. This is illustrated in (10.15c) above. It is understood that all the Chácobo of Alto Ivon had adopted European clothes in the distant past before the arrival of the Pacahuara, not that the Chácobo began the acquiring European clothing beforehand and continued to gradually adopt clothing before the Pacahuara arrived.

A very conspicuous example of the difference in the temporal interpretation of TDMs between $\{A,S\}$ -C and C- $\{A,S\}$ constructions is illustrated in (10.17).

The following sentences come from the quoted speech of the Chácobo folk hero Nahuapaxahua, who laments that he needs to leave his homeland just as he arrives upon finding that the rest of his clan has been burned in a great fire made by the tapir witch. He uses a C-{A,S} construction without a TDM in (10.17b) to reference his recent arrival, and then refers to the same event of arriving using a {A,S}-C construction in (10.17c) but with a distant past TDM. As I will show in Section 10.5, a lack of a TDM (Ø in Table 10.1 above) in past tense narratives encodes a hodiernal (same day) past.

By using distinct TDMs, Nahuapaxahua is not contradicting himself in terms of the temporal difference of his arrival or referring to different arrival events. Rather the first sentence (C-{A,S} construction) encodes the temporal distance between the speech time

[{]A,S}-C construction. The TDM is simply adding a modification to one part of the temporal interval associated with the event not necessarily referring directly to its initiation.

and the end of the event (he arrived that day), and the second sentence ({A,S}-C construction) encodes the temporal distance between the speech time and the beginning of his journey.

(10.17) a. mif-o=yo=ni=kikanatí hawí burn-ITR=CMPL=REMP=DEC:P 3sg:gen bow 'All of his bows had been burnt.' b. V C S hó=k**i i-a**=rá ka=tapirá i tsi come/arrive=DEC:P 1sg-epen=auth go=AUTH:1SG say Р5 kiá ha =ni=ki3 =REMP=DEC:P REP "I have just arrived and now I am going." he (Nahuapaxahua) said." V \mathbf{C} S c. habí nia=tsi į ho = yami(t) = kisurely P5 **1sg** here=SPAT come=DISTP=DEC:P 'Surely by this here (this route) I have been coming.' d. S habí nia='hawí raká ni?i tsi

P5

3sg:gen

EPIS3

tree

surely

here=SPAT

mɨʃ-o=yo=yamɨ(t)=(?)a=rákana

burn-ITR=CMPL=DISTP=NMLZ:P=CERT

'Surely from here, now how might it be (I have doubts concerning whether I will recognize this path), since I knew/saw that all of the forest has been burned.'

TXT 061:249-252

In contrast to the remote past, it is much easier to demonstrate that the distant past refers to a mind-internal concept of time. The use of the distant past =yamit in text data reveals that the distant past category is much more malleable and flexible than is suggested by the translations one receives of such morphemes in elicitation (between 4 days and one year ago).⁴³

An illustration of the malleability in the temporal distance encoded by =yamit comes from the folk story Nahuapaxahua where Nahuapaxahua's tribe has been brought back from the dead. The clitic =yamit appears in a nominalized verbal predicate. In this case it refers back to the death of part of Nahuaxapaxahua's clan. According to my Chácobo

⁴³ Zingg (1998: 12) translates the form as "hace poco tiempo" (only a little while ago). He also states that the morpheme is scarcely used in the daily lives of the Chácobo. This does not correspond to my own experience as a participant observer nor to data from naturalistic speech where =yami(t) appears to be quite frequent.

consultants, the death of these men occurred some years prior to the event described. This shows that the maximum (one year ago) can be stretched.

- - b. riso=yamit=(?)a=ka=ri ható oriwa=?iní no-a

 die=DISTP=NMLZ:P=REL=TOO 3PL:GEN give_food=INTER:NONP1PL-EPEN

 i kiá ható awí =bo =ni=ki

 say REP 3PL:GEN woman =PL/ASS =REMP=DEC:P

 'Are we going to give food to the dead (those that have died a while ago)

 as well.' TXT34:182-183

10.3. RECENT PAST TIME =ITA

The recent past TDM morpheme $=it\acute{a}$ encodes that an event took place one or up to three days prior to the speech time or some other temporal reference time. An absolute tense interpretation of this morpheme is found in (10.14d), which refers to an event that took place two days prior to the speech act. In this section I describe three properties of $=it\acute{a}$; (i) its discourse perseverance; (ii) relative tense and perfect interpretations; (iii) its time span.

10.3.1 Recent past - Discourse perseverance

As with =ni 'remote past' and =yamit 'distant past', $=it\acute{a}$ 'recent past' is repeated redundantly throughout discourse as long as events are described in-sequence and occur within its minimum and maximum (Table 10.1). (10.19) contains an excerpt of a narrative spoken by Gere Ortiz, where he describes a fishing trip he went on with me one day prior to the speech time. Notice that $=it\acute{a}$ is repeated throughout the narrative. In this case $=it\acute{a}$ modifies an absolute tense relation. This example shows that $=it\acute{a}$ 'recent past' displays discourse perseverance.

- (10.19) a. hariaparí tsi adan=yá ɨ fani=itá=kɨ
 first P5 Adam=COM 1SG think=RECP=DEC:P
 'Firstly I was thinking of going out with Adam.'
 - despues de clase a las dos i media b. naa toa after class at two thirty y media DEM1 DEM2 $ka=it\acute{a}=ki$ adan=yá $sani=tan=(?)\acute{a}i=na$ no Adam=COM 1PL go=RECP=DEC:P fish=PNCT=NMLZ=EPEN 'After class at two thirty we went with Adam to fish.'
 - c. hariaparí táita boka=kí náa ho=itá=ki
 firstly Taita Boca=DAT DEM1 come=RECP=DEC:P
 'Firstly we arrived at Taita Boca's.' TXT 021:001-003

10.3.2 Recent past - Temporal distance and remoteness

In elicitation contexts speakers translate sentences with $=it\acute{a}$ as taking place yesterday or up to three days in the past before the time of speech. Before this point (as in the day of speech), my consultants insist on using no TDM, and after this point (four days or more before the speech time) speakers insist on using the distant past enclitic $=yam\acute{i}t$ or the remote past enclitic $=n\acute{i}$. This suggests that by default the recent past morpheme $=it\acute{a}$ has one day in the past as its minimum limit and a three days in the past as its maximum limit. Data from narratives show that the minimum can be shrunk, and the maximum stretched according to discourse context, however.

In the conversation presented in (10.20), Jëma Roca (from Cachuelita) describes events that took place yesterday. She recounts finishing a house the day before the speech time in (10.20b-e), but as soon as she shifts to the night before no TDM (or zero TDM) is used. Instead, the time of day morpheme = $fin\acute{a}$ 'at night' (see Section 11.6 for a description of the semantics of this morpheme) is used. Then when she refers to events that occurred during the morning of her conversation in (10.20h) with Paë Yaquë (her son), she does not use any TDM either. As I have stated repeatedly above (and see Section 10.5.3 below for details), past tense sentences without a TDM encode the day of speech. Note that this narrative was recorded at night at approximately 8:00 PM. In this stream of discourse, we can see that the minimum limit of = $it\acute{a}$ is the day before the speech act. This is demonstrated by the fact that as soon as the speaker begins to speak about hodiernal events (the day of the speech time), the TDM is dropped as in (10.20h).

(10.20) PAË:

a. hisa kai=' hawi mi a=ita=?a=na naa bari see mother=VOC what 2sG do=RECP=NMLZ:P=EPEN DEM1 day ka=ita=kato='no

go=**RECP**=REL=SPAT

'Hey mother, what did you do yesterday or one of these recently passed-by days?'

JËMA:

- b. sobo mi-2-ipa a=no i-mi bi=itá=ki

 house 2SG-EPEN-father make=CONCUR 1SG-RFLX grab=RECP=DEC:P

 'While your father was making the house, I myself was collecting

 (grabbing) them (pataju fruits)'
- c. ha=ki i mani $raa=2it\acute{a}=ki$ 3=DAT 1SG pataju send=RECP=DEC:P

 'I was sending pataju fruits.'

Paë:

d. ha-pá

3-MIR

'I'm interested!'

JËMA:

e.
$$hatsi$$
 no $kiyo = ?it\acute{a} = ki$

then 1PL finish=RECP=DEC:P

'Then we finished it.'

f.
$$kiyo-ta(n)=s\acute{o}$$
 tsi no $osa=fin\acute{a}=ki$

finish-PNCT=PRIOR:A P5 1PL sleep=AT NIGHT=DEC:P

'As soon as we finished, we slept at night.'

sleep=NMLZ:P morning=CMPL=NMLZ:P P5 what

$$a(k)=tiki(n)=2ini$$
 $no-ki=ri$ $n\acute{a}a$ $no2\acute{o}$

do=AGAIN=INTER:NONP 1PL-EPEN=AUG DEM1 1SG:GEN

sobo pístia = parí
$$kiyo = tiki(n) = no$$

house small=FIRST finish=AGAIN=CONCUR

patuju send=CMPL=DEC:P

'He left all of the patuju (today)' TXT 093:007

However, if the speaker's narrative takes place on the same day and then she shifts back to an earlier time frame of the same day, the recent past $=it\acute{a}$ can be used for a

^{&#}x27;When we slept and when it became morning. "What are we going to do now?" and after this I had to finish my little house first.'

hodiernal situation. This can be seen in the following dialogue of Bosi Suarez (Cachuelita). In (10.21a-f), Bosi Suarez is describing a stream of events that took place later in the evening of the same day, then Bosi moves back even further in the day switching to $=it\acute{a}$ 'recent past' in (9.174g) and continues the rest of the discourse using this TDM until she reaches the temporal reference point that roughly corresponds to where she started in the narrative. In this case, the previous discourse time span which takes place over the course of the day of speech pushes the minimum limit of the recent past TDM $=it\acute{a}$ forward closer to the time of speech. Or put another way the concept of recent past time is measured on a shallower time frame compared with its uses in (10.20), allowing $=it\acute{a}$ to be used for events described the morning of the speech act. The following example shows that the minimum limit of $=it\acute{a}$ can extend until the evening of the same day as long as the discourse prior to the use of this TDM was after that evening at night.

- (10.21) a. kái náka=no no míbi=ki hawí oya

 mother chew=CONCUR 1PL help=DEC:P 3SG:GEN pot

 'When my mother was chewing (yuca), we helped as well with the bowl.'
 - b. hɨnɨ paṣa wɨsti valde haba ɨ bi=kɨ
 water crude one bucket run 1sg get=DEC:P
 'One bucket of water I ran and got it.'

- c. $ha=bita=s\acute{o}$ no $naka-y\acute{o}=ki$ 3=COM=A 1PL chew-CMPL=DEC:P
 - 'And we chewed up (masticated) all of the yuca with her.'
- d. kai=' haboki hawi hini náni=ki mother=ERG now 3SG:GEN water put=DEC:P
- e. no?ó arosa tsaya=kas=kí=a i boka **=itá=ki**1SG:GEN rice see=DES=NONP=1SG say Boca **=RECP=DEC:P**'Boca said (earlier in the day) "I want to look at my rice."
- f. hís=i $ka=w_{i}$ ha-?á tsi no bari=bás see=CONCUR:S go=IMPER 3-SPAT P5 1_{PL} Bari=BENEF no maipáya his=iká=no 1PLhoney see=CONCUR:S go=HORT "Let's go see" and from there we are going to see the honey for Bari."
- g. no ka=itá=ki yata pístia

 1PL go=RECP=DEC:P evening small

 'We went late.'
- h. aros tíisa báta $a(k)=bin\acute{a}$ no?ó matáka=bo do=COMING:PL/TR rice honey 1sg:gen walusa=PL sweet \dot{t} tsaya=yo=itá=ki 1sg see=CMPL=RECP=DEC:P

'When we went to see our rice and honey (in the afternoon), when we went to take it out, we came and I looked all of the walusa.' TXT 095:088

These examples suggest that a temporally more local discourse context can shrink the minimum of the recent past TDM = $it\acute{a}$. The time scale of = $it\acute{a}$ can be bent in the other direction, extending beyond a few weeks. This can be seen from the excerpt of the narrative from the folk story Ashiná given below in (10.22).

The folk story of Ashiná is set in the remote past as can be seen from (10.22a). The story is about how Ashiná created mosquitos by aborting her foetus and letting the magical contents sit in a sealed container for a few weeks. This narrative contains sentences which express counter-sequential events where the recent past enclitic $=it\acute{a}$ introduces a relative tense relation. It is clear from the context and from the use of the expression *dos semanas* y media "two weeks later" in (10.22d), that the use of $=it\acute{a}$ in (10.22c) actually encodes a temporal distance of two weeks, more than twice the length of the translations in elicitation. This example shows that the maximum limit of $=it\acute{a}$ can extend to at least two weeks in time from a temporal reference point.

(10.22) a. hatsi kiá dos semana medio kiá wistí semana o tsi then week two week half P5 REP **REP** one tſákobo =kibíi ho=ni=kiChacobo =DAT mosquito arrive=REMP=DEC:P

'Then after one week or two weeks and a half, the mosquitos arrived.'

b. ...
$$pa?iti=ki$$
 $ak=ita=ki$

pot =DAT $do=RECP=DEC:P$

'She had put it (her aborted feotus) into the pot.'

c. dos semanas media tsi ha ma-pɨk-a=**itá**=kɨ
two week half P5 3 head-open-TR=RECP=DEC:P

'Two and a half weeks later she had opened it.' TXT 081:027-033

It is unclear how to directly test the flexibility of the minimum or maximum limits in elicitation. Speakers unanimously translate $=it\acute{a}$ as yesterday, the day before yesterday, or two days before yesterday in elicitation contexts, and other translations are rejected outside of narrative contexts.

10.3.3 Recent past - Relative tense and perfect readings

In the narrative streams in (10.19), (10.20), and (10.21) the recent past TDM = $it\dot{a}$ modifies an absolute tense relation (between the event time and the speech time). In the sentence in (10.22b-c) the recent past TDM = $it\dot{a}$ expresses the temporal distance between the event time and a temporal reference time established in prior discourse. In this particular case the reference time is in the remote past as shown from the sentence in (10.22a) which is marked with the remote past TDM = $n\dot{i}$. The TDM switch sentence (10.22d) is an example of a {A,S}-C clause and, as such, we expect the temporal distance to be measured with repect

to the initiation of the event time denoted by the verb ma-pik-a 'open the lid'. Unfortunately, in the example above this aspect of temporal reference cannot be easily discerned, because Ashiná's opening of the lid is not conceptualized as an event unfolding over time. (For examples from elicitation that demonstrate this distinction with the recent past $=it\acute{a}$, see Tallman and Stout (2016)).

An example of a C- $\{A,S\}$ construction that combines with $=it\acute{a}$ 'recent past' from a text example is more revealing in this respect. In (10.23c), $=it\acute{a}$ encodes the distance between the end of an event time (becoming adolescent) and a temporal reference time in the remote past established in the previous discourse context. An $\{A,S\}$ -C construction in this particular case would result in an interpretation whereby the protagonist's children are only recently becoming adolescents which, based on the context, is clearly not the intended meaning.

(10.23) a.
$$iw\dot{a}na=bo$$
 or $i-wa=2i$ $k\dot{a}=ki$ mi-a old_sis=PL/ASS eat-V:TR=CONCUR:S go=DEC:NONP 2SG-EPEN i $ki\dot{a}$ $ha-2-ipa$ $ha-2-iwa$ $ti2i=ka=bo$ say REP 3-EPEN-father 3-EPEN-mother CONJ=REL=PL/ASS $=ni=ki$ $=REMP=DEC:P$

"You will go to feed your older sisters." Her father and mother said."

b.
$$ik=it\acute{a}=ki$$
 $ki\acute{a}$ $haw\acute{t}$ $gok\acute{o}bo$

be=RECP=DEC:P REP 3SG:GEN child

 $tfitima$ =bo tsi =ka $ki\acute{a}$

adolescent =PL/ASS P5 =REL? REP

'Her children had become adolescents / were already adolescents.'

Txt 111:091-093

Another C-{A,S} construction where the TDM can clearly be shown to be measured with respect to the end of the event is provided in (10.24). In this case, the narrator presents an acted out dialogue where one speaker asks whether the chicha has all been prepared yesterday using a C-{A,S} construction in (10.24b). For chicha to be ready for a festival it needs to be completely prepared one day prior to the festival in order for it to be alcoholic. This is how one can tell from the following context that the speaker who utters (10.24b) is interested in whether the chicha was finished the day before.

b.
$$i=yo=it\acute{a}=?\acute{a}$$
 $hini$

be=CMPL=RECP=INTER:P chicha

"Has the chicha been completely ready since yesterday?" (someone would say).'

c.
$$i=yo=it\acute{a}=ki$$
 $his-a=ta$ $no?\acute{o}$ $papa$

be=CMPL=RECP=DEC:P see-TR=IMPER:GO 1SG:GEN father

 $yoa=pao=n\acute{i}=ki$

tell=HAB=REMP=DEC:P

"Yes it is all/completely ready go see it" His father used to say.'TXT

033:020-021

The contrast between C-{A,S} and {A,S}-C constructions with respect to the timing of the temporal anchoring of the temporal distance modification can be seen from the conversation below. (10.25) contains a dialogue between Tani Chávez and his grandson Mario Chávez about a detail in a Chácobo folk story that involves a man being transformed into a jaguar by his brothers in law. Tani Chávez notes in (10.25a) that the protagonist had been transforming into a jaguar for some time by using the remote past time TDM in combination with a {A,S}-C construction. Mario uses a declarative sentence with an interrogative force to clarify whether at this time the man had already finished transforming. In this sentence and in Tani's affirmative response we see that the recent past

TDM = $it\acute{a}$ is used. Notice that Tani uses a C-{A,S} construction in (10.25c) to express completion of the event recently before the temporal reference time of the story.

(10.25) Tani:

a. yoánomano wistí sini='no kamá ~ kamá-ria

much_time one year=SPAT jaguar ~ jaguar-VERID

tsi kiá i=ní=ki

P5 REP be=REMP=DEC:P

'Its been a long time for a year now he has been turning into a real jaguar.'

MARIO: b. *mani=itá=ki*

transform=RECP=DEC:P

'He already transformed (recently)'

TANI

c. haa i=ita=ki kiá kamá ~ kamá-ria

yes be=RECP=DEC:P REP jaguar ~ jaguar-VERID

'Yes, the real jaguar had finished transforming (recently)' TXT 042:036038

Tani uses different TDMs to describe the same event in (10.25a) and (10.25c). He is not contradicting himself, however. In the first sentence he uses the {A,S}-C construction

and focuses on the event unfolding over time; here =ni modifies the temporal distance between the initiation of the transformation and the speech time. In the second sentence, he uses the C- $\{A,S\}$ construction which focuses on the result of the event; in this case the recent past $=it\acute{a}$ is used to refer to the temporal distance of the end result of the transformation which is much closer to the temporal reference time.

10.4. MIRATIVE PERFECT =YA

The mirative perfect $=y\acute{a}$ encodes that an event took place surprisingly soon. It is mutually exclusive with other TDMs and occurs in the morphosyntactic slot dedicated to these morphemes (position 13 of the sentence). Like all of the past time TDMs discussed above, $=y\acute{a}$ is only compatible with the past tense clause type/rank morphemes. The clitic $=y\acute{a}$ displays a number of interesting semantic differences with the TDMs described above, however. Minimum and maximum limits do not seem to be relevant to this morpheme. Speakers never translate $=y\acute{a}$ 'mirative, perfect' with a temporal frame adverbial expression in Spanish, for example.

The clitic = $y\acute{a}$ 'mirative, perfective' expresses surprise or differed realization; hence the *mirative* designation in the mirative perfect (DeLancey 1997). Unlike all the other past time TDMs, = $y\acute{a}$ does not display discourse perseverance. This is because the primary function of = $y\acute{a}$ is to encode an out-of-sequence event. The clitic = $y\acute{a}$ is also only compatible with the C-{A,S} construction; it is ungrammatical in {A,S}-C constructions.

Recall from Section 9.4 that the $\{A,S\}$ -C construction differs from the C- $\{A,S\}$ construction in that the perfect readings associated with the latter construction are obligatory. It is for this reason that I refer to $=y\dot{a}$ as a perfect morpheme; it can only, by virtue of its inherent meaning or a meaning that its construction encodes, occur in a verbal predicate that expresses a perfect reading.

The differed realization reading of $=y\dot{a}$ is very prominent in my corpus. In the following example from a Chácobo folk story about a panther who pretends to be a human, some children go to visit their grandmother (10.26a). The perfect mirative morpheme $=y\dot{a}$ is used to express the children's differed realization of their grandmother's decapitation at the hands of the panther in (10.26b).

(10.26) a.
$$hii$$
 $mat\acute{o}$ $iwat\acute{i}$ $yoa=?i$ $ka=no=man\acute{i}$ good 2PL:GEN gra_mo tell=CONCUR:S go=HORT=CONJECT $hat\acute{o}$ $iw\acute{a}ti=k\acute{i}$ ha $bi=k\acute{a}(n)=ki$ 3PL:GEN gra_mo=DAT 3 come=PL=DEC:P

"Good let's go tell your grandmother" (they said), and they came to their grand mother.'

Another example of $=y\acute{a}$ being used in the context of a recently discovered decapitation (a common event in Chácobo folk stories) is given in (10.27). In this example the mirative meaning of $=y\acute{a}$ is evident in that it expresses the surprise on the part of the people who discover that their uncle is dead.

The following example also expresses differed realization from the folk story Ashiná. Ashiná turns two men into birds. According to most narrators of the story she does this because the two men laugh at her for falling into their mud trap. The perfect mirative $=y\dot{a}$ is used in the following example to denote how quickly after laughing the men turned into birds, a fact that they did not immediately realize as they continued to laugh at Ashina.

(10.28) a.
$$osa=tsa=iki\acute{a}$$
 horo horo horo laugh=IMM:TR=REP IDEO IDEO:sound_of_burgo 'As they laughed they started making sounds of the burgo "horo horo horo".'

Apart from differed realization, the perfect-mirative $=y\dot{a}$ can also be used in the context where one of the participants completely lacks realization of the event is already occurring. An example of this is provided in (10.29), where someone continues to speak to their nephew even though their nephew is already asleep.

(10.29) a.
$$bikawa=pari=ki=a$$
 no? o tfa? ita close_eye=FIRST=DEC:NONP=1SG 1SG:GEN uncle/nephew "I'm going to close my eyes (nap), my nephew" (he said).

believe).' TXT 061:751-752

b.
$$n\acute{a}ama$$
 $o_{\it g}a=y\acute{a}=ki$ i - bi

already sleep=PERF:MIR=DEC:P 1SG-LIKE

 $o_{\it g}\acute{a}$ - $_{\it g}ini$ $kar\acute{a}=ka=na$

sleep-A/N EPIS=REL=EPEN

'But he (his nephew), was already asleep, he was a sleeper like me (I

There are some rare cases where $=y\dot{a}$ is used in the context of an in-sequence event. An in-sequence event which occurs with $=y\dot{a}$ is conceptualized as occurring surprisingly quickly as in (10.30b).

(10.30) a.
$$tsimo=2\acute{a}$$
 $kom\acute{a}-wa$ $h\acute{a}$ $noya=ma=n\acute{i}=ki$ darken=NMLZ:P partridge-AUG 3 fly=CAUS=REMPST=DEC:P 'He made the patridge fly.'

b.
$$ho=y\acute{a}=ki$$

come=PERF:MIR=DEC:P

'He (the partridge) already arrived / arrived immediately.' TXT 040:690

Currently I do not have any data that clearly show the temporal distance (the minimum limit and maximum limit) of an event encoded by $=y\dot{a}$, and examples from elicitation do not suggest that temporal distance is relevant for this morpheme. However, this question requires further research.

10.5.ZERO TDM EXPONENCE IN PAST TIME CLAUSES

A main clause sentence encoded in the past tense that lacks a TDM expresses that an event took place the same time as the day of speech. There is also evidence that null TDMs express that the speaker is non-committal concerning the time of speech (cf. Tallman and Stout 2016b), but this hypothesis requires more research since it is based almost exclusively on elicitation. I first describe the discourse perseverance of null TDM marking, followed by a discussion of perfect anterior readings in naturalistic speech. Finally, I briefly consider the evidence that a lack of a TDM in the past tense expresses non-commitment on the speaker's part concerning the time of the event.

10.5.1 Zero - Discourse perseverance

As was already noted above in Section 9.1 and Section 9.2, a stream of in-sequence events that are expressed the same day as the time of speech do not use any TDM at all (or a "null" TDM). An example of this is provided in (10.21). Another example of the use of zero TDM constructions in hodiernal discourse is provided in (10.31).

- (10.31) a. hatsi i-a=ri pi=ki then 1SG-EPEN=TOO eat=DEC:P 'Then, I ate as well.'
 - b. $pi=2\acute{a}$ hini $nami-na=2\acute{a}=ka$ i $b\acute{o}ti=ki$ eat=NMLZ:P chicha thick-V:ITR=NMLZ:P=REL 1SG descend=DEC:P 'After I ate, I lowered the chicha that had thickened.'
 - c. ha-tó=bita=só i-a=ri $náka \sim náka$ =ki 3PL-EPEN=COM=A 1SG-EPEN=TOO chew \sim chew=DEC:P tsimo=kana ha =ki darken=GO:ITR:SG 3SG =DEC:P'With them I was chewing (on the yuca) as well, while it got darker.' TXT 093:046-048

10.5.2 Zero - Relative tense and perfect readings

Past time zero TDM constructions can also code anterior past of the past readings in discourse. An example of this is provided in the excerpt from a narrative provided in (10.32). In this narrative (also made reference to in (10.17) above), Gere Ortiz is describing a fishing trip that he went on with me. When I went fishing with Gere, Gere got the fishing hook stuck in his arm after a hooked tucunaré jumped as he was pulling it out of the water

(I was rowing the long boat at the time). Gere explains my reaction to this in (10.32a-b), and then claims that I had been crying since the beginning of the whole ordeal reflecting my squeamishness around blood. In this case, he uses no TDM. The null TDM in (10.32c) encodes a temporal distance between when the temporal reference time of the narrative (in the recent past, "yesterday") and the initiation of the narrative when Gere's fish hook inserted into his own arm.

- (10.32) a. hatsi adan rat-i=itá=ki

 then Adam be_scared-ITR=RECP=DEC:P

 'Then Adam became frightened.'
 - b. hatsi mɨri tsi notí adán
 then quickly P5 canoe Adam
 bɨ-sak-ɨ=ma=itá=ki

head-turn_around-ITR=CAUS=RECP=DEC:P

'Then Adam quickly turned the canoe around by its head (the bow).'

c. ... toá go mi ára=ki rabití
... DEM2 DEC 2SG cry=DEC:P friend

'From that, you had been crying my friend.' TXT 021:090-091

(10.32) illustrates intrasentential TDM-switch from the recent past (yesterday-3 days ago) to the null TDM (earlier in the same day as the temporal reference time of the

discourse). In this case the null TDM occurs in a {A,S}-C construction with a universal perfect reading where the event continues until the reference time (which is in the recent past on the day before the speech time in this particular example). As a consequence of using a {A,S}-C order, a universal perfect reading emerges from the intrasentential-TDM-switch. The temporal distance encoded by the null (hodiernal) TDM is docked to the initiation of the event because it occurs in a {A,S}-C construction.

Cases where the null TDM occurs in a C-{A,S} construction are provided in (10.33) and (10.34). (10.33) is from the folk story of Nahuapaxahua. After Nahuapaxahua grows frustrated with an antbear for being a tedious and slow guide, that antbear's wife tries to kill Nahuapaxahua with her farts. Nahuapaxahua's curassows (type of bird) save him by all standing around him so that the female antbear cannot kill him. After Nahuapaxahua leaves from the protection of his curassows, the author expresses that it was already evening in (10.33c). The most common way of expressing that it is evening is by stating *kaki bari* 'lit. The sun has left'. A C-{A,S} construction is used here because the sun has already set by the time Nahuapaxahua leaves his curassows.

In (10.34), the null TDM is used in the context of a story of the *binojërajërahua* a bat (sometimes translated as "vampire") that fights for a particular clan of the Chácobo. The narrator describes the *binojërajërahua* arriving in one of the towns to wage a war against one of the clans. A null TDM C-{A,S} construction is used to describe the fact that the bat had already arrived with grass tied around his arm (ready for war). In this sentence the resultative and lingering relevance meanings associated with the C-{A,S} construction are apparent.

'The bat was wearing his cloack made of duck feathers (it is said).'

c. ... nii nobá=na =ki yabo-ko=ki kiá satſi
... stop/stand lpl:GEN=POSS=DAT tie-ITR=DEC:P REP grass
'He was standing, the stock of grass already tied around his arm (lit. our body part).'

10.5.3 Zero - A note on temporal remoteness and committment

In elicitation contexts, Caco Moreno and Miguel Chavez state that past time encoded clauses that lack a TDM express that the event took place the day of speech or that the speaker did not know when the event occurred.⁴⁴

I have not been able to find textual evidence for this claim. However, judgements from context-induced elicitation, following the methods in Cable (2013), do suggest that

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⁴⁴A more detailed discussion of data from context-induced elicitation that provide evidence for the hodiernal *or* lack of knowledge meaning associated with not using TDM is discussed in Tallman and Stout (2018).

null TDM constructions can have this meaning. This is discussed in more detail in Tallman and Stout (2018).

10.6. REMOTE FUTURE TIME $=s\hat{t}$

The remote future $=g\hat{t}$ encodes that an event will take place in the remote future, which either refers to events which take place the day after tomorrow and/or events that take place at some unknown time in the future. There are some more complicated details concerning the semantics of this morpheme that I will flesh out below.

First, I describe the morphosyntax of this clitic which does not straightforwardly follow from its description as a position 13 clitic. Secondly, I describe the future tense readings of this morphemes with specific reference to the temporal distance it encodes (minimum and maximum from a temporal reference point). Based on such examples it is also clear that =si does not display discourse perseverance like many of the other TDMs. There are cases where =si is used for an event where the temporal distance (in terms days from the speech time) is known or thought to be known by the speaker. But it is much more common for this morpheme to be found in sentences where the speaker lacks precise knowledge about when an event will take place and wishes to convey this lack of knowledge. This doubt about the precise time an event will occur bleeds into irrealis interpretations. In this vein, modal meanings associated with =si are discussed below as well. In the domain of modality =si is polyfunctional expressing epistemic modality

(possibility), functioning as the primary marker of the apodosis in conditional sentences and displaying an important directive (illocutionary function). The modal flavors of this morpheme notwithstanding I will continue to refer to it as the remote future TDM through this dissertation. The reason for this is because it occurs in complementary distribution with all other TDMs and in position 13 of the sentence (or within the tense group spanning positions 13 and 14; (see Section 5.2.3.15.2 concerning the constituency of positions 13 and 14).

10.6.1 Remote future - Auxiliation

The remote future =gi is distinct from the remote past in that it combines with nominalizers as illustrated in (10.36) below.

'There's one thing when we are not well ... before we fall, when we are dying, or the day that we are to die or something else bad... or the machete can cut us perhaps or snake could bite us perhaps; have you dreamt of this Jema? do you dream of this Jema?' TXT102:150

However, when a clause with =si is subordinated under a clause that occurs after the main clause, no nominalizer can appear. It is unclear why at this point. This is illustrated in (10.37) below. The epenthetic formative =na only occurs after nominalized or same/different subject clauses.

'The people of the jungle typically travelled far in order to shoot other people of the jungle; they bothered each other.' TXT 061:180

In contrast to the analysis of =ni where I understood the lack of nominalizer occurring beside this morpheme to provide evidence that =ni was a nominalizer itself, I do not apply this analysis to the remote future = $\mathfrak{s}i$ because clauses marked with = $\mathfrak{s}i$ cannot function as arguments of verbs and cannot be referential without another nominalizer. However, the topic requires more research.

Recall that the remote past =ni also disallows clause-type rank morphemes (position 14 in the sentence) in interrogatives. This is not true of =gi, which occurs with interrogative clause-type/rank enclitics in interrogative constructions. An example of =gi occuring in a question comes from one of Miguel Chavez's explanations of his interview question to a speaker of Siete Almendros (Benicito River). The remote future =gi is used in a rhetorical question that Miguel asks to himself while trying to induce the other speakers to discuss their future plans, dreams and desires in (10.38).

(10.38)
$$hia=ka$$
 no $naama=ki$ tsi $hawi$ $a(k)=si=2ini$

good=REL 1PL dream=D{A,S} P5 what do=REMF=INTER:NONP

 $i-a$ $hawi$ $fina=2ini$ $i-a$ $toka=ka$ $naama$

1SG-EPEN what think=INTER:NONP 1SG-EPEN like so=REL dream

mi naama=yáma=yamit=(?)á

2sg dream=NEG=DISTP=INTER:P

'After dreaming of this nice thing, thinking what will I do? what I am thinking/planning? haven't you ever thought like this before?'

Txt 101:127-128

Another example of =gi in an interrogative sentence comes from Caco Morán's telling of Nahuapaxahua. At the point in the story where the curassows explain they will return to Nahuapaxahua (see (10.40) below), Milton asks Caco for clarification using the remote future =gi in an interrogative construction. The sentences are provided in (10.39).

(10.39) MILTON ORTIZ:

a. $baka=\mathbf{si}=k\acute{a}(n)=2in\acute{i}$

arrive=REMF=3PL=INTER:NONP

'Are they going to arrive one day?'

CACO MORAN:

b. baka = si = ki

arrive=REMF=DEC:NONP

'They are going to arrive.' TXT 061:841

Another point about the morphosyntax of the remote future =si is illustrated in the sentence in (10.46b) below. In an intransitive equational construction with =si the i-auxiliary does not appear. Rather =si occurs by itself without any overt verb. Since this clause also appears with the clause-type/rank morpheme typical of verbal predicate constructions, one could conclude that the remote future marker is the auxiliary verb here, or that the auxiliary verb is dropped. The other TDMs do not display this behavior.

10.6.2 Remote future - Temporal distance and remoteness: tomorrow or after

Examples of =si expressing a lack of knowledge concerning when an event will take place are provided in (10.40) and (10.45b) below. In elicitation and naturalistic speech, verbal predicates encoded with =si are translated in Spanish as "un día" ('one day'). (10.40) provides an example from the folk story Nahuapaxahua. Nahuapaxahua's curassows tell him that they will return one day. They use the remote future =si to express a lack of commitment about when they will return, befitting their unpredictable personalities.

While conceptual temporal remoteness from the speech time seems to be the default interpretation of = si, the following sentence in (10.41) makes clear that this morpheme can express events that or expected to occur one or two days from the speech time. In this utterance Miguel Chávez asks Iba Toledo (Benicito river) a question to try to induce her to talk about her future plans. The crasternal = fari is used for all events that take place the day after the time of speech, but after this the remote future is appropriate, even for events that are only one day after tomorrow, an event time which is not obviously conceptually remote.

In the following example = gi is used to express an event time that is expected to occur the day after the speech time. The speaker uses the crasternal kafarikia 'I will go tomorrow', but then follows this with the remote future = gi to specify some temporal distance after the time she leaves. It is clear that this will likely occur the same day, showing that the minimum time of = gi can shrink in the context of a time span that only includes the day of speech and one day after.

The remote future clitic = ξi can occur with the immediate initiation enclitic = $tsi\sim=tsa$ as in the sentence in (10.43) uttered by a folk character who had just been transformed into a jaguar. In the following example, the speaker indicates that they know

the time of the initiation of the event by using the immediate initiation TDM $=tsi\sim=tsa$. While the initiation time of the event is known =si is used to express that the end time of the event is at an unknown and conceptually remote point into the distant future. This example shows that =si can modify the temporal distance between the initiation of an event to some remote time into the future; it does not have to encode that the event begins in the remote future as in (10.41).

(10.43)
$$habi$$
 $nika$ $\sim nika=pao=tsi=\mathbf{gi}=ki=a$

surely $do_like_so \sim do_like_so=HAB=IMM:ITR=\mathbf{REMF}=DEC:NONP=1SG$
 i tsi $ki\acute{a}$ ha $=n\acute{i}=ki$

say P5 REP 3 $=REMP=DEC:P$

'From this point I will be like this for an unknown time into the future.'

Txt 034:034

It is possible for the remote future clitic =si to modify verbal predicates whose events are not so conceptually remote, understood as occurring at a known time in the future. An example of this comes from a conversation between Miguel Chávez and Yoca Durán (Siete Almendros, Benicito river) provided in (10.44). Miguel asks Yoca if she plans to go to look for almonds in the next rainy season. Since this interview was conducted approximately two months after the rainy season had ended (in June 2016), the future event

is almost a year from the speech time. You uses the remote future =gi in this context even though she knows when the wet season is.

(10.44) MIGUEL:

a. *ma-to naa mi fina=?ái=ka tfaíta tiáni =ya=so*2PL-ACC DEM1 2SG think=NMLZ:IPV=REL gra_fa Roberto =COM=A *fina=?ái=ka tapa mira=?ái=na oi=yá*think=NMLZ:IPV=EPEN almond look=NMLZ:IPV=EPEN rain=COM *tiá=no*

time=SPAT

'You (pl) with Roberto how do you think about this, thinking about looking for almonds in the rainy season?'

YOCA:

b.
$$ha-2\acute{a}$$
 $ka=\mathbf{g}\mathbf{i}=k\acute{i}=a$ haa $ka=kas=k\acute{i}=a$ 3-SPAT go=REMF=DEC:NONP=1SG yes go=DES=DEC:NONP=1SG \mathbf{i} - $a=r\acute{i}$

1sg-epen=aug

'I will go there (to get almonds), yes, I want to go there myself.'

Txt 105:214

The example in (10.44) also demonstrates that the remote future =si does not display discourse perseverance; it is not repeated redundantly throughout discourse. You uses the morpheme once in (10.44b), and does not use it in (10.44d). There are no examples in my corpus where the same speaker repeats =si redundantly throughout a narrative. There are a few cases (to be discussed below), where =si is repeated redundantly in question answer pairs, but I argue that this does not count as a counter example to the lack of discourse perseverance.

Related to the idea of known time in the future, =si can also be used to express prediction. An example of a prediction reading is from the folk story of the woman of the southern wind (*yotáno yoṣa*). While a number of Chácobo shiver to death in an prolonged southern freeze brought about by the presence of the southern wind woman, one man decides to go to his farm plot as indicated in (10.45a); his wife uses =si predicting his death from the cold in (10.45b).

(10.45) a. hatsi kiá honi kari bitf-i ka=ki=a then REP man sweet_potato get-CONCUR:S go=DEC:NONP=1SG
$$i$$
 kiá ha =ni=ki say REP 3 =REMP=DEC:P

'Then the man said "I'm going to get some sweet potato."

10.6.3 Remote future - Modal and illocutionary semantics

The prediction function of the remote future TDM bridges the general distinction between the temporal distance and modal semantics. A straightforward extension of the prediction function can be observed by the fact that $=\xi i$ is always used for the apodosis clause in a conditional statement that refers to a possible future event (=kia 'counterfactual' is used for the apodosis of conditional statements in the past; Chapter 12). The apodosis function of $=\xi i$ is illustrated in (10.46).

(10.46) a.
$$n\acute{a}a$$
 i - ki i - a mi $baki$ - wa = $2ita$ = $2\acute{a}$ = ka

DEM1 1SG=DAT 1SG-ACC 2SG child-V:TR=RECP=NMLZ:P=REL

 $honi$ pi = no tsi ha - $2\acute{a}$ $bini$ = $y\acute{a}$

man COND=CONCUR P5 3-SPAT husband =COM

= $\mathbf{g}i$ = ki = a

= \mathbf{REMF} =DEC:NONP=1SG

'If this one which I am pregant with is a male, it will be my [new] husband.'

Extending the modal uses found above, the remote future can also be used to express a probable event (epistemic modality). An examples is provided in (10.47) below.

The clitic $= g\hat{i}$ can also be used to express a directive illocutionary force even outside of the context of an imperative sentence. An example of this is provided in (10.48), where the goddess Ashiná uses the remote future $= g\hat{i}$ in her directives to the mosquitos she just created to suck the blood of various animals of the forest.

(10.48)t/așo áwara hono anó rono tapir deer taitetu agouti snake rono himi $bi = \mathbf{s}\mathbf{i} = ki$ ma-to snake blood receive=REMP=DEC:NONP 2PL-EPEN 'While you suck blood (drink) from the tapir, the deer, taitetu, the agouti, and the snake, you (pl) will also bite take from the snake and snake blood.' TXT081:023

The example above provides an instance of the remote future =si being used to construe a structurally declarative clause with directive force. A functionally and formally similar=si = so is also found in imperative constructions where it appears to encode a delayed imperative meaning such that the speaker does not expect the interlocutor to act on the directive immediately. An example of this is provided in (10.49).

Not all examples conform to the semantic description provided above. In particular the following example of =so in (10.50) does not involve a delayed imperative reading.

There are a few reasons to not consider the $=gi\sim=go$ in the sentences above as the same as the remote future =gi described above for declarative sentences. First most speakers pronounce =go in imperative contexts. There are no independently motivated morphophonological rules in Chácobo that can account for the $=gi\sim go$ allomorphy. Secondly, it is not even clear that this morpheme encodes comparable remote future

semantics as is shown from the example in (10.50). It is therefore plausible that the $=gi\sim=go$ of the imperative should be regarded as a distinct, albeit diachronically related, enclitic from the the tremote future.

10.7. Crasternal future time = ΣARI

The crasternal future = fari always encodes that the event will take place the day after the speech time. The morpheme can only combine with the clause-type/rank morphemes that are compatible with future tense interpretations which include = ki 'declarative', non-past', = 2ii 'nominalization, imperfective', = $2ini\sim=2ai$ 'interrogative, non-past' and all imperatives. The clitic = fari is distinct from gi in that it combines with the nominalizer = 2ii. The crasternal clitic = fari is also distinct from = gi in that it displays discourse perseverance. Out of all of the TDMs, = fari encodes the strictest temporal modification. It only modifies an absolute tense relation between the time of speech and the event time. That = fari can combine with nominalized clauses is illustrated in (10.51).

It also combines with imperative and interrogative clauses as in (10.52) and (10.53a) respectively.

(10.52)
$$h\acute{a}a$$
 $kia=y\acute{a}ma=ki$ $no-a$ $his=i$

yes $lie=NEG=DEC:NONP$ $1PL-EPEN$ $see=CONCUR:S$
 $bo=fari=kan=p\acute{a}$

go:TR/PL=CRAS=3PL=IMPER:MIR

"Yes we are not lying, let's go and look." TXT 067:151

10.7.1 Crasternal - Discourse perseverance

The excerpt from a conversation between Paë Yaquë and his sister Choca Yaquë in (10.53) shows that $= \int ari$ displays discourse perseverance. Choca repeats the crasternal clitic $= \int ari$ redundantly when discussing what she will do tomorrow.

(10.53) PAË YAQUË

a. wiaki hawi a=fari=?ai

tomorrow what do=CRAS=INTER:NONP:2SG

'Tomorrow what are you going to do?'

CHOCA YAQUË

b. hawi i = fari=na

what 1sG =CRAS=EPEN

'What am I going to do tomorrow?'

c. $w_i a k_i$ $n_i a = \int a r i = k_i = a$ i - a - ri aros

next_day be_here=CRAS=DEC:NONP-1SG 1SG-EPEN=AUG rice

tis-a=fari=ki=a hina-wa=só

harvest-tr=cras=dec:nonp-1sg do how-v:tr=prior:a

i $tis-a=n\acute{a}$

1sg take off-tr=epen

'Tomorrow I am going to be here, tomorrow I will harvest my rice, how am I going to harvest it?' TXT 095:93-95

Another illustration of discourse perseverance for the crasternal clitic is illustrated in (10.54). This example also shows that = fari can occur redundantly with the temporal/aspectual adverb wiaki 'the next day'.

(10.54) PAË YAQUË

- a. ha=roʔá wɨakɨ́
 - 3=LIMIT next_day
 - 'That's it, and tomorrow?'

JËMA ROCA

- b. wiaki i-a=ri paṣna-ria=ṣó ṣobo
 - next_day 1sg-epen=aug be_hungry-aug=a house
 - tsa?o~ tsa?o=ba?ina=?a=na i-a=rí wiakí
 - sit~ sit=ALLDAY=NMLZ:P=EPEN 1SG-EPEN-AUG next day
 - $tan\dot{a}=?i$ ka=fari=ki=a
 - fish=CONCUR:S go=CRAS=DEC:NONP=1SG
 - 'Tomorrow, because one gets hungry sitting around all day, tomorrow I am going to fish.'
- c. habi toa $ha=n\acute{o}$ $ka=ro?a\sim$ $ka=ro?\acute{a}=?ai=na$ surely DEM2 3=CONCUR go=LIMIT \sim go=LIMIT=NMLZ:IPV=EPEN 'Surely over there where we always go.'
- tana=tɨkɨ=?i d. toá tsi ka = fari = ki = aDEM2 Р5 fish=AGAIN=CONCUR:S go=CRAS=DEC:NONP=1SG i-a=rino?ó ta?ŧ pa = no1sg-epen=aug 1sg:gen foot be hurt=concur

tihiro=hona=şi=na

limp=COMING:ITR/SG=REMF=EPEN

'Over there I am going tomorrow to go fish again even while my foot

hurts, I'm going to be coming limping.' TXT 93:53-59

The crasternal clitic = $\int ari$ always modifies an absolute tense relation. I have no examples where = $\int ari$ encodes one day after a temporal reference time that is not the speech time.

10.7.2 Crasternal - The = farita construction

The formative = fari also occurs in a construct with a formative -ta which occurs at the end of the verb complex. = farita encodes crasternal, and ative associated motion and a first person singular subject. While the formative -ta does encode and ative motion in some constructions, it does not occur anywhere else expressing first person singular. The entire construct of = farita is, therefore, glossed as its own morpheme.

(10.55)
$$i$$
- a = t i h i s = i k a= f arita n aa b ari

1SG-EPEN=TOO see=CONCUR:S go=CRAS:GO:1SG DEM1 sun

 raa = f ar i = k i= a

send=CRAS=DEC:NONP=1SG

'Tomorrow I am going to look, and this day I am going to send it.'

10.8.Immediate initiation = $TSI \sim =TSA$

The immediate initiation $=tsi\sim=tsa$ is an aspectual/temporal enclitic that encodes that an event begins immediately and suddenly at the most local temporal reference time given the semantics imparted by other morphemes in the sentence. Due to the fact that it is bound and that is has a function in encoding temporal distance, I classify it as a TDM in this description. However, as noted in the introduction to this section, it is unlike the other TDMs described thus far in that it is not mutually exclusive with other TDMs (e.g. (10.49) above where =tsa combines with the remote future $=\xi i$).

Furthermore, the enclitic displays allomorphy based on transitivity harmony (cf. Valenzuela 2016). The =tsi allomorph occurs for intransitive verbs with a singular subject, and the =tsa allomorph occurs when the verb is transitive and/or the subject is plural. One caveat to this generalization is that the transitive/plural allomorph does not surface when it is before certain verbal enclitics.

The most common contribution of $=tsi\sim=tsa$ is that it expresses that the event is temporally close to the speech time. An example of this is provided in (10.56) where the narrator relates Nahuapaxahua's thoughts when a caiman grows angry with him while the caiman ferries him across a river.

(10.56)
$$i$$
- \acute{a} $p\acute{i}$ = t s a = ki

1SG-ACC eat= t IMM: t R=DEC:NONP

'He (the caiman) is going to eat me now.'

More examples of the immediate present reading are provided below. The transitive version of the enclitic surfaces in (10.57b) and the intransitive version surfaces in (10.57c).

Another example of the immediate present interpretation is provided in (10.58), uttered to me by a frustrated Chácobo speaker on the Yata river who was trying to convince me that I should give her the rest of my fishing hooks and line before I leave.

(10.58)
$$ka=tsi=pi=ki$$
 $mi-a$ $go=IMM:ITR=ANX=DEC:NONP$ 2SG-EPEN '(But) you are going now!' OBSV

In combination with the crasternal = $\int ari$ the immediate initiation refers to a future event. In this particular case the meaning is "first thing tomorrow"; an example is provided in (10.56). The clitic = $tsi\sim=tsa$ forces the event time to be as close as possible to the temporal reference time in collaboration with the temporal semantics encoded by other morphemes (see (10.43)).

(10.59) a. bárira bárira
time_passes time_passes
'After time passed for a while.'

ka=fari=**tsi**=ki

b.

go=CRAS=IMM:ITR/SG=DEC:NONP gra_dau say wife =DAT

ha =ni=ki mi his-i-ta

3 =REMP=DEC:P 2SG see-EPEN-GO

"Grandmother will go first thing tomorrow." he said to his wife. "Go

see!" Txt 083:069-071

iwáti

i

awi = ki

The immediate initiation clitic $=tsi\sim=tsa$ can also occur in subordinate clauses as in the example in (10.60) from a folk story about a panther. In the following case the event time of t of a 'have sex' is not even forecasted by the speaker. Here $=tsi\sim=tsa$ encodes that the panther desires to initiate the event as soon as he is able. This example also shows that the intransitive allomorph appears before certain verbal enclitics, such as =kas.

The morpheme $=tsi\sim=tsa$ can also be used for cases of the narrative present. An example comes from Choca's story about her badger in (10.61). She uses $=tsi\sim=tsa$ to indicate that the event of laughing occurred throughout the narrative imparting roughly a "at this time" sense.

(10.61) CHOCA YAQUË

- a. *fifa* pi i atf-a=só bo=?á=ka tfapon

 badger ANX 1SG grab-TR=PRIOR:A carry=NMLZ:P=REL Chapon

 pi hawi hobo atf-a=má=kia

 ANX 3SG:GEN testicle grab-TR=CAUS=CNTFCT

 'I grabbed the badger carrying it and almost let it grab Chapon's testicles.'

 PAË YAQUË:
- b. hawi hobo bi=ma=kiá=tsa=?ini

 3sg:gen testicle grab=CAUS=CNTFAC=IMM:TR/PL=INTER:NONP

 'One almost let him grab his testicles?'

 CHOCA YAQUË:
- c. $os\acute{a}\sim os\acute{a}=tsa=2in\acute{i}$ no-a laugh~ laugh~ laughHTR/PL=INTER:NONP 1PL-EPEN

 'We were laughing about it (at the time) (about Chapon).' TXT 095:131-133

In Chácobo speakers use a fixed expression to as a farewell that uses the immediate initiation enclitic; *katsikia* 'I am going now'. An example from a text is provided in (10.62) from the story of the southern wind woman.

(10.62) a. ánoma mátsi kai=′
too_much cold mother=VOC

"It's so cold, mother." (the man said)'

b.
$$ka=tsi=ki=a$$
 $h\acute{o}o$ i $ki\acute{a}$ ha $=n\acute{i}=ki$ $go=IMM:ITR=DEC:NONP-1SG$ yes say REP 3 $=REMP=DEC:P$ "I'm going now!" (he said) "okay!" she responded.' TXT 083:044-045

The expression is also very frequently used in a question and answer pair as in the following example in (10.63) from the story of Nahuapaxahua.

The immediate initiation enclitic displays no clear evidence of disourse perseverance.

10.9. ZERO TDM EXPONENCE IN NON-PAST TIME CLAUSES

The non-past time clause type/rank enclitic =ki is used for all events that that are occurring in the present or that are forecasted to occur in the future, as described in Chapter 9. When used without any TDMs =ki can be used for events that are ongoing. Such sentences seem to have a strong implicature that the event is happening in the visual range of the speaker (§9.1). Other functions of =ki constructions without a TDM such as habitual readings and the narrative present are discussed in Chapter 9.

However, in discourse contexts where a future time has been established by a temporal adverbial expression, =ki 'declarative, non-past' is used throughout the discourse showing that it is also compatible with future events. This can be seen in a conversation between Miguel Chavez and Iba Toledo in (10.64) where Miguel Chavez establishes an event time one week after the speech time.

(10.64) MIGUEL CHAVEZ:

ho=?ái=ka semana=' tsi wai tsi a. naa farmplot P5 DEM1 come=NMLZ:IPV=REL week=LOC Р5 a(k)=ika=?aí alegré=no do=concur:s go=inter:nonp:2sg Alegre=SPAT 'Next week are you going to make your chaco in Alegre.'

IBA TOLEDO:

- b. haa naa semana=' tsi a=i ka=ki=a

 yes DEM1 week=SPAT P5 do=SS go=DEC:NONP=1SG

 'Yes in this week I will go.'
- a(k)=biriakuenta c. tsi ha-tó ipaísa hawi do=DO&COME:TR/PL P5 3-ACC:PL uncle 3sg:gen account kopi=biriá toa wai ... pay=DO&COME:TR/PL DEM2 chaco a(k)=biriaha?ari ho=tiki(n)=kitsi по-а do=DO&COME:TR/PL Р5 still come=AGAIN=DEC:NONP 1PL-EPEN nia=no

here=SPAT

'After doing this and after paying the account of his uncle we are going to return again to that chaco here.'

TXT 101:108-110

Similarly in (10.65), Miguel Chavez uses =ki throughout his question to refers to events which will occur on consecutively ordered days. No TDMs are used for any of the sentences below in (10.65).

(10.65) MIGUEL CHAVEZ:

- $ak=yo=?\dot{a}=ka$ hakirɨkɨ́ ma wai a. toa DEM2 2PLfarm plot do=CMPL=NMLZ:P=REL after that hawi atí mɨtsa пí ma-to 2PL-EPEN 3sg:gen place POSS INTER 'When you finish your chaco what are you going to do after?'
 - when you linish your chaco what are you going to do after?
- b. $fina=yamit=\acute{a}$ $ma-t\acute{o}$ $n\acute{a}a$ think=DISTP=INTER:P 2PL-EPEN DEM1 'Have you already thought of this?'
- palmito a(k)=ika=kima-to hakirɨkɨ c. palm tree do=CONCUR:S go=DEC:NONP 2PL-EPEN after that a(k)=kiwai ma-to i toa=na=2asfarm plot do=DEC:NONP 2PL-EPEN and there=ABL=S tsi hawi atí mitsa пí ma-to Р5 3sg:gen place POSS INTER 2PL-EPEN 'So you (pl) are going to gather plam trees, then you are going to prepare a farm plot, and from there what else could you (pl) do?' IBA TOLEDO:
- d. wái wítsa tsi nia=só a(k)=tikín=ki no-a

 farm_plot other P5 here=A make=AGAIN=DEC:NONP 1PL-EPEN

 'We are going to build another farmplot.' (txt. 051:112-114)

The clitic =ki without any TDM is also used in the description of cultural practices. In the following Iba Toledo describes the basic cultural script of the Chácobo on the Benicito river surrounding dreams and snakes.

- (10.66) a. $naam\acute{a} \sim naam\acute{a}$ no =fina= $?\acute{a}$ =ka kawi i dream \sim dream 1PL =ATNIGHT=NMLZ:P=REL alcohol 1SG a(k)-?-a(k)=pa i wa=ki do-EPEN-do=MIR 1SG TR=DEC:P
 - 'When we have dreamt, (it is because) I have been drinking alcohol.'
 - b. i no = $2\acute{a}$ =ka ka= $5\acute{o}$ honi 5o = $mar\acute{a}$ be 1PL =NMLZ:P=REL go=PRIOR:A man DEC =IMAG 'When we go to where we are as if I were a man.'
 - c. no?ó naabo i yoa=?á ka=só

 1sG:GEN relatives 1sG advise=NMLZ:P go=PRIOR:A

 rono tsaya=ki=a

 snake see=DEC:NONP=1sG
 - 'I advise my relatives (children), after I go I see the snake.'
 - d. rono i tsaya=?á=ka tipas=ki=a róno
 snake 1sG see=NMLZ:P=REL murder=DEC:NONP=1sG snake
 'When I see the snake, I kill it.' TXT101:115-124

Similarly, instructions for the construction of technology use =ki throughout as discussed in Chapter 9 in the context of habitual uses of zero TDMs.

Chapter 11. Aspect: (im)perfectivity

This section provides a description of aspectual morphemes and constructions that encode semantics associated with perfectivity and imperfectivity. Following Comrie (1976) and Givón (2001a: 287-293), I understand the distinction between perfective and imperfective to be related to the extent to which an event is conceptualized as containing internal structure or not. Imperfective corresponds to a perspective which focuses on the internal structure of an event, without focus put on its termination and temporal boundedness, in the sense of having a clear beginning and start point. Perfective focuses in on the termination or temporal boundedness of an event.

Related to the general distinction between perfective and imperfective conceptualizations is lexical potential of given verb roots. While there are a number of temporal properties along which verb roots can be classified (e.g. Vendler 1967; Smith 1997; Sasse 2002; *inter alia*); roughly verb roots can be organized on a cline from more inherently perfective or to more inherently imperfective (Givón 2001a: 287-289; Croft 2012: 143-145). Based on this idea I understand the construal of a situation to be positioned on a cline from perfective to imperfective. The position of a given situation on this cline is a function of the aspectual potential of a verb root and the aspectual construction in which it is embedded. While Croft (2012) develops a highly intricate typology of aspectual situations, for reasons of scope I make reference to the coarser grained distinctions between situation types in Givón (2001a:287). I classify the situation types according to three

aspectual properties listed below. I roughly follow Smith (1997: 19) and Givón (2001: 287) with respect to the definitions of these aspectual properties; they are summarized below.

(11.1) ASPECTUAL PROPERTIES

- a. Staticity: A situation is static if it consists of a single undifferentiated period.
 A situation is dynamic if it is non-stative; it can be understood as consisting of various stages or components.
- b. *Telicity:* A situation is **telic** if it has an inherent end point or culmination Otherwise a situation is **atelic**; it does not have an outcome or consist of some distinct end state; the initiation and end points of the event are arbitrary.⁴⁵
- c. *Durativity:* A situation can be conceptualized as long or short. I refer to a situation conceptualized as long as durative (Givón 2001: 288). A conceptualization of a short situation is **instantaneous**. Such a situation ends and begins without possibility of interruption and without shorter intervals.

⁴⁵ In the following discussion I do not make a distinction between achievement and semelfactive situations. I follow Givón (2001) in conflating these two notions. I consider situations that Smith (1997) would consider semelfactive and, therefore, atelic as telic because they do not consist of an arbitrary end point. The reason is that I cannot see any linguistic reason in Chácobo to make such a distinction. Furthermore, it is easier to state generalizations concerning the semantic construal of situations under aspectual constructions without the concept of an (atelic) semelfactive. It also makes it easier to conceptualize and depict the perfective-imperfective continuum where telicity is associated with perfectivity.

How these aspectual properties relate to the aspectual constructions of Chácobo is discussed throughout this chapter. The aspectual constructions discussed in this chapter are organized on a cline from the the imperfective construals to the most perfective construals provided in Table 11.1. Table 11.1 also relates the aspectual constructions to the aspectual properties listed in (11.1). Each aspectual construction can be classified according to the aspectual properties that it is compatible with. The auxiliary *i*-imperfective is compatible with durative and atelic situations. It is neutral with respect to staticity, however (which is represented in the table as static/dynamic). The telic/completive = $y\acute{o}$ is compatible with telic and dynamic situations. It is neutral with respect to durativity. The flexibility in terms of aspectual properties is related to the fact that the precise aspectual interpretation of an aspectual construction will depend partly on the verb root it combines with. For instance, where a situation encoded with reduplication is stative or dynamic will depend on the verb that is reduplicated. For instance, when the verb tsa?ó 'sit' is reduplicated it is interpreted as static (be sitting), when the verb root tik-a 'break something' is reduplicated the resulting situation is dynamic.

The **aspectual potential** of a verb root refers to all of the situations it is compatible with across all of the aspectual constructions (Dahl 1985: 26-27; Croft 2012: 37). Conversely, I will refer to the aspectual potential of an aspectual construction. This refers to all of the aspectual situations an aspectual construction is compatible with as a function of the verb roots it combines with. The following discussion will describe the aspectual potential of aspectual constructions with reference to the properties listed in Table 11.1 by

considering them in the context of different verb roots along the perfective-imperfective cline (following the terminology in Givón [2001] for aspectual verb types).

Table 11.2 provides an overview of the interactions between aspectual constructions and morphemes and what non-aspectual categories these constructions and morphemes are associated with. Aspectual morphemes vay according to whether they are compatible with or require reduplication of the verb root. Under the *verb reduplication* column, for instance, the morpheme $=ba in \acute{a}$ 'during the day, all day' is listed as "Yes". This means that the clitic $ba in \acute{a}$ can only occur in the context of a reduplicated verb root. On the other hand, $=y\acute{a}$ 'completive' is indexed as "No" under this column, indicating that it can never combine with a reduplicated verb. The morpheme =fina 'at night, during the night' allows both possibilities and is thus indexed with "Yes/No".

Table 11.1. Aspectual construction on the imperfective-perfective cline according to temporal features and compatibility with verbal reduplication and auxiliary *i*-imperfectives.

| (IM)PERFECTIVE | CONSTRUCTION / | BASIC | STATIC | DURATIVE | TELICITY |
|----------------|-----------------|------------------|----------|------------|----------|
| CLINE | Могрнеме | DESCRIPTION | | | |
| Imperfective | | | | | |
| 1 | Auxiliary i- | Imperfective/ | | | |
| | imperfective | Counterfactual/ | | | |
| | Imperiective | Habitual | | | |
| | Dadamii asti an | Pluractional/ | _ | | |
| | Reduplication | | | Durative | |
| | , | Durative | | Durative | |
| | =paó | Habitual / | | | |
| | | Durative | Static / | | Atelic |
| | =baʔiná | Durative / | Dynamic | | |
| | | During the day | | | |
| | =?ai | Imperfective / | | | |
| | | Nominalizer | | | |
| | =fìná | At night / | | | |
| | | During the night | | | |
| | =yá | Perfect / | | Durative / | |
| | | Result / | | Instant | |
| | | Mirative | | | |
| | C-{A,S} | Resultative | | | |
| | construction | Completive | | | |
| | =yó | Telic / | | - | Telic |
| | | completive | | | |
| | =tápi | Punctual / | 1 | Instant | |
| <u>†</u> | | Quickly | Dynamic | | |
| Perfective | | | | | |

As will be shown below the aspectual constructions also interact with number and quantification. In transitive verb constructions, reduplication can indicate multiple P arguments, even if no overt marker of plural is found on the $\{P\}$ NP. The morpheme $=y\phi$ will often function as a universal quantifier over the $\{S,P\}$ argument (e.g. "all the men went"). The aspectual constructions also interact with perspectival semantics. For instance, the auxiliary *i*-imperfective can encode a counterfactual if it is in the past tense. The perfect marker $=y\phi$ (already discussed in Chapter 10) is also strongly associated with mirativity. Interactions between aspect and tense have already been discussed in Chapter 10 and 11 in the context of perfect readings. $\{A,S\}$ -C constructions are compatible with perfective or imperfective readings (persistence perfect), while in C- $\{A,S\}$ constructions are more perfective (result perfect, lingering relevance) (Bybee et al. 1994: 68-74; Croft 2012: 143 for discussion).

Table 11.2. Aspectual constructions and morphemes according to what aspectual constructions they can combine with and which non-aspectual domains they interact with.

| (IM)PERFECTIVE | CONSTRUCTION / | BASIC | VERB | AUX. | INTERACTS |
|----------------|----------------------|------------------|-------|------------|----------------|
| CLINE | Могрнеме | DESCRIPTION | REDU | <i>I</i> - | WITH |
| Imperfective | | | | | |
| 1 | Auxiliary <i>i</i> - | Imperfective/ | Yes | / | Modality |
| | - | • | | | _ |
| | imperfective | Counterfactual/ | /No | | (irrealis) |
| | | Habitual | | | |
| | Reduplication | Pluractional/ | | Yes | Number and |
| | | Durative | | /No | quantification |
| | =?ai | Imperfective / | Yes / | Yes / | |
| | | Nominalization | No | No | |
| | =paó | Habitual / | Yes | Yes | |
| | | Durative | | /No | |
| | =baʔiná | Durative / | Yes | Yes | |
| | | During the day | | /No | |
| | =fìná | At night / | Yes | Yes | Temporal |
| | | During the night | /No | /No | distance |
| | =yá | Perfect / | Yes | No | tense, |
| | | Result / | | | temporal |
| | | Mirative | | | distance |
| | C-{A,S} construction | Result perfect | No | No | tense |
| | | Completive | | | temporal |
| | | | | | distance |
| | =yó | Telic / | No | No | Number and |
| † | | completive | | | quantification |
| Perfective | =tápi | Punctual / | No | No | |
| 1 CHECUVE | | Quickly | | | |

Tables 11.1 and 11.2 does not even provide an exhaustive list of aspectual morphemes in Chácobo. Associated motion morphemes in Chácobo encode aspectual semantics related to (im)perfectivity as well as translational motion. The way in which the aspectual domain interacts with associated motion categories is taken up in Chapter 12 in the context of a general description of associated motion.

11.1.AUXILIARY I-IMPERFECTIVE

The auxiliary *i*-imperfective construction has an important function in backgrounding events that occur throughout discourse (cf. Hopper 1981: 216). A typical function of this construction is to refer to an event or repeated events that occur throughout the whole duration of a number of other (more or less perfective) events. It can also encode counterfactual situations. It is incompatible with punctual or achievement interpretations. The structural definition of this construction is provided in Section 4.1.4 and Sections 7.1.1.2 and 7.2.1.3 discuss the relevant alignment facts.

11.1.1 Backgrounding

An illustrative example of the imperfective's backgrounding function is provided in (11.2). The narrator relates a story that happened to her while her husband had gone hunting. She prefaces the story by stating that she cooked during this period. She means cooking during

the whole period relevant to when her story takes place. The imperfective meaning thus encompasses the entire time span of the discourse.

- (11.2) a. ho = so i a = ri biti = ?i i = ni = kicome = PRIOR: A 1SG-ACC = AUG cook = CONCUR: S AUX = REMP = DEC: P

 'When I came (back again), I used to cook (this was my job that I performed throughout this period of my life).'
 - b. hakirikí wiakí no $ka=tikin=(?)\acute{a}=ka$ baki/marí after that next day 1PL go=AGAIN=NMLZ:P=REL morning į $biti=2\acute{a}=ka$ hakirikí yosa-ná=?i 1s_G cook=NMLZ:P=REL after that be tired-V:ITR=CONCUR:S ka=ni=kigo=REMP=DEC:P

'After that (when my husband went hunting) on the next day I went in the morning after I cooked I went tired.' TXT 102:018-019

Another instance of the backgrounding function of the auxiliary *i*-imperfective construction is illustrated in (11.3), which is a story concerning how the latest bridge into Alto Ivon was built. In (11.3b) the speaker uses the auxiliary *i*-imperfective construction as general background into the story. The business men in charge of financing the bridge did not want to finish the job; a fact that holds true throughout the whole story until they

are forced to act by the president of the Chácobo. The lack of will on the part of the business men forms the background and premise to the entire sequence of events that unfolds in the narrative. Thus the imperfectively marked situation in (11.3) does not advance narrative time, unless the other sentences in this example.

(11.3) a.
$$tres$$
 $bari$ no $yonoko=ima=yami(t)=ki$ three day 1PL work=NEG=DISTP=DEC:P 'We didn't work for three days.'

AUX=DISTP=DEC:P

'Those business men didn't do well (didn't want to do the right thing).'

- c. hakiriki tsi presidente ho=yami(t)=ki
 after_that P5 president come=DISTP=DEC:P

 'After that the president arrived.'
- d. toa=só tsi ha-to ha raa?ak=yami(t)=ki taná DEM2=A P5 3-3PL:ACC 3 threaten=DISTP=DEC:P bridge a(k)=ti make=PURP

'Then he came and criticized them so that they would make a bridge.'

Txt 099: 043-046

For general backgrounding in stories it is not typical for auxiliary *i*-imperfective constructions to repeat consecutively in discourse. More commonly, they express one background event that holds true throughout the discourse. However, if one is describing habitual situations that occurred over and over again throughout some time, auxiliary *i*-imperfectives can occur one after another in discourse. For instance, the following narrative consists of a description of the typical practices of the speaker's father during the time of the rubber boom. The speaker's father performed these actions everyday. In every sentence, an auxiliary *i*-construction is used as illustrated in (11.4).

b. ...
$$ho=2\acute{a}=ka$$
 tsi $ki\acute{a}$ $otfo$ $valde$ tsi $ki\acute{a}$ $come=NMLZ:P=REL$ P5 REP eight bucket P5 REP ha $bitf=i$ ha $i=n\acute{i}=ki$

3 get=CONCUR:S 3 AUX=REMP=DEC:P

^{&#}x27;When he came home (it is said) he would have eight buckets of rubber.'

11.1.2 Irrealis

As is true of many imperfective constructions cross-linguistically (James 1982; Fleischman 1995; Arregui, Rivero & Salanova 2012), the auxiliary *i*-imperfective has an irrealis function. This is illustrated in (11.5a). The speaker uses an auxiliary verb construction to express that the event of the badger grabbing someone's testicles could have occurred but did not.

- (11.5) a. hawi hobo bitf=ma=?i t/apon i=kiChapon 3sg:gen testicle grab=CAUS=CONCUR:S AUX=DEC:P i=kihawí ha?i=bosay=DEC:NONP 3sg:gen girl =PL
 - "Chapon almost let him (the badger) grab his testicles." his girls say."
 - $nis-a=7\acute{a}=ka$ ina misni tsi b. *t*[aponsito ſiſa =kino tie-TR=NMLZ:P=REL Chapon dog small P5 badger =DAT 1_{PL} hoo osá ~ osá=ki по-а bark laugh at ~ laugh at=DEC:NONP 1PL-EPEN
 - 'When we tied up the badger, Chapon's little dog was barking at the badger, and we were laughing.' TXT 095:134-135

Irrealis readings of the auxiliary *i*-imperfective have been robustly confirmed in elicitation, although in my corpus they are rare.

11.2. VERBAL REDUPLICATION

Verbal reduplication in Chácobo expresses three semantic categories; (i) pluractional; (ii) processual; (iii) durative. When a verb complex that would normally express an achievement is reduplicated, the interpretation is atelic and pluractional, expressing that the event took place multiple times (Wood 2007: 10). When reduplication applies over a verb complex that would normally express an activity or an accomplishment, the resulting meaning is either pluractional or continuative (in the sense of Bybee et al. 1994: 127). When verb complexes that are otherwise stative are in a reduplicative construction they express durative semantics, and do not necessarily involve the expression of multiple events.

For activity verbs, the processual or continuative interpretation could be seen as derived from the pluractional reading. However, it is less clear that the durative semantics associated with many stative verbs cannot be subsumed under a strictly pluractional analysis of reduplication. I interpret this as meaning that verbal reduplication in Chácobo is polysemous between pluractional and durative interpretations. While one might consider the "core" meaning of verbal reduplication to be pluractional in that most of the situations

expressed by verbal reduplication involve multiple events, not all of the situation types encoded by verbal reduplication can be straightforwardly subsumed under this interpretation. Reduplication is highly productive in that reduplicative constructions can apply over nearly every verb root or complex in Chácobo. There are a small group of verb roots that encode stative events that cannot be reduplicated, however.

Recall from Chapter 5 that reduplication can apply over complex stems and complex stems in combination with clitics. This section also briefly considers the semantics of affix and clitic conscription; affixes and clitics that can appear in both of the reduplicant and the base simultaneously. Finally, I provide an overview of the aspectual constructions and morphemes that reduplication is not compatible with.

11.2.1 Achievement/compact verbs

Achievement or compact verbs are at the most extreme end of perfective lexical aspect. Such verbs typically indicate events of short duration and are bounded at both ends of their time span (inception and termination) (Givón 2001: 287). They share the aspectual properties of being telic. In reduplicative contexts they become atelic and depict activities that are repeated multiple times. With achievement verbs, the function of reduplication is always pluractional. One example is the verb tfof-a 'crush something'. The pluractional-activity semantics of this verb complex in a reduplication construction is illustrated in (11.6).

Another example of an achievement verb is *biis* 'jump'. In reduplicative constructions it also refers to a pluractional activity. This is illustrated in (11.7) (The verb root *taná* 'fish' is also reduplicated in this example; it will be discussed below) A similar example is illustrated with the verb *makatſi* 'dive'. It has a pluractional meaning in (11.8) in the context of a reduplicated construction.

'While he was cathing fish, he fished at night, the payaras were jumping on his body.' TXT 068:068

(11.8) a.
$$hawi$$
 $baki$ $ha?i$ $pistia$ tsi $ki\acute{a}$

3SG:GEN child girl small P5 REP

 $mafini='$ $tsa?o=ro?a$ $hini='$
 $sand/beach=SPAT$ $sit=LIMIT$ $water=SPAT$
 $afi\sim afi=?\acute{a}=na$

bathe~bathe=NMLZ:P=EPEN

'Then, her child and small girl was sitting on the beach continuously bathing in the water.'

11.2.2 Accomplishment verbs

Pluractional readings also emerge out of accomplishment verbs in reduplication constructions. An accomplishment verb is one which has a terminal boundary by default. They are distinct from achievement verbs in that the event is not necessarily instantaneous but can have a longer duration (Givón 2001a: 287). Like achievement verbs, when accomplishment verbs are reduplicated they become atelic and refer to activities. The verb

pi 'eat (it)' in Chácobo has such a terminal boundary as illustrated by the fact that it is used to express one one has finished eating a meal and wishes to excuse oneself (pi=ki i-a 'I have eaten'). In narrative contexts, completion is also typically implied. When it is reduplicated, it encodes a pluractional activity. An example of this is illustrated in (11.9), where a reduplicated $pi\sim pi$ refers to the fact that the protagonists habitually and iteratively ate naked.

(11.9)
$$n\acute{a}mi$$
 $ak=kan=?ita=?\acute{a}$ $ts\acute{o}boko=?\acute{a}$ tsi meat $do=3PL=RECP=NMLZ:P$ naked=NMLZ:P P5 $pi\sim pi=k\acute{a}(n)=ki$ eat-eat=PL=DEC:NONP

'They used to eat while they were naked after having recently cooked the meat.' TXT117:305

Another example of an accomplishment verb is *raa* 'send (it)' which is a transfer verb whose terminal boundary is a recipient or location. When it is reduplicated it obligatorily encodes a pluractional activity. This is illustrated in (11.10).

clan(s), he continued conversing with Nahuapaxahua.' TXT 062:020

11.2.3 Activity verbs

Examples of reduplication applying to activity verbs are found in (11.7) with *tana* 'fish' and (11.10) with *tfani* 'speak to/with'. Reduplication appears to display the most variation with respect to its semantic contribution when applied to activity verbs. Activity verbs refer to atelic processes that may or may not have boundaries (Givón 2001: 288). In some cases, reduplication adds a terminal boundary to an event. An example of this is found in (11.7). The verb root *tana* 'fish' can refer to the process of fishing, not necessarily catching fish. But in the reduplicative context of (11.7), the semantics are pluractional and iterative. The other core meaning of reduplication is **continuative**. Following Bybee et al. (1994: 127) the continuative is ongoing a progressive but "additionally specifies that the agent of the action is deliberately keeping the action going". In the context of this description I expand the meaning of continuative to include non-agentive/non-volitional meanings where the speaker depicts the event as continuing past some natural or expected end point. An

example of a continuative meaning associated with reduplication is provided in (11.10) above. The sentence follows a narrative where Nahuapaxahua and the woodpecker had been speaking. An expectation that Nahuapaxahua and the woodpecker had stopped talking emerges from the discourse context when other actions they are performing are described. The reduplicative context indicates that they continued conversing even while they were performing actions.

Another example of the continuative meaning of reduplication is provided in (11.11). Here the meaning imparted by reduplication corresponds to Bybee et al. (1994: 127) meaning of deliberate continuation of the event.

(11.11)
$$tió\sim tió$$
 $ha=2\acute{a}=ka$ $ti\acute{o}\sim ti\acute{o}$ $ha=2\acute{a}=ka$ fly~ fly 3 =NMLZ:P=REL fly~ fly 3 =NMLZ:P=REL $ti\acute{o}\sim ti\acute{o}$ $ha=2\acute{a}=ka$ ha $ni\acute{a}$ tsi ha $k\acute{a}=ki$ fly~ fly 3 =NMLZ:P=REL 3 here P5 3 go=DEC:P

'When the wood pecker was flying and kept flying and kept flying, he went here.' TXT 062:026

Other examples of continuative readings are illustrated in (11.12) below. Reduplication of the verb a(k) 'do, make, take, give' as in (11.12a) is a typical greeting for the Chácobo, when the speaker is aware that the addressee is involved in a task and expects that the task will continue throughout the discourse exchange. Such cases fall under the

general semantics of continuative in the sense described above because beginning a conversation can be considered a normal stopping point for the performance of other actions, even if neither of the interlocutors expect that the action will stop.

Reduplicated verb complexes *can* have end points as long as they are depicted as pluractional, continuative and/or durative. This is illustrated in (11.13).

It is not clear to me whether all cases of continuative aspect can be subsumed under the the general concept of pluractionality. Cases of continuative that I am aware of could be understood as pluractional to the extent that extra effort or the implication of additional surpassed terminal boundaries is related to multiple events. But the reduplication of activities does not imply multiple cycles of initiation and termination. Reduplicated verbs of change of physical state, for instance, do not refer to repeated cycles in and out of that state, but rather imply persistence of this state despite potential interruptions.

(11.14)
$$matsi-n\acute{a} \sim matsi-n\acute{a}=ki$$
 $ani=\acute=ka$ $h\acute+n\acute+i$ $cold-V:ITR\sim cold-V:ITR=DEC:NONP$ lake=SPAT=REL water 'The lake water is still cold (despite it being hot outside).' ELIC

11.2.4 Stative verbs

The most imperfective verb class are stative verbs (Givón 2001: 288). When stative verbs are reduplicated, the interpretation is durative. Illustrative examples are provided in (11.15) and (11.16). Stative verbs never receive pluractional readings.

(11.15)
$$mai='$$
 $man \acute{a} \sim man \acute{a} = 2 \acute{a}$ tsi $sobo = k \acute{i}$ ground=SPAT $wait \sim wait = NMLZ:P$ P5 house=DAT $waha=iki\acute{a}$ $awini$ leave=REP wife 'The woman was waiting on the ground for some time, after which she left to the house.' TXT 050:1084

11.2.5 Non-pluractional meanings

The verb root tsa26 'sit down, be seated' is actually ambiguous between a stative and an accomplishment reading (be seated vs. sit down). When this verb root is reduplicated it receives the stative interpretation obligatorily which is illustrated in (11.16).

(11.16)
$$tsa26 \sim tsa20$$
 $ha=no$ $omaka$ kia ha $sit \sim sit$ $3=CONCUR$ tucunare REP 3 $a(k)=ni=ki$ do/take=REMP=DEC:P

'While he was sitting [in the boat] for some time, he caught a tucunaré.'

TXT $68:186$

The stative interpretation is obligatory under reduplication. This is illustrated in (11.17).

(11.17) a.
$$noti='$$
 i $ts\acute{a}?o=ki$

canoe=SPAT 1SG $sit=DEC:P$

'I sat down in the canoe.'

*'I was sitting in the canoe for some time.'

b. $noti='$ i $tsa?\acute{o}\sim tsa?\acute{o}=ki$

canoe=SPAT 1SG $sit\sim sit=DEC:P$

'I was sitting in the canoe for some time.'

*'I sat down multiple times in the canoe.'

The stative interpretations of reduplication and the obligatorily stative non-iterative reading found in (11.17) show that not all verbal reduplication can be straightforwardly subsumed under the category of pluractionality. With some verbs, the reading appears to

be strictly durative. I, therefore, tentatively analyse verbal reduplication as a polysemous construction spanning pluractionality, continuative and durative semantics.

As stated in the introductory paragraphs, most verb complexes in Chácobo can reduplicate. There are a handful of verb roots that cannot. The copula verb i 'be' cannot reduplicate regardless of the situation type. This is illustrated in (11.18) and (11.9) which express existence and social role respectively (see the list of situation types in Taoka [2000]).

There are two semantic classes of verbs that have members that cannot undergo reduplication. Certain verbs of emotional activity cannot be reduplicated as in *rani* 'be happy' shown in (11.20a). This ban on reduplication is not true of all emotional activity verbs; for instance the verb *káṣa* 'be angry' *can* reduplicate as in (11.20b).

'Jema stayed angry / Jema became angry multiple times.'

11.2.6 Lexical aspectual constraints

There are two verbs of light emission that cannot reduplicate. The verbs *riri* 'shine' and *bahra* 'glisten' cannot reduplicate. However, the verb *wifti* 'flash' can where it receives an iterative interpretation.

Finally, there is one verb of movement that is also restricted; the verb root *moi* 'move' cannot reduplicate. All other verbs of movement and motion can reduplicate, however, as illustrated in (11.22)

11.2.7 Reduplication of complex forms

As discussed in detail in Chapter 6, affixes and clitics vary concerning whether they can occur inside reduplicative constructions: their conscriptability (see Section 6.4.2 for details). An example of an obligatorily conscripting affix from naturalistic speech is provided in (11.23). The morpheme $-2ak\acute{a}$ is obligatorily repeated in the reduplicant and the base.

- (11.23) a. i=ki tsaya=?ai awa mani=kibe=DEC:P see=INTER:NONP:2SG tapir transform=DEC:P

 "Ready! you see?" he already transformed into tapir.'
 - b. habi nika tsi pi-ʔaká~ pi-ʔaká=pao=ṣi=ki
 surely like_so P5 eat-PASS~ eat-PASS=HAB=REMF=DEC:NONP
 mi-a

2sg-epen

"You (the tapir) will be eaten for the rest of your life (lit. into the remote future)." TXT 034:193-194

An example of an obligatorily conscripting clitic from naturalistic speech is provided in (11.24). The limitative clitic $=ro2\dot{a}$ expresses the meaning 'always' in reduplicative constructions.

- (11.24) a. *i-a=ri* wiaki taná=i ka=ʃari=ki=a

 1SG-EPEN=EMPH next_day fish=CONCUR:S go=CRAS=DEC:NONP=1SG

 'Tomorrow, I am going fishing.'
 - b. habi toa ha=nó ka=ro?a~ ka=ro?á=?ai=na
 surely DEM2 3SG=SPAT go=LIMIT~go=LIMIT=NMLZ:IPV=EPEN
 'Surely, going where we always go.' TXT 093:055

For the examples above, the functional morphemes obligatorily copy. Recall that many (semi)functional morphemes optionally conscript. For those morphemes that optionally conscript, the formal difference between appearing on just the base or the reduplicant and the base can covary with a semantic difference. For instance, the absence of the presence of the conscriptable clitic =ma 'causative' encodes a difference between indirect causation and (continuative) direct causation. In the verb complex tfota~tfota=ma 'cause/send to have sex' the causer does not have to be present throughout the action. The causing and caused events are temporally distinct. However, when the causative clitic appears on both the reduplicant and the base, the causing event continues through the duration of the caused event. This is illustrated in (11.25) where the verb complex tfota=ma~tfota=ma 'cause (continuously) to have sex' implies seduction and continued participation of the causer throughout.

(seduce him/her)" her mother said.' TXT. 032:016

A minimally contrastive pair of reduplicative constructions with causatives copied and not copied are provided in (11.26) below. In these examples the difference between reduplication of a simple verb root (11.26a) and reduplication of the larger verb complex with =ma 'causative' is a difference in whether the causer exerts control in a spatio-temporally disjoint fashion (send to work) as in (11.26a) or not as in (11.26b)

'Toro was making Gere work (controlling/observing him the whole time).'
ELIC

A similar difference can be observed with root-associated motion complexes, as in (11.27). If $=bay\dot{a}$ 'do and go (transitive)' is copied along with the root, multiple motion events are implied in the sentence; otherwise there is one motion event.

leave~ leave=DO&GO:PL/TR=DEC:P

'He was leaving things behind and then he went.'

leave=DO&GO:PL/TR=DEC:P

'He left something behind and went (multiple times).' ELIC

11.2.8 Verbal reduplication and distributive semantics

Distributive refers to cases where events are performed in multiple distributed locations. Verbal reduplication does not by itself encode distributive semantics by itself, but typically goes along with other ways of encoding distributive semantics. For instance, noun reduplication encodes distributivity as in (11.28) (Chapter 15 for more details on noun reduplication). The verb is also reduplicated in this sentence indicating pluractional semantics.

(11.28)
$$m\acute{a}$$
 $s\acute{i}$ $tfof-\acute{a}\sim tfof-a=?\acute{a}i=ka$ $honi='$ urucu urucu **crush-TR=NMLZ:IPFV=REL** man=ERG $bi=n\acute{i}=na$ grab=NMLZ:REMP=EPEN

'The man who was crushing (continuously) urucu grabbed her.'

Such constructions require more research. In particular it is unclear whether PV repetition is structurally distinct from asyndetic coordination.

11.3.DURATIVE/DAY TIME =ba?iná

The enclitic $=ba in\acute{a}$ (or $=bain\acute{a}$) encodes durative and expresses that an event took place over one entire day or every day over a several day period. This morpheme 'during/each (the) day' requires reduplication of the verb it modifies. There is variation between speakers and rates of speech concerning whether this morpheme is pronounced with a glottal stop as in $=bain\acute{a}$ or not as in $=bain\acute{a}$. I have not found any lexical restrictions on the use of $=bain\acute{a}$; the enclitic appears to be able to combine with any verb.

11.3.1 Discourse perseverance

The day time morpheme can express pragmatically backgrounded information. Evidence for this is that the morpheme displays discourse perseverance in that it is repeated redundantly throughout the discourse. This is illustrated in (11.29) with consecutive sentences from discourse.

TxT095:58-59

One might conclude that because =ba? $in\dot{a}$ displays discourse perseverance and because it occurs mostly in subordinated clauses, that it necessarily encodes given or old information, for example, in cases where it is already established in prior discourse that the events in question are taking place throughout the day. While the expression of old information appears to be a strong tendency of this morpheme, the enclitic can express new information. In the sentence in (11.30), the main verb expresses given information and the

new information is found in the enclitic =baina. The main verb repeats information from the previous clause, while $=ba2in\acute{a}$ adds new information.

(11.30) a.
$$a(k)=biri\acute{a}$$
 tsi $bi=tiki(n)=k\acute{a}n=(?)iki\acute{a}$ $kill=DO\&COME:TR/PL$ P5 $come:PL/TR=AGAIN=PL=REP$

b. $ho\sim h\acute{o}=ba?ina=kan=(?)\acute{a}i$ $ki\acute{a}$ $come\sim come=ALLDAY=3PL=NMLZ:IPV$ REP

'When they killed them (the Siriono), they returned [home]. It is said that they returned taking the whole day.' TXT

11.3.2 All day vs. every day

It appears that the two interpretations of =bainá, "all day, next day" versus "every day", are conditioned by discourse context, although more research on this question is needed. In elicitation contexts, speakers state that either or both interpretations are permissible.

One way that the readings can be disambiguated in elicitation is through combination with temporal frame adverbial expressions as in *naa bari* 'this day (today)'.

In contrast a *bari* 'sun/day' embedded under a spatial postpositional phrase with = 'no forces the 'all day' construal. This is illustrated in (11.33).

(11.33) no
$$ka \sim ka = baina = ni = ki$$
 $bari = no$

1PL go~ go=ALL/EACH_DAY=REMP=DEC:P day/sun=SPAT

'We went all day throughout the day.' ELIC

However, in naturalistic speech sometimes the difference is only disambiguated by discourse context. An example of an 'all day' interpretation is provided in (11.30) above. Other examples of the all day interpretation from naturalistic speech are provided in (11.31) and (11.32). In (11.32) the temporal adverb *wiaki* 'the next day' is likely what produces the "all day" construal.

Instances where the dayhood notion quantifies over multiple days are illustrated in (11.37) and (11.36).

(11.36)bari tsi kiá naa tsɨmo tsi kiá naa day P5 REP night Р5 REP DEM1 DEM1 ko~ko**=ba?ina**=?ái=kato tsi kiá nɨa hunt~hunt=ALL/EACH DAY=NMLZ:IPV=REL here P5 REP şoki

toucan

'(For him), the day is night and the night is day (lit. this is day and this is night), as wander every single day (this is what the toucan is like).' TXT 054: 751-753

(11.37) a. ti-siki-2a(k)=so tsi kiá tapo=' neck-cut-CAUS/APPL=PRIOR:A P5 REP table=SPAT ha hana=ni=ki3 put=REMP=DEC:P

'After he cut her throat, and put her on the table.'

b. tapo= hana-ta=so tsi kia ha table=SPAT put-PNCT=PRIOR:A P5 REP 3 $pi\sim pi=baina=ni=ki$ $eat\sim eat=ALL/EACH$ DAY=REMP=DEC:P

'After he put her on the table, he was eating [little by little] every day (it is said)' TXT076:30-31

There are very few examples where sentences with the clitic *baina* unambiguously receive an everyday interpretation. In most cases, $=bain\acute{a}\sim=ba?in\acute{a}$ 'all day'every day' quantifies over the time span of an entire day but also quantifies over multiple days. Often it is hard or impossible to distinguish between all day and everyday interpretations, even for speakers. An example where both interpretations likely apply is provided in (11.37) above.

11.3.3 Historical origins

The historical origins of $=bain\acute{a}\sim=bain\acute{a}$ are not altogether clear. Its possible that $=bain\acute{a}$ and 'all day, every day' is a reduced form of $bar\acute{i}$ -na 'of the day'. There are a few other functional morphemes in Chácobo that show variation between /i and /i, that provide some evidence for this hypothesis. For instance, =pari 'first' can be alternatively pronounced as =pai 'first'. In these cases, the glottal stop appears in the same environment; a_i. -na is an ending found on a number of associated motion morphemes, which perhaps provided the analogical base for grammaticalization of $=bain\acute{a}\sim=bain\acute{a}$ (Tallman 2016).

11.4. Habitual/durative =PAO

The enclitic =pao encodes two related meanings that are associated with imperfectivity; (i) durative: that a situation is conceptualized as taking place over a long period of time and/or (ii) habitual that an {A,S} participant is typically associated with a particular situation. The habitual reading arises when the verb root is not reduplicated. The durative reading arises out of cases where =pao combines with a reduplicated verb complex. Note that reduplicated verb complexes can already encode durative meanings (Section 11.2). The evidence suggests that =pao either adds a habitual reading to the durative context or augments the durative semantics of the reduplicative construction implying an extremely long duration. The clitic =pao displays no restrictions in terms of which verb roots it combines with. However, the clitic is incompatible with the highly perfective clitics =yo 'completive' (Section 11.8) and =tapi 'punctual' (Section 11.9).

The habitual/durative can combine with both past and non-past tense morphemes. That the semantic contribution of =pao is more strictly durative when the verb complex is reduplicated is illustrated in (11.38a) and (11.38b). Without reduplication a habitual reading is conditioned as in (11.38c).

(11.38) a. *tsayá~tsayá=paó=ki*

see~see=HAB/DUR=DEC:P

'He was / has been watching for some time.'

b. tsayá~tsayá=**paó**=ki

see~see=HAB/DUR=DEC:NONP

'He will be watching for some time.'

c. tsáya=**paó**=ki

see=HAB/DUR=DEC:NONP

'He always watches.' ELIC

There are a number of complex constraints on the use of =paó 'habitual, durative' in the past tense. After I present an overview of the pragmatics and semantics of the morpheme, I will provide a discussion of some of the constraints on this morpheme and the extent to which these constraints have a semantic explanation.

11.4.1 Discourse perseverance

That $=pa\acute{o}$ expresses backgrounded information can be shown from the fact that it displays discourse perseverance; it is repeated throughout discourse redundantly. This is illustrated in (11.39) which consists of a conversation between Mario Chávez and his grandfather

Tani. concerning the habitual practices of pre-contact Chácobo Notice that the morpheme $=pa\acute{o}$ is repeated throughout.

(11.39) MARO CHÁVEZ:

- a. yoa=tiki(n)=wi papa rikiba= fiesta rikiba=
 - tell=AGAIN=IMPER father ancestor=GEN festival ancestor=ERG
 - a(k)=2i i=pao=ni=na

do=concur:s Aux=hab=nmzl:remp=epen

'Repeat, father, about the ancestor's festival and how the ancestors used to do it (their festival).'

TANI CHÁVEZ:

- b. hatsi kiá haska naa fiesta ha
 - then REP same DEM1 festival 3

$$a(k)=ka(n)=pao=ni=ki$$

do=3PL=HAB=REMP=DEC:P

'So it is said that they used to do this festival in the following way.'

- c. $nob\acute{a}$ rikiba=' $a(k)=pao=n\acute{i}=ki$
 - 1PL:GEN ancestor=ERG do=HAB=REMP=DEC:P

'Our ancestors used to do this.'

d. hatsi no?ó papa= pora a(k)=pao=ní=ki
then 1sg:gen father=erg canoe make=hab=remp=dec:p

11.4.2 Habitual readings

The habitual morpheme $=pa\acute{o}$ is used in discussion of traditional cultural practices as in (11.39) above. It is also used to describe habitual happenings throughout one's life in general. This is illustrated in (11.40) where the speaker describes how she used to see her (more stubbornly traditional) grandmother throughout her childhod.

Another illustration of the habitual use of the morpheme $=pa\acute{o}$ is found in (11.41). This describes the general practice of the earth goddess Ashina.

It is rare in my corpus, but =pao can modify non-reduplicated non-past clauses. The sentence in (11.42) is from a narrative where a woman repeats what she told her stalker after confronting him.

'[But] I don't even know you.'

TxT003:28-29

The habitual reading is also found in imperfective nominalized clauses as in (11.44).

11.4.3 Durative readings

As stated above, when verb complexes are reduplicated a durative reading emerges. The most common cases are in the context of nominalized clauses marked by $=2\dot{a}$ 'past, anterior, nominalization'. Examples are illustrated below.

(11.45)
$$kopi\sim kopi=pao=?\acute{a}$$
 tsi $siri$ tsi nia $h\acute{a}$ $buy\sim$ $buy=HAB=NMLZ:P$ $P5$ old $P5$ here 3 $ho=n\acute{i}=ki$

come=REMP=DEC:P

'They bought it (meat) everytime for a while and then returned a long time ago.' TXT 090:004

The most common TDM found in such constructions is the distant past =yamit. Illustrations of durative readings in distant past time constructions are provided in (11.46), (11.47) and (11.48).

- (11.46) no-kí toka~ toka=pao=yamí(t)=ki mi-a kai=´

 1PL-ACC do_so~ do_so=HAB=DISTP=DEC:P 2SG-EPEN mother=VOC

 "You have been doing this to us (disrespecting us) for a while, mother!"

 TXT 026:210
- siri sawi~ sawi=pao=yami(t)=ki kiá

 old put_on put_on=HAB=DISTP=DEC:P REP

 '(It is said) it was a long time ago that they had been wearing it (the traditional leather shoes).' TXT075:007
- (11.48) $tsa?o=?\acute{a}$ $ha=k\acute{i}$ yiki yiki yiki yiki sit=NMLZ:P 3=DAT wiggle wiggle wiggle $i\sim?\sim i=pao=yam\acute{i}t=k\acute{i}$ $ki\acute{a}$ AUX \sim EPEN \sim AUX=HAB=DISTP=DEC:P REP

'(Because) she had been sitting down on top of him for some time wiggling around.' TXT35:24-25

Notice that all of these clauses are C- $\{A,S\}$ constructions. The relationship between reduplication and the distinction between C- $\{A,S\}$ and $\{A,S\}$ -C constructions is described

in Section 11.7. A habitual reading in combination with a recent past TDM is provided in (11.49).

(11.49)
$$toka$$
 $i\sim ?\sim i=pao=ita=?a$ tsi $wisti$ $bari$ $like_so$ $do\sim EPEN\sim do=HAB=RECP=NMLZ:P$ P5 one day $hoi=ki$ $no-a$ $rest=DEC:NONP$ $1PL-EPEN$

'After we've been working for one whole day, we rest.' TXT010:011

It is much rarer for the reduplication-*pao* combination to occur in remote past time clauses. An example is provided in (11.50) with a durative meaning "for many years".

'You have been killing (doing) us for many years now.' TXT061:102

When =pao and the remote future TDM =si combine life-long duration reading emerges. This is illustrated in (11.51 below. Another example is in (10.43) above (Chapter 10)

- (11.51) a. i=ki tsaya=?ai 'awa mani=kibe=DEC:P see=INTER:NONP:2SG tapir transform=DEC:P

 'Done! you see?! he has transformed into a tapir.'
 - b. hábi níka tsi pi-ʔaka pi-ʔaka=ṣí=ki
 surely like_so P5 eat-PASS eat-PASS=REMF=DEC:NONP

 'And in this way he will be eaten for the rest of your life.' TXT034:193

11.4.4 Habituality and temporal distance

All combinations of TDM and $=pa\acute{o}$ are possible when the verb complex is reduplicated. When the verb complex is not reduplicated there are a number of constraints on combination with $=pa\acute{o}$ that are presumably related to the semantics of temporal distance. The restrictions are listed below.

- (11.52) Restrictions on TDM = $pa\dot{o}$ combinations
 - a. Incompatible with = fari 'crasternal' in all contexts
 - b. Incompatible with =ki 'declarative past' when the verb complex is not reduplicated and there is no TDM.
 - c. Incompatible with $=it\acute{a}$ 'recent past' when the verb complex is not reduplicated.

d. Incompatible with =yamit 'distant past' when the verb complex is not reduplicated.

The combinations listed in (11.52) never appear in texts and speakers reject such combinations in elicitation as is illustrated in (11.53) below.

go=HAB=DISTP=DEC:P

'The man has/had been going yesterday.'

 $ka=pao=yam\dot{i}(t)=k\dot{i}$

d.

*honi

man

Note that there are no such restrictions on combinations with TDMs of the remote past. The constraints specified above can be related to the semantics of the habitual. Habitual readings emerge when the verb complex is not reduplicated. However, the TDMs above refer to specific time spans. The habitual semantics encoded by =paó in Chácobo seem to be incompatible with specific time spans. Combinations with remote TDMs are permissible because the remote TDMs do not have maxima (Chapter 10). The incompatibility with the zero TDM construction in (11.53a) has a more complex explanation. Recall from Chapter 10 that there are two interpretations of null TDM constructions in combination with =ki 'declarative, past/perfect'; (i) the event happened today or (ii) the speaker is unaware of when the event took place). Interpretation (i) is ruled out for the same reason that the other TDMs are ruled out. Interpretation (ii) could be ruled out because a speaker cannot simultaneously express ignorance regarding the time span of an event, but also express that the event is habitual.

11.5.IMPERFECTIVE NOMINALIZATION =?ÁI

This section is concerned with the aspectual interpretation of the verb complexes elaborated by the imperfective nominalizer $=2\dot{a}i$. Before moving on to the aspectual semantics of $=2\dot{a}i$ a few notes are in order concerning its status as a nominalizer.

Verb complexes headed by $=2\acute{a}i$ can function as arguments of verbs as is shown in the examples from elicitation in (11.54).

(11.54) a.
$$noya=?\acute{a}i$$
 $pi=k\acute{i}=a$ fly=NMLZ:IPV eat=DEC:NONP=1SG

'I eat that which is flying (e.g. a bird).'

b. mi $tsaya=?\acute{a}i$ $inia=k\acute{i}=a$

2 see=NMLZ:IPV sell=DEC:NONP=1SG

'I am selling what you are looking at.' ELIC

interpreted as meaning "the woman saw the man", for example.⁴⁶

In overtly marked non-verbal predicate constructions, verb complexes with =?ái receive a referential interpretation. According to Caco Moreno, the following sentence cannot be

'The viewpoint of the woman is (that) of a man.' ELIC

When a non-verbal predicate construction is not overtly marked with go and the predicate is a verb complex nominalized with $=2\acute{a}i$ an event (non-referential) interpretation emerges (see Section 4.1.2.3). In other words the meaning 'the woman was watching / saw the man' for a sentence which is minimally contrastive with (11.55) but does not contain the clause-type/rank morpheme go.

Nominalized clauses with $=2\acute{a}i$ can be modified by the plural morpheme $=bo\sim=b\acute{a}$ as illustrated in (11.56).

Constructions with $=2\acute{a}i$ are very frequently as predicates, where they are frequently ambiguous between denoting a referent and an event.

(11.57)
$$pa?i=y\acute{a}ma=kan=(?)\acute{a}i=bo$$

get_drunk=NEG=PL=NMLZ:IPV=PL

'They are the ones that do not get drunk. / They did not get drunk'

TXT 052:404

With event interpretations, the imperfective nominalization encodes progressive (ongoing) or continuous interpretations in many lexical and syntactic contexts. This is its

primary function when it combines with non-agentive stative and activity verb roots. Since stative and activity verb roots tend to express ongoing functions anyways, the semantic contribution of $=2\acute{a}i$ can only be discerned with non-agentive verb roots (more on this below).

In combination with achievement and accomplishment verbs the interpretation of $=2\dot{a}i$ is more complex. In clause initial position, the interpretation of achievement and accomplishment verbal predicates in combination with $=2\dot{a}i$ is imperfective. In clause final position achievement/accomplishment verb complex $=2\dot{a}i$ combinations can be perfective.

Thus, compared to the imperfective aspectual constructions discussed in Sections 11.1 through 11.4, nominalized = $2\dot{a}i$ constructs are relatively bleached semantically. This is why imperfective =2ai constructions are placed in the middle on the imperfective-perfective continuum depicted in Table 11.1. Imperfective nominalized = $2\dot{a}i$ constructions are often used for irrealis semantics. More details on the temporal interpretation of = $2\dot{a}i$ constructions are found in Chapter 9 in the context of a discussion of tense.

11.5.1 Stative, activity and non-agentive verbs

Stative and activity verbs receive ongoing readings when they combine with the imperfective nominalizer = $2\acute{a}i$. An illustration of an ongoing reading associated with an imperfective nominalized form is provided in (11.58). An example of an activity verb with such a reading is provided in (11.59).

osa=?ái=kato= ['] (11.58)ipama naa tɨti meanwhile Quintin sleep=NMLZ:IPV=REL=SPAT DEM1 paki=ni=kihawi fipati =kí tsi kiá hisó 3sg:gen chest = DATP5 REP urine fall=REMP=DEC:P 'Meanwhile while this Quintin was sleeping, the urine fell onto his chest (it is said).' TXT061:606 (11.59)habá tsi kiá wɨtsa masko =ni=kihɨnɨ run P5 REP other brother =REMP=DEC:P water sawiki=?ái=ka his=i=natopple=NMLZ:IPV=REL see=CONCUR:S=EPEN 'Then his other brother ran while he watched the water topple.' Txt 026:413

The progressive reading for stative/activity verb = $2\acute{a}i$ combinations applies when the nominalized verb is the only predicate in a non-verbal predicate construction as in (11.60).

(11.60)
$$mai=$$
 $tisi$ tsi so $osa=?ái=na$

earth=SPAT other P5 DEC sleep=NMLZ:IPV=EPEN

'The others were sleeping on the ground.' TXT117:202

The semantic contribution of the the morpheme = $2\dot{a}i$ can be observed in contexts where it combines with a non-agentive verb in attributive function. Non-agentive verbs are those that can occur in the predicate position of non-verbal predicate constructions (Chapter 3 for details), where they occur as bare roots without any verbal functional elaborations. For instance, the non-agentive verb afi 'bathe' occurs embedded under a relative clause in (11.61) without any clause-type/rank morpheme.

(11.61)
$$yoga$$
 $\acute{afi}=ka$ \acute{i} $ts\acute{a}ya=k\acute{i}$ woman $bathe=REL$ 1SG see=DEC:P

'I saw the bathed woman (the woman who is already clean).' ELIC

In this sentence above afi 'bathe' has a result/stative interpretation. (11.62) provides an minimally contrastive example with the nominalizer =2ai in combination with afi 'bathe'. In this case there is a progressive/continuous interpretation. The contrast between (11.61) and (11.62) illustrates the imperfective semantic contribution of =2ai.

Another illustration of the aspectual contribution of the nominalizer = $2\dot{a}i$ is illustrated by comparing *poro* 'rotting' with *poro?ai* 'rotting' in (11.63) and (11.64). The non-nominalized form receives a result state reading, whereas the complex formed with the nominalizer =2ai receives a progressive reading.

11.5.2 Accomplishment and achievement verbs

Accomplishment and achievement verb stems *can* be associated imperfective interpretations. One illustration is provided in (11.65). Arguably the progressive/continuous interpretation of this sentence emerges from the repetitive use of the ideophone *sode*.

(11.65) sode sode sode mai =
$$ki$$
 mapo ha

IDEO IDEO IDEO earth=border head 3

 $tsaka=?\acute{a}i=na$

shoot=NMLZ:IPV=EPEN

'They were shooting the rift with the sound "sode sode sode" TXT 54: 601

However, accomplishment/achievement verb = $2\dot{a}i$ combinations can also have telic non-progressive readings. A number of illustrations of this are provided below; (11.66) for an accomplishment verb; (11.67) and (11.68) for achievement verbs. These examples illustrate that the imperfective semantics of = $2\dot{a}i$ is likely a default interpretation. Verbal

predicates that have default accomplishment or achievement semantics are not construed as progressive or generally imperfective when they combine with $=2\acute{a}i$. 47

throw-PASS=NMLZ:IPV=EPEN

'When they threw it in the water, the owners didn't find the path of the tapir, and there was no pubic hair which had been thrown in the water.' TXT 083:126

⁴⁷ The lack of progressive semantics in the examples above seem to contradict Córdoba et al.'s (2012) claim that constructions with =2ai=na are dedicated progressive constructions.

(11.67) hatsi pi şo toa şa
$$?i$$
 rifa=ki ha then ANX DEC DEM2 ant_eater snout=DAT 3 taaşa= $?ái$ =na

hit=nmlz:ipv=epen

'Then he hit that ant eater in the snout.' TXT 061:822

fold=NMLZ:IPV=EPEN

'The axe just made the sound "tsoh" [when it hit], the axe folded/doubled.'

TXT070:026

11.5.3 Irrealis

Like many imperfectives cross-linguistically and the auxiliary *i*-imperfective (see §11.1), nominalized $=2\acute{a}i$ constructions have irrealis interpretations. Illustrations of irrealis interpretations of verb complexes with $=2\acute{a}i$ are provided in (11.69) and (11.70).

'Then the jaguar became angry with them "It's better that we leave (see and then go away from) our grandmother" he said.' TXT26:180

(11.70) a.
$$kar \acute{o}$$
 tsi $ki \acute{a}$ ha $bi=tikin=ka(n)=ki$ lumber P5 REP 3 bring=AGAIN=PL=DEC:P 'From there they brought lumber again.'

b. tobi poróma rabi máni рį DEM ANX axe two knife rabi-wa=ka(n)=kitobi no-a two-v:TR=PL=DEC:NONP 1PL-EPEN DEM рį *tik-i=?ai=na*

break-ITR=NMLZ:IPV=EPEN

ANX

'We want to make two axes and two knives, because otherwise (over there) they could break.' TXT026:329-230

Notice that in (11.70) there is no (additional) modal marking of counterfactuality apart from the nominalizer (see Chapter 13 on modality). All irrealis interpretations of nominalized =2ai clasues refer to potential future events, rather than past tense ones (contrast this with the irrealis readings associated with the auxiliary i-imperfective).

11.6. NIGHT TIME = finá

Chácobo has another time of day enclitic = $fin\acute{a}$ 'at night'. Unlike the morpheme = baina 'each/every day', the clitic = $fin\acute{a}$ 'at night' does not encode durative semantics. I discuss it in this section because it displays semantic and structural complementarity with = baina. The two morphemes cannot occur in the same verbal predicate and they both encode time of day. In contrast to the durative morpheme = baina, = fina does not require reduplication of the verb it modifies. The morpheme has two interpretations; it does not seem to encode any semantics related to (im)perfectivity even by default.

11.6.1 At night

The at-night interpretation of the clitic = $lin \dot{a}$ is illustrated in (11.71) and (11.72).

11.6.2 All night

The clitic = $fin\acute{a}$ receives an 'all night' durative interpretation, paralleling the meaning of = $bain\acute{a}$ for nocturnal events, only when the main verb complex reduplicates as in (11.73) and (11.74).

11.7. Perfect C- $\{A,S\}$ and perfect/mirative =yA

'The tapir wandered all night.' TXT 034:108

The C- $\{A,S\}$ construction encodes relative tense and perfect semantics. A detailed semantic description of this construction as it relates to relative tense and perfect readings is provided in Chapter 9. This section is concerned with the perfective semantics encoded by this construction. All events expressed in C- $\{A,S\}$ are completive. Auxiliary i-

imperfective constructions are incompatible with C-{A,S} constructions. The compatibility of reduplication constructions with the C-{A,S} construction is more complicated.

11.7.1 Achievement/Accomplishment verbs

Achievement and accomplishment predicates cannot be reduplicated in C-{A,S} constructions. That achievement verbs in C-{A,S} constructions cannot be reduplicated is illustrated in (11.75) and (11.76).

- (11.75) *tik-i~ tik-i=ki ka?iti pistia
 break-ITR~ break-ITR=DEC:P door small
 'The windows had been breaking.'
- *ka?iti pistia tik-a~ tik-a=ki toa honi
 door small break-TR break-TR=DEC:P DEM2 man
 'That mad had been breaking the window.'

That accomplishment predicates in C-{A,S} constructions are incompatible with reduplication is illustrated in (11.77).

- *moro sawi~ sawi=ki toa yoşa

 bark_clothes put_on put_on=DEC:P DEM2 woman

 'That woman had been putting on the moro.'
- (11.78) *rɨgó~ rɨgó=kɨ náa niʔi hóa
 bloom~ bloom=DEC:P DEM1 forest flower
 'This flower had been blooming.'

11.7.2 Activity/ Stative verbs

Activity and stative predicates vary in terms of whether they are compatible with C-{A,S} and reduplication simultaneously. Most activity and stative predicates are ungrammatical in such contexts. This is illustrated in (11.79), (11.80) and (11.81)

- (11.79) *ani tsayá~ tsayá=ki i-a
 lake see~ see=DEC:P 1SG-EPEN
 'He had been watching the lake.'
- *yobi=ba=' tfani tfa?a~tfa?a-wa=ki i-a

 shaman=PL=GEN word believe~believe-V:TR=DEC:P 1SG-EPEN

 'I had always believed in the word of god.'

(11.81) *oṣa~ oṣa=kɨ noʔó papa sleep~ sleep=DEC:P 1sg:GEN father 'My father had been sleeping.'

The ungrammaticality of the forms above is likely related to the fact that C-{A,S} encodes perfective semantics and reduplication is imperfective. However, a small class of predicates can be reduplicated in the context of a C-{A,S} construction. They are illustrated in (11.82) and (11.83) below. In general those verbal predicates that receive a durative (rather than pluractional or continuative) interpretation under reduplication are also those that can be reduplicated in C-{A,S} constructions.

- (11.82) $ti gi = ba = ' fina ka ?i \sim ka ?i = ki boca$ other =PL=GEN feelings know~ know=DEC:P Boca 'Boca had been thinking of the feelings of others.'
- (11.83) noti=' $tsa?ó\sim$ tsa?ó=ki i-a canoe=SPAT sit \sim sit=DEC:P 1SG-EPEN 'He had been sitting in the canoe for a while.'

11.7.3 Durative construal under =yá

The mirative-perfect TDM $=y\dot{a}$ is discussed in more detail in Chapter 10. Note from Chapter 10 that $=y\dot{a}$ is only compatible with C-{A,S} constructions; {A,S}-C constructions cannot occur when $=y\dot{a}$ occurs. This morpheme also has another function relevant to (im)perfectivity. It overrides whatever semantic constraint disallows verbal predicates from being reduplicated in C-{A,S} constructions. For instance, reduplicated C-{A,S}, the sentence in (11.84) is grammatical.

(11.84) ka?iti pistia tik-a~ tik-a=yá=ki toa honi
door small break-TR break-TR=PERF:MIR=DEC:P DEM2 man
'That mad has been breaking the window for a while.'

That constructions with $=y\acute{a}$ allow verbal reduplication has been supported in elicitation. I do not have an explanation for why such a construction is grammatical. A tentative hypothesis based on the translations and the fact that certain reduplicated verbal predicates are compatible with C-{A,S} constructions when these are associated with strictly durative semantics is that $=y\acute{a}$ construes reduplication as strictly durative rather than necessarily atelic as is the tendency with reduplication by itself.

11.8. Completive = $y\dot{o}$

The clitic $=y\delta$ 'completive' has two related functions; (i) it functions a universal quantifier over $\{S,P\}$ arguments of a verbal predicate; (ii) it refers to total completion of an event performed by $\{A,S\}$. As a result of the latter function it can also be used to express total affectedness of $\{P\}$ rather than quantification over a plural $\{P\}$ argument. Due to the fact that plural marking on non-human NPs is facultative (Chapter 15), this results in ambiguities between the quantifier versus the completive interpretation. Such ambiguity is illustrated in (11.85).

As I will show below there are no restrictions on what types of verbal predicates $=y\acute{o}$ can combine with. All situation types that are elaborated with $=y\acute{o}$ are telic. An endpoint or culmination is added to any verbal predicate that combines with $=y\acute{o}$ either by virtue of making the {S,P} arguments definite quantities or by virtue of encoding total affectedness on {S,P}.

This means that typically stative and activity verbs become accomplishments in combination with $=y\delta$ (see introduction of this Chapter for my definition of telicity). A few

other important points about $=y\acute{o}$ 'completive' are related to its interaction with tense and aspectual constructions and coordinative constructions are discussed below

11.8.1 Stative verbs

Examples of stative verbal predicates modified by $=y\acute{o}$ are provided in (11.86) and (11.87).

(11.86)
$$o_{\xi}a=y\delta=tsi=k\acute{a}(n)=ki$$

 $sleep=CMPL=IMM:ITR=PL=DEC:NONP$
'They all fell asleep.' TXT 045:299
(11.87) $tsa?o=yo=k\acute{a}n=ki$
 $sleep=CMPL=PL=DEC:P$
'They all sat down.' TXT 045:262

I have no examples of stative predicates that express completive semantics without also encoding all-quantification over the S argument.

11.8.2 Activity verbs

Activity verbal predicates are construed as achievements when they combine with the clitic $=y\acute{o}$. In combination with intransitive verbal predicates, this is achieved by quantifying over the $\{S\}$ argument. This is illustrated in (11.88) and (11.89).

An example where $=y\acute{o}$ associates with $\{P\}$ for a default activity verbal predicate is provided in (11.90) below.

11.8.3 Accomplishment verbs

For intransitive accomplishment verbal predicates with definite goals, $=y\delta$ modifies the S argument even where a location is present. In the following examples for instance $y\delta$ modifies *treinta hónibo* 'thirty men', rather than the spatial postpositional phrases $ni2itf\delta$ 'through the jungle'. This is illustrated in (11.91) below.

A completive meaning of $=y\acute{o}$ in the context of an intransitive accomplishment verb is provided in (11.92). The all-quantifier/completive difference is disambiguated in this sentence by having a singular S.

When transitive accomplishment verbs are transitivized $=y\acute{o}$ targets the {S} argument (for {P} argument of the transitive clause). Examples of $=y\acute{o}$ combining with passivized verbal predicates are provided in (11.93) and (11.94).

- (11.93) a. bari wisti naa ora matorokó yama tsi kiá kamano ...

 day/sun one DEM1 hour noon NEG P5 REP jaguar

 'One day, on this hour, at noon, there is nothing for the jaguar (food only lasts half a day).'
 - b. $pi-2aka=y \delta=ki$ eat-PASS=CMPL-DEC:P

 'All of it is eaten (by the jaguar).' TXT 026:172

(11.94) yáma tsi şo hɨnɨ =kí nia-ʔaka-yó=kɨ

NEG P5 DEC water=DAT throw-PASS=CMPL=DEC:P

hawɨ şao

3SG:GEN bone

'There is nothing, all his bones had been thrown in the water.' TXT 026:179

Examples of accomplishment verbs with the completive are provided in (11.95) and (11.96) below.

- (11.95)hatiro?a=ka ho=só ha tfani nika=ma=yo=ni=kicome=CONCUR:S all=REL 3 ask=caus=cmpl=remp=dec:p $a(k)=y\acute{a}ma=ki$ по-а i ha = kan = ni = kikaſi=norí do=NEG=DEC:NONP 1PL-EPEN say 3 =PL=REMP=DEC:P bat=SPAT? 'They all arrived and then they asked all of them (about it) "we don't do that! (we don't know anything)" they said, but the bat (who was being asked about) was among them.' TXT 34:207
- (11.96) hawi iwati=báş wiyo=yo=tsa=?ikiá

 3sG:GEN gra_mo=BEN hollow_out=CMPL=IMM:TR/PL=REP

 'He cleared out the the cave completely for the grand mother.'

 TXT 061:745

11.8.4 Achievement verbs

Cases where $=y\delta$ combines with default achievement verbal predicates are illustrated in (11.97) and (11.98). In (11.97), the $\{S\}$ receives an all-quantifier reading, while in (11.98) the reading is strictly completive, referring to the complete breaking of the arrow.

(11.98) also illustrates the combination of $=y\delta$ with a transitive achievement verbal predicate. In this example $=y\delta$ provides a completely affected reading over the affected (broken) $\{P\}$ argument. All-quantification of $\{P\}$ arguments with transitive achievement verbal predicates are illustrated in (11.99) and (11.100).

11.8.5 Tense and Aspect

that the bats multiplied.' TXT 034:247

The clitic $=y\delta$ displays no restrictions with respect tense and/or clause-type/rank morphemes. When the clitic combines with the declarative non-past clitic =ki a future

reading is obligatory.⁴⁸ This can be attributed to the fact that $=y\delta$ is inherently telic and thus cannot associate with events that are on-going at the time of speech. Illustrations of future readings of non-past constructions with $=y\delta$ are provided in (11.101) and (11.102) Past tense examples are copiously illustrated above.

⁴⁸Other linguists who have worked on Chácobo have glossed the clause-type/rank morpheme =ki as 'incompletive' (Prost 1962; Zingg 1998; Iggesen and Valenzuela 2007; Córdoba et al 2012), rather than 'non-past' as is done in this dissertation. The analysis of =ki 'declarative, non-past' as an incompletive morpheme is problematic in that it can combine freely with the completive morpheme = $y\acute{o}$ (Tallman & Stout 2018; see Section 9.1.1 and Section 10.9 for details on the semantics of the declarative non-past morpheme =ki.

The completive $=y\delta$ is also compatible with hortative constructions, which are inherently future as in (11.103).

The completive is also compatible imperative constructions as in (11.104) below.

The completive is compatible with interrogative and the reportative constructions which are illustrated in (11.105a) and (11.105b) respectively.

(11.105) a. toa yoşa =bo tsi bi(tf)=yo=?ini kápiti

DEM2 woman =PL P5 grab=CMPL=INTER:NONP caiman

'Did the caiman used to all marry women?'

b.
$$ka=2as=ka$$
 $yosa=bo$ tsi $bi(tf)=yo=2ikiá$ $kápiti$ $go=P=REL$ woman=PL P5 $grab=CMPL=REP$ caiman 'The caiman used to marry all of the women.' TXT 030:034-035

In sum there are no restrictions on the use of $=y\delta$ 'completive' related to clause-type or tense. The completive $=y\delta$ is aspectual in that it does not display restrictions or force construals that are uniquely related to tense.

In line with the perfective semantics encoded by $=y\delta$ 'completive', this morpheme is incompatible with the auxiliary *i*-imperfective (§11.1), verbal reduplication (§11.2), the clitic $=ba2in\dot{a}$ 'during the day' (§11.3), and the clitic =pao 'habitual, durative' (§11.3). It is compatible with the imperfective nominalizer =2ai. Recall, however, that this morpheme is relatively bleached with respect to the perfective-imperfective distinction. While it imparts imperfective meanings in appropriate contexts, it is compatible with telic situations. That the completive is compatible with the morpheme $=y\delta$ is illustrated in (11.106) below.

(11.106)ka=só tsi kiá naa yot/i pi?i ha-tó ha leaf 3-ACC:PL go=PRIOR:A Р5 REP DEM1 pepper 3 siba=ma=yo=?ái=na wrap up=caus=cmpl=nmlz:ipv=epen 'When he went there, he made them prepare all of these pepper leaves.' TXT 007:184

11.8.6 Asyndetic coordination

Chácobo has an asyndetic verbal coordination construction where the first verb complex contains no clause-type/rank morpheme (see Section 4.1.1 and Section 5.2.2.3). In verbal coordinate constructions, =yo is the most common final clitic of the first verbal complex. Examples are provided in (11.107) and (11.108). While many verb roots, verb-suffix/enclitic combinations can occur without the clause-type/rank morpheme in such a construction, verb-yo combinations are by far the most frequent in naturalistic speech.

(11.107)boti ha=?á=ka toto ho=vó ísaka=bo flamingo come=CMPL stork=PL lower 3 = NMLZ:P = RELbo=?ái=ka ho=**yó** hama patiári come=CMPL but go:PL/TR=NMLZ:IPV=REL chicken kiá boti=ni=kitsi Р5 REP lower=REMP=DEC:P 'When they lowered, all the flamingos arrived and all the storks arrived but the chickens flew down.' TXT 063:052 (11.108)hawi hátsi kiá ha-to náa=bo $bina=v\acute{o}$ then 3-ACC:PL DEM1=PL call=CMPL 3sg:gen REP honi=ka=bo $bina=y\acute{o}$ tsi kia $h\acute{a} = wa = n\acute{i} = ki$

Asyndetic coordination is one of three strategies for clause-combining in Chácobo (adverbial clause nominalization, same subject clauses, different subject clauses). It tends to be used for events that are performed in perfective quick succession. The perfective semantics of $=y\acute{o}$ 'completive' perhaps explains why it frequently occurs in asyndetic coordination constructions.

P5

'Then he called all of his parents and all of his brothers.' TXT 061:159

REP

3

=TR=REMP=DEC:P

call=CMPL

man=REL=PL

11.9.Punctual =tápi

The perfective clitic $=t\acute{a}pi$ encodes that the event denoted by the verb it combines with is punctual, occurs quickly, or intensely. It also very often implies quick succession between this event and another one expressed in an adjacent clause (with a meaning like "as soon as" (Sp. "al momento que..."). Like the completive clitic $=v\delta$ described in Section 11.8, the punctual morpheme $=t\acute{a}pi$ cannot combine with the auxiliary *i*-imperfective (Section 11.1), verbal reduplication (Section 11.2), the clitic =ba?iná 'durative, day time' (Section 11.3), and the clitic =pao 'habitual, durative' (Section 11.4). The clitic $=t\acute{a}pi$ 'punctual' is even more extreme in terms of its aspectual restrictions compared with the completive $=y\acute{o}$. It cannot combine with the imperfective nominalizer = ?ái (which can combine with the completive). It is the only aspectual morpheme that displays obligatorily non-durative (instantaneous) semantics. The clitic =tápi is free to combine with verbal predicates of any aspectual classes where its semantic contribution is the same, although I do not have any text examples of it combining with stative verbal predicates. All verbal predicates that combine with =tápi 'punctual' are construed as instantaneous and telic. This will be illustrated below.

The clitic $=t\acute{a}pi$ 'punctual' occurs in a fixed slot in position 7 of the verb stem, right after $=y\acute{o}$ 'completive'. The clitic $=t\acute{a}pi$ 'punctual' cannot combine with reduplication.

11.9.1 Activity verbs

It is not very common for $=t\acute{a}pi$ 'punctual' to occur with activity verbal predicates. When it does it refers to an action performed in an instance. For instance, the verb his 'look at' becomes histapi 'glance at' as illustrated in (11.109).

11.9.2 Accomplishment verbs

For accomplishment verbs, $=t\acute{a}pi$ encodes rapid action and culmination of the event. This is illustrated in (11.110) and (11.111) below.

map-a=**tápi** hini='(11.111)kiá kóoh wa=ni=kiclose-TR=PNCT REP water=ERG TR=REMP=DEC:P IDEO:water =tiki(n) $k\dot{a}=k\dot{a}$ kako go=DEC:P Caco =AGAIN "...And immediately the water blocked it with the sound "kooh" and Caco went again.' TXT 026:333

With certain accomplishment verbal predicates $=t\acute{a}pi$ can refer to quick initiation of an event rather than quick initiation and termination. This is illustrated (11.112) and (11.113).

- (11.112) katsami=tápi=?ikiá
 look_for_lice=PNCT=DEC:REP

 'At this moment, she started looking for lice.' TXT 032:149
- (11.113) $bi=biri\acute{a}$ $paki=t\acute{a}pi$ $ki\acute{a}$ $ha=n\acute{i}=ki$ grab=DO&COME:TR/PL fall=PNCT REP 3 =REMP=DEC:P 'He grabbed it and fell immediately.' TXT 007:296

11.9.3 Achievement verbal predicate

Achievement verbal predicates are understood as occurring in an instant when combined with the clitic $=t\acute{a}pi$ 'punctual'. Illustrations of this are provided in (11.114) and (11.115).

11.9.4 Quick succession and frantic activity

One very common meaning expressed by $=t\acute{a}pi$ 'punctual' is quick succession between events often with the interpretation that that thee elaborated action was performed

frantically. An example of the quick succession interpretation is found in (11.116) in the context of the story of Ashina. The clitic $=t\acute{a}pi$ is used to express the fact that Ashina was pushed by her son in law as soon as she entered the door.

(11.116)
$$ha-2-ipa$$
 $ho=so$ $tfiraba-tápi$ $kiá$ 3-EPEN-father come=PRIOR:A push-PNCT REP ha $wa=ni=ki$ 3 TR=REMP=DEC:P

'After her father arrived, he immediately pushed Ashina.' TXT 063:28

Another example of the quick succession meaning is illustrated in (11.117).

(11.117) a.
$$tsa?o$$
 $ha=?\acute{a}=ka$ tsi $ki\acute{a}$ $yof\~{i}$ $wino=kan=n\acute{i}=ki$ sit $3=NMLZ:P$ P5 REP wind pass= $3PL=REMP=DEC:PST$ 'When he sat down (on the tree), the wind passed by.'

b.
$$ho=t\acute{a}pi$$
 $ki\acute{a}$ $tfi2\acute{i}-wa$ $=n\acute{i}=ki$ $come=PNCT$ REP fire-AUG =REMP=DEC:P

'And at this very moment the forest fire arrived.' TXT 34:113-144

It is common for $=t\acute{a}pi$ to be used in cases which are not necessarily conceptualized as being performed with literal speed, but rather involve an action that is performed

frantically at a whim without much thought of the consequences. An example of this use is given in (11.118) from the story of Nahuapaxahua, where two women (ignoring the advice of their chief Nahuapaxahua) are excited that their husbands have been brought back from the dead and decide to confront them.

them (their undead husbands).' TXT 034:172

11.9.5 Distributive semantics

Verb complexes cannot combine with $=t\acute{a}pi$ and reduplicate at the same time. However, they are compatible with distributive verbal repetition. Verbal repetitive constructions involve repetition of the entire PV constituents. Unlike verbal reduplication, the complex can be repeated more than twice. An example of $=t\acute{a}pi$ in a distributive construction is provided in (11.119).

(11.119)
$$a(k)=t\acute{a}pi$$
 $a(k)=t\acute{a}pi$ $a(k)=t\acute{a}pi$ $ki\acute{a}$ ha

$$do=PNCT$$
 $do=PNCT$ $do=PNCT$ REP 3
$$wa=kan=n\acute{a}=ki$$
 $yo_{\xi}a=bo$

$$TR=3PL=REMP=DEC:P$$
 woman=PL
'The woman did it (learnt it) one by one.' TXT 007:377

11.9.6 Historical note

A possible historical source of =tápi is the verb tapi "take a step, trample, march". Some of my consultants consider the word mildly esoteric, although it is fairly common in texts.

An example is provided in (11.120)

11.9.7 Assertive-lamentative =tapirá

There is one functional morpheme that seems to have been historically derived from a combination of $=t\acute{a}pi$ and the assertive $=r\acute{a}$ (Section 13.11). The morpheme $=tapir\acute{a}$ encodes that the subject is first person singular and encodes that the speaker feels self-pity about having to perform the event encoded by the verb that this clitic combines with. It is often translated in Spanish as "pobrecito mí" (roughly "poor me").

(11.121)ka=tapirá haba=kiriá haba=kiriá go=ASS2:1SG run=COME:ITR/SG run=COME:ITR/SG hawinia ní i-a=rawhere INTER 1sg-epen=auth "(Woe's me) I'm going now!" he kept running and running. "Where am I?" he said.' TXT 061:662-663 bi=**tapirá** (11.122)habiha=ro?á tsi kiá ha boti=ní=ki Р5 REP 3 grab=ASS2:1SG lower=REMP=DEC:P sure=LIMIT "(Woe's me) I'm going to get it" "Yeah, you should" (she said) no more

There are two reasons to not regard $=tapir\acute{a}$ as synchronically consisting of $=t\acute{a}pi$ and $=r\acute{a}$. One reason is semantic; its not clear from the examples I have that punctuality is

and then he went down.' TXT 068:223

a necessary meaning of this morpheme. Rather, $=tapir\acute{a}$ seems to encode the associated concept of immediacy in that the speaker is always in the midst of performing the action as she uses a $=tapir\acute{a}$ construction. More evidence for treating $=tapir\acute{a}$ as one morpheme comes from its syntagmatic distribution. Adverbial enclitics like =tiki(n) 'again' cannot intervene between a verb stem and $=t\acute{a}pi$, but such enclitics can intervene between a verb stem and $=tapir\acute{a}$ as in the text example in (11.123).

(11.123)
$$o_Sa$$
 ha $=?\acute{a}=ka$ wia wia $i=tik\acute{a}(n)=no$ sleep 3 =NMLZ:PST=REL morning morning be=AGAIN=CONCUR $ka=tik\acute{a}(n)=tapir\acute{a}$ i tsi $ki\acute{a}$ ha $=n\acute{i}=k\acute{a}$ go=AGAIN=ASS2:1SG say P5 REP 3 =REMP=DEC:P

'When he was sleeping as it was becoming morning, he said "Woe's me I need to go again!" TXT 061:258

Chapter 12. Associated Motion

This chapter provides a description of associated motion (AM) in Chácobo. I also discuss a related but more marginal category in Chácobo grammar called associated location (AL). The distribution of AM/AL morphemes was described in Chapter 5 (see Section 5.2.2.2 and Section 5.2.3.10). AM morphemes have three defining properties; (i) they are bound and must combine with an open class **main verb** (ii) they obligatorily associate a motion event to an event of the main verb; (iii) they encode when this motion event occurs with respect to the main verb (Koch 1984; Wilkins 1991; Vuillermet 2012; Guillaume 2006, 2008, 2016). AL morphemes are similar except that they encode a location rather than motion.

Apart from the timing of the motion event with respect to the main verb, AM morphemes have a number of other properties. They are listed below.

• **Point of reference**: The path encoded by an AM morpheme can make reference to a source and a goal. The source or goal are not necessarily the speaker or addressee but can make reference to a salient place (see Vuillermet 2012: 660); "away from" from refers to a trajectory with an explicit source; "towards" refers to a path with an explicit goal.

- Pragmatic backgrounding: This parameter refers to what extent the AM morpheme expresses backgrounded motion events rather than introduces new motion events into discourse (Wilkins 1991: 251). That an AM encodes pragmatically backgrounded motion can be seen from redundant repetition of the AM either with respect to a lexical motion verb or another AM morpheme (called 'echo') (Guillaume 2009). Following the discussion on tense and temporal distance, I will refer to so-called echo phenomena as discourse perseverance.
- **Aspect**: AM morphemes can affect the aspect of the event of the main verb. For instance, they can force the main verb to be durative, pluractional or completive. The aspectual interpretation seems to depend on the aspectual class (stative, activity, accomplishment, achievement) of the verbal predicate construction.

All of the concurrent, subsequent, counterdirectional and distributive motion AM morphemes displays transitivity harmony (see Chapter 4; see Valenzuela 2017), which will be described below. The prior motion AM morphemes do not display transitivity harmony.

Table 12.1. Associated motion morphemes

| Temporal relation | Further | Orientation to | AM clitic | |
|-----------------------|--------------|----------------|-----------------------------------|-----------|
| with event | semantic | point of | (left hand variant refers to | |
| | contribution | reference | intransitive singular form, right | |
| | or syntactic | | hand variant refers to transitive | |
| | restriction | | plural form) | |
| concurrent | durative | NA | =kana~=bona | GOING |
| | | towards | =hona~=bɨna | COMING |
| subsequent | completive | away from | =kaya~=baya | DO&GO |
| | | towards | =kiria~=bɨria | DO&GO |
| counterdirectional | | towards+away | =koná~=bo?oná | CNTRDIR |
| | | from | | |
| distributive | pluractional | | =kó~=bo?ó | DIST |
| prior | imperative, | away from | =tá~=katá | DO&GO |
| | same subject | | | |
| concurrent/subsequent | | towards | =tiari | COME_VIEW |

12.1.CONCURRENT MOTION: =kaná~=boná, =honá~=biná

Chácobo has two concurrent AM morphemes that form a natural class. They share two

properties; (i) they encode the same temporal relation with respect to the main verb; (ii)

they encode similar aspectual semantics on the main verb. The concurrent andative displays

transitivity harmony as follows; $=kan\acute{a}$ surfaces when the main verb is intransitive and has

a singular S argument; =boná surfaces when the main verb is transitive and/or when the

main verb has a plural pronominal {A,S} argument. The allomorphy and basic temporal

relations of the andative are illustrated in (12.1) below.

(12.1) a. $tsa?o=kan\acute{a}=ki$

sit=GOING:ITR:SG=DEC:NONP

'He sits down (repeatedly) while going.'

b. $tsa?o=bona=k\acute{a}(n)=ki$

sit=GOING:TR/PL=PL=DEC:NONP

'They sit down (repeatedly) while going.'

c. tsaya=**boná**=ki

see=GOING:TR/PL=DEC:NONP

'S/he sees (him/her/them) while going.'ELIC

The concurrent venitive displays transitivity harmony as follows; $=hon\acute{a}$ surfaces when the main verb is intransitive and has a singular S argument; $=bin\acute{a}$ surfaces when the main verb is transitive and/or has a plural pronominal $\{A,S\}$ argument. The allomorphy and basic temporal semantics of this morpheme are shown in (12.2).

(12.2) a. $tsa?o=hon\acute{a}=ki$

sit=COMING:ITR:SG=DEC:NONP

'He is seated while coming.'

b. $tsa?o=bina=k\acute{a}(n)=ki$

sit=COMING:TR/PL=PL=DEC:NONP

'They are seated while coming.'

c. tsaya=biná=ki

see=COMING:TR/PL=DEC:NONP

'S/he sees him/her/them while coming.' ELIC

Concurrent AM morphemes seem to encode backgrounded information. This is shown in Section 12.1.1. A basic characterization of the semantics of the concurrent AM morphemes in Chácobo is that they encode that a motion event occurs simultaneously with the main event which must be construed as atelic (Chapter 11). This is shown in Sections 12.1.2-12.1.4. Concurrent AM morphemes display an interesting interaction with verbal reduplication, which is described in Section 12.1.5. The combination of concurrent AM

morphemes with motion verbs (deictic and manner) is described in Section 12.1.6. The concurrent AM morphemes also encode a point of reference and path which is described in Section 12.1.7.

12.1.1 Pragmatic Backgrounding

Concurrent AM morphemes tend to express backgrounded motion events. Often, they anaphorically refer back to lexical motion verbs that introduce the motion event in the discourse. This can be illustrated with the text example in (12.3) which describes a woman who left her house crying after her husband had been killed by her mother. Her initial motion event leaving the house is described in (12.3a) with the lexical motion verb ka 'go'. She continues to walk away from the house while she cries. Since her movement is backgrounded old information it is expressed with the concurrent AM morpheme $=kan\acute{a}\sim=bon\acute{a}$ in (12.3b) rather than expressed as a lexical verb as it is in (12.3a).

(12.3) a.
$$ka=ki$$
 $riso=ki$ $bini$
 $go=PRIOR:D\{A,S\}$ $die=DEC:P$ husband

'She (the woman) left (lit. went) (because) her husband (the snake) had $died...$ '

no?o bɨnɨ

1sg:gen husband

'She was crying while going on the road (saying) "my husband my husband!" TxT 050:288

Like tense morphemes and some aspect and TDM morphemes, concurrent AM morphemes display discourse perseverance whereby they are repeated redundantly throughout discourse. This is shown in the sentence in (12.4).

As with the andative, the concurrent venitive AM morphemes also display discourse perseverance. This can be seen in (12.5) below where the venitive AM repeats redundantly throughout the discourse encoding the movement of the protagonist of the story (Nahuapaxahua).

(12.5)toká~toká=pao**=honá** ha $=2\acute{a}=ka$ hawí do so~do so=HAB=COMING:ITR:SG 3 =NMLZ:P=REL 3sg:gen naba=' sao kɨpi~kɨpi**=bɨna** ha relative(s)=GEN bone lean against~lean against=COMING:TR/PL 3SG wa=2a=kakapiti= $\int ita=ma=ni=ki$ caiman=ERG TR=NMLZ:P=REL cross=CAUS=REMP=DEC:P 'Like this he was coming for a long time and he was leaning (while coming) the bones of his ancestors (up against the edge of the path), and the caiman helped him cross.' TXT034:118

12.1.2 Stative/activity verbal predicate

Concurrent AM morphemes combine productively with stative and activity verbal predicates. The main event can occur throughout the whole duration of the motion event or occur just once during the motion event. For instance, the sentence in (12.6) is ambiguous with respect to whether the sitting event of the main verb extends throughout the whole duration of the motion event or not.

(12.6)
$$tsa?o=kan\acute{a}=ki$$

sit=GOING:ITR:SG=DEC:NONP

'He sat once while going.' (e.g. taking a rest)

'He was sitting while going.' (e.g. sitting in a car) ELIC

The durative meaning where the main event occurs throughout the duration of the motion event is the most common. In fact, I do not have any clear text examples of cases where stative or activity verbs do not seem to extend throughout the duration of the motion event (or else the precise timing is unspecified or difficult to discern from the translation and context). An example of a concurrent andative AM in combination with a stative verbal predicate is provided in (12.7). The verb *ofo* 'be skinny, get skinner' receives a durative interpretation in the following example and the main verb and the motion verb are concurrent.

rɨso=ki ínaka

die=dec:nonp dog

'(After the dog eats the contaminated meat), the dog (starts to) die getting skinnier while going.' TXT 114:18-19

An example of the activity verb *taşa* 'sweep' in combination with the concurrent andative AM morpheme is provided in (12.8). The motion event and the main sweeping event are described as occurring simultaneously.

An example of the venitive form combining with an activity verb is provided in (12.9). In this case the duration of the event of the main verb lines up with the duration of the associated motion event.

12.1.3 Atelicity: accomplishment to activity interpretation

In my corpus data, there are a class of default accomplishment verbal predicates that are construed as atelic in combination with a concurrent AM morpheme; they become activities without an inherent endpoint (see Chapter 11 on telicity). By default the verb stem *ria-mi* 'fill up' is telic with an inherent end point which denotes the state of its S argument being completely full (see examples in Section 8.3). However, in combination with the concurrent AM morpheme =kaná~=boná the verbal predicate is construed as an (aetlic) activity. An example of this is shown in (12.10) which is from a folk story about an anaconda that tricks people into entering him by masquerading as a canoe. The verbal predicate *ria-mi=kaná* 'filling up while going' refers to the fact that the anaconda went village to village picking up more people as he went. There is no clear endpoint in this example since the anaconda is described as just getting bigger and bigger through the accumulation of more people.

(12.10)
$$tobi\acute{a}$$
 $ria-mi=kana$ $h\acute{a}$ =no $r\acute{i}riri$ ani ha

DIST $fill_up-MID=GOING:ITR:SG$ 3 =CONCUR IDEO grow 3

= $2\acute{a}i$ $ki\acute{a}$ not \acute{i}
=NMLZ:IPV REP canoe

'Over there the canoe was growing while it (the canoe) was filling up while going (along the river picking people up) (with the sound) rërërë.' TXT 054:017

The verb *giri* 'pull out, pull towards oneself' is telic. It has an inherent endpoint that refers to an end location of an object which has been pulled out of some location and put in another. In combination with the concurrent andative clitic, the verbal predicate *giri=boná* 'pull while going' is construed as an activity in (12.11) which describes an inprocess event where a man is dragging the rope. My understanding of this sentence is that by focusing on the "pulling out" of the rope rather than the pulling out of caiman, the end point is not focused on. The rope does not have an endpoint where it is pulled out of anything. The endpoint of the whole situation is the lifting of the caiman out of the water, but this is not expressed in this sentence.

Currently, it is not clear whether the atelic activity interpretation on accomplishment verbal predicates is a necessary reading or not or whether the lack of

accomplishment interpretations in the context of a concurrent AM morpheme reflects a gap in my corpus.

12.1.4 Atelicity: Achievement to (pluractional) activity interpretation

There are a class of verbal predicates that have an obligatory pluractional reading in combination with the concurrent AMs. An illustration of this is found in (12.12). The predicate *no?iria kiyo* 'finish people' is an achievement. In combination with the concurrent clitic it receives an iterative (activity) interpretation. In the following examples *no?iria kiyo=boná* refers to multiple instances of killing.

Another example of an achievement verb in combination with the concurrent venitive AM morpheme is provided in (12.13). Similar to the case above, when the achievement verbal predicate *honi tiş-a* 'bite the man' combines with the concurrent morpheme, the interpretation is necessarily iterative; it does not refer to just one instance of biting.

Another example of the iterative construal produced through combination with the concurrent AM is provided in (12.14). In the following example the man grabs multiple paipaimichi fruits rather than just one as he comes home.

One might argue that the pluractional / iterative interpretation of the main verbs above are a result of discourse context. However, evidence from elicitation suggests that concurrent motion verbs always force an activity construal of achievement verbs. This is illustrated in (12.15) and (12.16) below. According to Caco Moreno the sentence in (12.15b) cannot refer to just one instance of stick breaking and the sentence in (12.16b) cannot refer to just one instance of monkey killing.

12.1.5 Pluractionality and reduplication

monkey do=COMING:TR/PL=DEC:P

'He came killing (multiple) monkeys.'

*'He killed a monkey on his way while coming.'

Recall from Chapter 11 (Section 11.2) that verbal reduplication in Chácobo encodes pluractionality on activity, achievement and accomplishment verbs. I presented evidence in Section 11.2.4 that stative verbal predicates receive durative rather than strictly pluractional interpretations in reduplicative constructions.

When concurrent AM morphemes combine with reduplicative constructions, they allow a pluractional reading even on stative verbal predicate constructions. Recall from Chapter 11, that a reduplicated stative verb such as tsalo 'sit' will typically receive a durative interpretation, rather than a pluractional one. However, combination with a concurrent AM morpheme such as $= kan\acute{a} \sim = bon\acute{a}$ allows a pluractional reading.

(12.17) a.
$$tsa2o\sim tsa2o=ki$$

sit $\sim sit=DEC:P$

'He was sitting.'

b. $tsa2o\sim tsa2o=kana=ki$

sit $\sim sit=GOING:ITR:SG=DEC:NONP$

*'He sat once while going.' (e.g. taking a rest)

'He was sitting while going.' (e.g. sitting in a car)

'He sat repeatedly while going' (e.g. resting many times) ELIC

An illustration of the pluractional reading over a default stative verbal predicate from naturalistic speech is provided in (12.18).

(12.18)osa~osa=**hona**=i toá tsi nobá sobo=kí sleep~sleep=COMING:ITR:SG Р5 1PL:GEN house=DAT DEM2 ka?i=tiki(n)=kiпо-а arrive=AGAIN=DEC:NONP 1PL-EPEN 'Sleeping (and waking multiple nights) while coming, from there we arrive at our house.' TXT 045:160

12.1.6 Motion verbs

The clitic $=kan\acute{a}\sim=bon\acute{a}$ cannot combine with lexical motion verbs ka 'go', ho 'come', bo 'take away, carry', bi 'bring' or ko 'hunt, wander'. They can combine with motion+manner and some motion+path verbs, however. This is shown in (12.19) and (12.20). In (12.19), the motion+manner verb haba 'run' combines with the andative concurrent morpheme $=kan\acute{a}\sim=bon\acute{a}$ to form a verbal predicate that means "run away".

(12.19) haba=kana=ikiá hawi tʃaʔi_yá_kato
run=GOING:ITR:SG=REP 3SG:GEN bro_in_law

'(After transforming into a jaguar) His brother in law ran away (from his wife)' TXT005:1093

In (12.20) the motion+manner verb wafa 'paddle' combines with the clitic = $kana\sim=bona$ to form the verb complex wafa=bona 'paddle something away'.

In (12.21), the concurrent venitive morpheme $=hon\acute{a}$ combines with the motion+path verb fifo 'pass through, visit'. In this sentence the venitive morpheme indicates the path of the S argument, rather than specifying motion.

In combination with motion+manner verbs the function of concurrent andative AMs is to deictic. For instance, the concurrent andative $=kan\acute{a}$ combines with the verb haba 'run' in (12.19) to designate the motion away from the man's house. The clitic $=bon\acute{a}$ combines with the verb wafa 'paddle' in (12.20) to designate motion away from the shore.

Combination with motion+manner verbs shows that deictic function of AM morphemes. However, andative morphemes do not have an away+from interpretation in all circumstances. This is discussed below.

12.1.7 Point of reference

The venitive seems to obligatorily require some point of reference expressing the path semantics of "towards the PR". Most of the time the andative encodes "away-from PR" semantics. However, the evidence suggests that andative encodes the away-from meaning by default. First, I will illustrate the deictic semantics of the venitive. Then I will move onto the andative.

The following sentences from a description of how Papa Yaquëxëni used to kill carayanas (non-indigenous Bolivians) can help illustrate the distinction in deictic semantics between the venitive and the andative. (12.22a) is a quotation from Papa Yaquëxëni where it is clear from context that the reference point is the speaker. Then the narrator of the story describes the movement of the boat turning around the stream *coming* towards Papa Yaquëxëni in (12.22b). In this sentence Papa Yaquëxëni is plausibly the reference point and, therefore, the concurrent venitive AM morpheme =hona~=bina is used.

- (12.22) a. tobi motoro ho=?ai=na a(k)=ki=a

 over_there motor come=NMLZ:IPV=EPEN do/kill=DEC:NONP=1SG

 "I'm going to kill (someone) over there where the motor boat is coming

 (towards me)" (said Papa Yaquëxëni)'
 - tikami = '=kab. nika=kahabí tsi naa pao surely DEM1 stream curve=SPAT=REL like this=REL Р3 tɨkamí tʃipatia**=bina**=ʔai=ka pao stream curve turn around=COMING:TR/PL=NMLZ:IPV=REL tʃibo-ʔa**=bona**=ʔai=ka naa t[arita piſa arrow-TR=GOING:TR/PL=NMLZ:IPV=REL DEM1 river little 'And then just as he (Papa Yaquëxëni) said this, he (Papa Yaquëxëni) did (pulled back his arrow) like this at the curve in the stream, as he (the stranger/brazilian) was turning the curve in the stream coming, (towards Papa Yaquëxëni), he (Papa Yaquëxëni) shot him (the stranger/brazilian) while going...' TXT 049:329-330

In the example above, the concurrent andative $=kan\acute{a}\sim=bon\acute{a}$ is used to refer to the generic motion of the protagonist, presumably away from his starting point, but the point of reference is not as clear as with the venitive morpheme.

Apart from topical participants or protagonists in narratives, a common point of reference for the towards-semantics of the venitive is the village or home of one of the

topical participants. An example where a discourse participant's home is the point of reference with a venitive AM is provided in (12.23).

continued arguing (as they were going home).'

The concurrent andative is commonly associated with away-from as its reference point and path. However, evidence from discourse and elicitation suggest the away-from point of reference is a pragmatic default interpretation and that the reference point and path of the concurrent andative is unspecified (see Wilkins & Hill 1995). Evidence for this is provided in (12.24b). In the discourse context the salient reference point are the women (the man's wife and daughters) rather than the jaguar. That the women (the man's wife and daughters) are a salient reference point is suggested by prior discourse context in (12.24a) and the fact that the venitive lexical verb *ho* 'come' is used to describe the jaguar's movement in (12.24b). However, the andative concurrent morpheme $=bon\acute{a}$ is used to background the jaguar's motion *towards* the reference point in (12.24b)

(12.24) a. awi biboko=só hiwi kinia=tapi=?ikiá honi
wife go_ahead=PRIOR:A tree press_against=PNCT=REP man
'He (the man) went ahead of his wife (and daughters) and hid behind (lit.
pressed against) a tree immediately (in order to hide from the jaguar).'

b.
$$h \acute{o} = ki$$
 $h \acute{o} = ki$ $h \acute{o} = ki$

smell=GOING:PL/TR=DEC:NONP

'He (the jaguar) is <u>coming</u>, he (the jaguar) kept <u>coming</u>, he (the jaguar) kept <u>coming</u>, surely he is smelling <u>while going/coming</u> where the women have gone.' TXT 050:204-206

Another example that illustrates the lack of path specification for the andative morpheme is provided in (12.25). In this sentence the concurrent AM combines with the verb root tsimo 'become dark', the moving figure is the sky which is darkening. If the concurrent AM only encoded andative the following sentence would refer to the loss of darkness since the darkness would be traveling away from the reference point (the speaker). However, in this case =kana simply refers to generic motion.

(12.25)
$$ha-to=bita=so$$
 $i-a=ri$ $náka\sim náka=ki$

3-EPEN=COM=A 1SG-EPEN=AUG chew~ chew=PRIOR:D{A,S}

 $tsimo=kana$ $ha=ki$

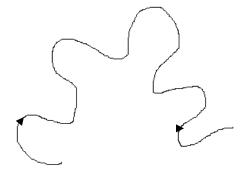
become_dark=GOING:ITR:SG 3 =DEC:P

'I myself was chewing (coca) with them and it (the sky) darkened along the

way (lit. it (the sky) darkened while going/coming).' TXT 093:048

In some Pano and Takana languages there is a category of AM that Guillaume (2017: 228, 236-239) refers to as "wandering about" (Sp. deambulando) distinct from the andative. However, my consultants associate wandering-about semantics with the andative. When my consultants were asked to describe events in Chácobo that involved wandering nondirectional motion, they used the concurrent andative =kana~=bona (rather than the counterdirectional or distributive AM morphemes). For instance, a participant that follows a path depicted in Figure 12.1 while performing some action will be described with an andative AM.

Figure 12.1. An example of a translation of this sentence is provided in (12.26)



(12.26) mɨra=bona=ʔái=na
look_for=GOING:TR/PL=NMLZ:IPV=EPEN
'He was looking while going.' ELIC

Based on the data from naturalistic speech and my consultants' judgements concerning the trajectory of events modified with the concurrent morpheme, I argue that the andative does not *encode* a point of reference. I will continue to refer to it as the andative because the andative (away-from) interpretation seems to be a pragmatic default. I will show below that the venitive (concurrent and subsequent) and the counterdirectional AM morphemes have much more restricted semantics.

12.2.Subsequent =kayá~=bayá, =kiriá~=bɨriá

Chácobo has two subsequent AM morphemes that form a natural class with respect to the temporal relation to have with the main verb and the aspectual semantics they encode. The concurrent andative displays transitivity harmony as follows; $=kay\acute{a}$ surfaces when the main verb is intransitive and has a singular S argument; $=bay\acute{a}$ surfaces when the main verb is plural and/or when the main verb has a plural pronominal $\{S,A\}$ argument. The allomorphy and basic temporal relations of the andative are illustrated in $\{12.27\}$ below.

The concurrent venitive displays the following transitivity harmony; =hona surfaces when the main verb is intransitive and has a singular S argument; $=bin\acute{a}$ surfaces when the main verb is transitive and/or has a plural pronominal $\{A,S\}$ pronominal argument. The allomorphy and basic temporal semantics are shown in (12.28).

(12.28) a.
$$tsa?o=kiri\acute{a}=ki$$

 $sit=DO\&COME:ITR/SG=DEC:P$
'He sat (got up) and then came.'
b. $tsa?o=biria=k\acute{a}n=ki$
 $sit=DO\&COME:TR/PL=PL=DEC:P$
'They sat (got up) and then came.'

c. $pi=biri\acute{a}=ki$ eat=DO&COME:TR/PL=DEC:P

'He ate it and then came.'

Subsequent AM morphemes encode that a motion event occurs after the completion of the main verb event. A basic illustration of the semantics of the andative subsequent AM is provided in (12.29). The AM morpheme $=bay\acute{a}$ associates a motion event that occurs subsequent to the event denoted by the verbal predicate $gani\ bi$ - 'grab pubic hair'.

then REP 3SG:GEN pubic_hair 3 grab=**DO&GO:TR/PL**=REMP=DEC:P

'Then he (the man) grabbed her (his grandmother's) pubic hair and then

went (home).' TXT 083:104

A basic illustration of the semantics of the andative subsequent AM is provided in (12.30). The AM morpheme $=kiri\acute{a}$ associates a motion event that occurs subsequent to the event denoted by the verbal predicate nii 'stop, stand'.

In (12.29) and (12.30) above, the AM morpheme is the only morpheme encoding motion in the sentence. In naturalistic speech, it is most common for subsequent AMs to occur in asyndetic coordinate constructions (see Section 5.2.2.3). In such constructions they combine with a verb complex that is not adjacent to the clause-type/rank morpheme. This is illustrated in (12.31). The coordinated verb complexes are in square brackets.

In the example above, the clitic $=bay\acute{a}$ does not uniquely encode the motion event, which is redundantly expressed in the motion+manner verb haba 'run'. The clitic $=bay\acute{a}$

encodes that the verbal predicate roos a(k) 'shove inside' is complete before the event of the verb in the right-most constituent of the coordinate construction.

In the context of subsequent motion in asyndetic coordinate constructions, it is also very common for the right-most verb to be a deictic lexical motion verb as shown in (12.32) where the motion event denoted by the clitic $=bay\dot{a}$ is expressed redundantly by the lexical verb root $ka\sim bo$ 'go'.

Subsequent motion morphemes are most frequently used in the context of asyndetic coordination, where very often their semantics could be seen as redundantly expressed in the verb head of the right-most constituent as in (12.31) and (12.32) above. Following Wilkins (1991:251) I view the frequent apparently redundant expression of subsequent AM morphemes as an expression of the fact that the primary function of AM morphemes is not to elaborate information about a motion event, but rather to show how the motion of participants is timed with respect other actions. This issue is discussed in detail in Section

12.2.1. That subsequent AMs encode subsequent motion and not some other temporal relation is defended in Section 12.2.2. Subsequent AMs can combine with motion verbs which is shown in Section 12.2.3. The relationship between reduplication, pluractional semantics and subsequent motion is discussed in Section 12.2.4.

12.2.1 Asyndetic coordination in discourse context

An example of redundant expression of a subsequent AM is provided in (12.33). In this sentence there is one motion event which is indexed by two subsequent AM morphemes. It can be seen that the subsequent AMs encode the temporal order of each of events with respect to one motion event, but they do not encode their own motion event. The shooting and burying of the monkey occur in the same general location. One andative motion event occurs after both of these actions are completed.

'After going up, they (the men) shot a monkey, buried it (the monkey) and then went (away/home).'

(lit. After going up, they shot a monkey <u>and then after went</u>, they buried it again <u>and then went</u>.') TXT: 003:033

Another illustration of redundant expression of subsequent AMs is provided in (12.34). There are three morphemes that index and ative motion in this sentence. From the context and the meaning of the sentence there are at most two separate motion events assuming that Caco and Corachio's stopping to build a house implies restarting a new motion event. The primary function of the AM morphemes in these sentences is to index when the passing by and the building of the house occurred with respect to the motion event indexed by the lexical verb $ka\sim bo$ 'go'.

(12.34)
$$natani=bay\acute{a}$$
 tsi $gobo$ $a(k)=bay\acute{a}$ $pass=DO&GO:TR/PL$ P5 house $do=DO&GO:TR/PL$ tsi $ki\acute{a}$ ha $bo=kan=n\acute{i}=k\acute{i}$ P5 REP 3 $go=PL=REMP=DEC:P$

'After passing by (their mother's house), they (Caco and Corachio) built a house, and then kept going (lit. went).'

(lit. 'They passed by (their mother's house), and then after went, they built a house and then after went, they went.') TXT 026:0220

Examples of venitive subsequent AM in an asyndetic coordinate context are provided in (12.35). In (12.35a) there is one venitive motion event. It is indexed once with the subsequent venitive AM clitic =kiria and once with the lexical verb root $ho\sim bi$ 'come'. In (12.35b) there is one venitive motion event indexed once with the clitic =kiria and once with the lexical verb root ka i 'arrive'.

(12.35) a.
$$tana=kiri\acute{a}$$
 bo ha $kan=2\acute{a}$ tsi tres bari
fish=DO&COME:ITR:SG go 3 PL=NMLZ:P P5 three days
 $mai='$ ha $ho=n\acute{i}=ki$
ground=SPAT 3 **come**=REMP=DEC:P

'When one fished it was three days by foot (lit. on the ground they had travelled three days) before one was (close to) coming (back home).'

b.
$$mai=$$
 no $ho=2\acute{a}=ka$ oş $a=kiri\acute{a}$

ground=SPAT 1PL come=NMLZP=REL sleep=DO&COME:ITR:SG

 tsi nob \acute{a} şo $bo=k\acute{i}$ no $ka2\acute{i}=n\acute{i}=k\acute{i}$

P5 1PL house=DAT 1PL $arrive=REMP=DEC:P$

'When we had been coming on the ground, we slept (and then came) and arrived at our house.' TXT 102:35-36

A particularly extreme example of redundant indexation of subsequent AMs is provided in (12.36c) which is from an interview between Miguel Chavez and a speaker (Pëa) of Siete Almendros. The example is complex and thus I present the previous discourse context in (12.36a-b) in order to help clarify the meaning of the sentence. In (12.36a), Miguel asks Pëa whether next week he is going to harvest his farm plot in the nearby community of Alegre. Pëa responds in (12.36b) that he is going to do this next week. In (12.36b) he clarifies providing more details concerning all of the actions that he and his family are going to perform when they are outside of their community before coming back home. In this sentence there is one venitive motion event that is indexed four times; three times by the subsequent AM morpheme =biria and one time by the deictic lexical verb $ho\sim bi$ 'come'. He restates that he and his family are going to harvest their crop near Alegre (a=biria 'do and come'), then in Alegre he is going to pay a family member's debt ($kuenta\ kopi=biria\$ 'pay debt and come'), then he will harvest another crop closer to Siete Almendros ($toa\ wai\ a=biria\$ 'do that crop') before coming home.

(12.36) MIGUEL

ho=?ái=ka semana=' náa tsi wái tsi a. P5 farm plot P5 DEM1 come=NMLZ:IPV=REL week=SPAT a(k)=ika=?aí alegre= no do=CONCUR:S go=INTER:NONP:2SG alegre=SPAT 'During the coming week are you going to harvest (lit. do) your farm plot

PËA

in Alegre?'

- b. haa naa semana=' a(k)=i ka=ki=a

 yes DEM week=SPAT do=CONCUR:S go=DEC:NONP=1SG

 'Yes next week I am going to do it (harvest the farm plot in Alegre).'
- a(k)=biriaha-to c. ipaisa hawi kuenta do=DO&COME:TR/PL 3-GEN:PL uncle 3sg:gen account kopi=**biriá** toa wai a(k)=bɨriá pay= DO&COME:TR/PL DEM2 farm plot do=DO&COME:TR/PL ha?arí ho = tiki(n) = kinia=notsi no-a P5 again **come**=AGAIN=DEC:NONP 1PL-EPEN here=SPAT 'We are coming here again after doing it (harvesting the farm plot in Alegre), paying the debt (account) of their uncle, and harvesting that farm plot (the one in Siete Almendros).'

(lit. After we do it (harvest the farm plot in alegre) we will come, and after

we pay their uncle's account we will come, and after we do that farm plot

(the one in Siete Almendros) we will come, and we will come here again.).'

Txt101:108-110

12.2.2 Completive aspect

Subsequent AM morphemes encode that a motion event occurs after the completion of the

event of the main verb. The motion event can still occur before or during the event of the

main verb, however, as long as the main event does not extend throughout the whole time

frame of subsequent motion. The various translations for the sentence in (12.37) are meant

to illustrate the various temporal interpretations compatible with subsequent AM motion.

(12.37) $tsaya = bay\acute{a} = ki$

see=DO&GO:TR/PL=DEC:P

- (i) 'S/he saw him/her/them on the way.'
- (ii) 'S/he visited him/her/them for a while and left.'
- (iii) 'S/he looked/glanced at him/her/them and then went.'
- (iv) *'S/he was looking at him/her/them the whole time s/he was going.'

966

Thus, the subsequent AM morphemes in Chácobo do not allow concurrent interpretations in the sense of a main event occurring concurrently throughout the whole period of the motion event as is described for cognate morphemes in Shipibo-Konibo (Valenzuela 2003: 159; cited in Guillaume 2016: 153). As a corollary to obligatory subsequent motion, subsequent AMs encode the completion of the main event. I illustrate this with a number of examples from verbs of different semantic classes.

Examples of andative subsequent motion are provided in (12.38) and (12.39). The verbal predicates in these examples generally have stative or activity interpretations without an explicit culminative. However, in these examples they are interpreted as completed.

(12.38)
$$nia=r\acute{a}$$
 $wist\acute{i}$ $oga=kay\acute{a}$ ha here=AUTH one sleep=DO&GO:ITR:SG 3 $bo=tiki(n)=ka(n)=2=it\acute{a}=ki$ $go=AGAIN=PL=EPEN=RECP=DEC:P$

'Here (for certain) one (of the traveling men) slept and then went again.'

Txt117:061

Examples of venitive subsequent AM morphemes in combination with verbs of a similar semantic class (stative/activity) are provided in (12.40) and (12.41). In each of these examples the verbal predicates must be completed before the motion event begins.

Examples of andative subsequent AM morphemes with verbal predicates that typically are telic (accomplishment and achievement verbs) are provided in (12.42) and (12.43).

(12.42) habi toa pasta=bayá tsi haʔarí i
surely DEM2 clean=DO&GO:TR/PL P5 again 1SG
$$ka=tiki(n)=yami(t)=ki tana a(k)=ti$$
go=AGAIN=DISTP=DEC:P bridge make=NMLZ:PURP
'Surely after I cleaned that (the patio of my house), I went again to (help)
build the bridge.' TXT 099:041

Examples of andative subsequent AM morphemes with verbal predicates that typically are telic (accomplishment and achievement verbs) are provided in (12.44) and (12.45).

There are no examples in my corpus where the main event continues throughout a motion event when the subsequent AM morpheme occurs. The examples above illustrate that this generalization holds across a variety of different semantic types of verbs.

12.2.3 Motion verbs

Subsequent AM morphemes cannot combine with the following deictic motion verbs; $ka\sim bo$ 'go'; $ho\sim bi$ 'come'; ko 'wander, hunt'. Subsequent AM morphemes combine with all other types of motion verbs. Examples of andative subsequent AM combining with motion verbs are provided in (12.46), (12.47) and (12.48).

In (12.46) the andative AM clitic $= kay\acute{a}$ combines with the verb fita 'cross', a verb which implies motion. The speaker describes crossing the river and then continuing to travel away from where the jaguar was.

(12.46)rabikisi fita=**kayá** tsi kaa ... kamáno kása other shore cross=DO&GO:ITR:SG P5 1SG go jaguar angry saípi i=ki=natsi SO naa oa siin P5 DEC DEM₁ machete DEM2 AUX=CONCUR:A=EPEN IDEO 'I crossed to the other shore and then went away (from the jaguar) ... the jaguar ... this one was angry, because of the sound of the machete "see"" TxT099:171

Another example of an andative subsequent AM in combination with a motion verb is provided in (12.47) from the folk story of Nahuapaxahua. In this case the AM morpheme expresses that motion continued horizontally after Nahaupahuaxa jumped vertically onto the patawa fruit tree.

The following example is also from the folk story of Nahuapaxahua. The verbal predicate *hiwi tʃaʔita tia* 'go around a big tree' describes the motion of an anteater that told Nahuapaxahua he was going to help guide him to his mother's village. The subsequent AM indexes a motion event that is separate from the motion event encoded by the verb *tia* 'go around'.

A case where a venitive AM morpheme combines with a motion verb is provided in (12.49) from the folk story of the thunder women. The verb tsiki 'come out' describes the thunder woman emerging from the darkness and the subsequent AM = $kiri\acute{a}$ indexes the thunder woman's movement towards the village.

come_out-ITR=DO&COME:ITR:SG=IMM:ITR=REP

'The woman is pretty (lit. nice), the thunder woman is coming, she is coming out (of the darkness) and coming towards us.' TXT 050:505

In all of the examples above the motion indexed by the subsequent AM is understood as continuing after the completion of the motion expressed by the main verb. The function of the subsequent AM morphemes in combination with motion verbs is, therefore, not necessarily purely deictic. For instance, in (12.47), the subsequent AM is the

only morpheme expressing the andative motion event that occurs after Nahuapaxahua has climbed the patawa fruit tree.

12.2.4 Pluractionality, reduplication and repetition

Subsequent AMs are more perfective than concurrent AMs with respect to the aspectual semantics that they impose or at least tend to impose on the events of the main verb. Aspectual constructions in Chácobo on the extreme end of the imperfective-perfective continuum (Chapter 11) are incompatible with durative or pluractional interpretations (see Section 11.8 and Section 11.9). However, despite imposing completive semantics on the main verb, main verb events are not incompatible with durative or pluractional semantics when they combine with subsequent AMs.

An example of a main verb with a pluractional interpretation in combination with a subsequent AM is provided in (12.50) below. In the following example, pluractionality is encoded through reduplication of the main verb *paşka* 'move one's body, wiggle around'.

the other side away from the caiman).'

Another strategy for encoding pluractional events in combination with subsequent AMs is to repeat the entire verb complex with the AM marker as shown in (12.51) which describes an agouti lifting his buttocks up everytime he starts to move along a path again. As long as the pluractionality includes the motion event, this strategy is acceptable.

TxT061:611

laughed at him (because of this).' TXT 034:146

12.3. COUNTERDIRECTIONAL =KONÁ~=BO?ONÁ

The counterdirectional encodes movement in opposing directions. Counterdirectional AM morphemes display transitivity harmony as follows: $=kon\acute{a}$ surfaces when the main verb is intransitive and has a singular S argument; $=bo?on\acute{a}$ surfaces when the main verb is transitive and/or when the main verb has a plural pronominal $\{S,A\}$ argument. This is illustrated below.

(12.52) a. $tsa?o=kon\acute{a}=ki$

sit=CNTRDIR:ITR:SG=DEC:NONP

'S/he comes, sits down and leaves'

b. tsa?o=bo?ona=kán=ki

sit=CNTRDIR:TR/PL=PL=DEC:P

'They come sit down and leaving from opposite directions.'

c. tsaya=**bo?oná**=ki

see=CNTRDIR:TR/PL=DEC:P

'He came and visited him/her/them and then went.'

The counterdirectional has different interpretations depending on the semantic class of the verb and the number and definiteness the of participants in its clause. Its core

meaning relates to translational motion (Section 12.3.1), but the morpheme has a number of metaphorical extensions (Section 12.3.2).

12.3.1 Motion: reversive and curved trajectories

The counterdirectional expresses two different types of motion trajectories; reversive and curved path. What unites these motion events is that they all involve motion in contradictory directions. In a reversive meaning "the motion systematically ceases while the action coded in the lexical root is performed." (Rose 2015: 140) An example of this is illustrated in (12.53). The counterdirectional clitic $=kon\acute{a}$ combines with the verb afi 'bathe' which refers to the fact that Caco plans to go to the river to bathe and return to the same spot.

As in other languages with reversive motion, counterdirectional morphemes are often rendered as "for a short while" in translation (Rose 2015: 140-141). The semantics of contradictory motion is still maintained in such cases.

$$(12.54) tsa?o=kon\acute{a}=ki$$

sit=CNTRDIR:ITR:SG=DEC:NONP

'He comes and sits (for a short while) and then goes (back from where he came).' ELIC

In contrast to strictly reversive motion, however, the counterdirectional allows the main event to occur throughout the motion event. This is illustrated in (12.55). The sitting event does not occur throughout the motion event encoded by $=kon\acute{a}$ in the verbal predicate tsa2o=kona 'come and sit and go'. However, the panther is panting throughout the motion events, and thus goo 'pant' does not interrupt the motion, but rather occurs throughout.

(12.55)
$$hakiriki$$
 $tana$ $tsa?o=kona=?á$ tsi $niri$ after_that distance sit=CNTRDIR:ITR:SG=NMLZ:P P5 this_way $soo=kona=?á$ tsi $kiá$ $no?ó$ breathe=CNTRDIR:ITR:SG=NMLZ:P P5 REP 1SG:GEN $ia=ri$ $tsaya=kan=wi$ $i=tsi=ikiá$ lice=TOO look=PL=IMPER say=NOW:ITR/SG=REP

'When he came and sat before going he came panting before going, (and then got up and said) "look at my lice as well!" (said the jaguar).'

The counterdirectional can encode a wider range of motion situations than the reversive. It can refer to circular motion or motion with a curved trajectory (e.g. Zariquiey 2011: 407 for Kakataibo). This is illustrated in the sentence in (12.56) which refers to someone serving chicha to a group of men sitting in a circle. Note that it is typical for the Chácobo to sit in a circle while drinking chicha. The custom is for one person at a time to go around the circle offering chicha which is what the following scene described. The motion event is encoded by the counterdirectional =bo?oná.

TXT 026:082

'When he arrived he greeted them and offered them chicha (going around in a circle where they were seated passing it around).' TXT 001:006

The counterdirectionality of the motion need not be performed by one participant.

The following example describes two Sirionos that outrun and then close ranks on a tapir

running at the animal from opposite directions. Here the verb root *bibo* 'interrupt' combines with the counterdirectional in order to encode the fact that the Siriono are running from opposite directions at the tapir.

'After the Siriono ran together with the tapir, surrounding the tapir on opposite sides, they grabbed him and cut the tapir's neck.' TXT058:522

Another example of the counterdirectional AM encoding circular motion from multiple directions simultaneously is provided in (12.57). The following example is from the story of Maina, the people who lived underneath the earth. After the Chácobo found their villages underground, they lit fires with magical peppers to smoke the Maina out to kill them. The following sentence describes how the smoke approached the Maina from all directions. The counterdirectional $=kon\acute{a}$ combines with the verb bito 'meet' to express the fact that the smoke came at the Maina from multiple directions.

In certain contexts the main event does not have to be performed. Rather the counterdirectional can express that a participant was preparing to perform an action but reversed their decision. This is illustrated in the following story about a family that raises a baby jaguar. It describes the jaguar's grandmother who moves to kiss the baby jaguar but

obsessively.' TXT 007:248

then pulls back from this action without performing it as the jaguar bares her teeth at the grandmother.

(12.59)
$$ha-ki$$
 $rani=kona$ $há=ka$ $ha-ki$

3-DAT $kiss=CNTRDIR:ITR:SG$ $3=REL$ $3-DAT$
 $rani=kona$ $há=ka$ $nika-wa=ta=pama$
 $kiss=CNTRDIR:ITR:SG$ $3=REL$ $like_this-V:TR=SHORTLY=CONCUR$
 $hato$ $iwati$ gao $a(k)=tápi$
 $3PL:GEN$ $grand_mo$ bone $do=PNCT$
 kia $ha=wa=ni=ki$
 REP $3=TR=REMP=DEC:P$

'She (the grandmother) went in to kiss her (the jaguar) and pulled back, she went into kiss her (the baby jaguar) and pulled back, everytime her grand mother did this, she (the baby jaguar) would immediately bare her teeth at her (lit. show her teeth)' TXT 033:106-108

In elicitation contexts I have found that counterdirectionals are incompatible with reduplication (unlike the distributive AM morpheme described in Section 12.4 below). However, it seems that there are some apparently lexicalized forms that allow reduplication. An example of reduplication of a verb complex with a counterdirectional AM is provided in (12.61).

12.3.2 Metaphor

Counterdirectionals do not necessarily imply literal motion. They have metaphorical extensions associated with deceit, lack of commitment, or alternative motives on the part of the {A,S} agent. For instance, the combination of *tfani* 'converse' with the counterdirectional AM =kona implies conversing with motives that are not beneficial to the addressee. The verb complex *tfani=kona* 'converse counterdirectionally' is typically used to describe someone who makes small talk as a prelude to asking for a favor, for instance. Another example is the verbal predicate *tsaya=bo?ona* 'see counterdirectionally', which according to Caco Moreno is typically used to describe men or women who visit a household under false pretenses; they are interested in sleeping with someone who lives there but pretend to be interested in something else.

An example from my corpus of a clearly metaphorical use of the counterdirectional is provided in (12.61). It refers to Nahuapaxahua who sits down to drink chicha and

converse with women of the village but only because he is interested in asking them to make magical baskets (which as it turns out will be necessary to bring their husbands back to life).

12.4. DISTRIBUTIVE =*K***ó**∼**=***B***o?ó**

The distributive AM construction encodes that an event took place in distributed in different places while the $\{S,A\}$ was moving. The distributive displays transitive harmony, however following the general pattern; $=k\dot{o}$ surfaces when the main verb is intransitive and has a singular S argument; $=bo?\dot{o}$ surfaces when the main verb is plural and/or when the main verb has a plural pronominal $\{S,A\}$ argument. The distributive conditions obligatory reduplication on the verb complex and is obligatorily conscripted in reduplicative contexts, meaning that it must occur on both of the reduplicated verb complexes (the reduplicant and

the base) (see Section 6.4.2 on the concept of conscription). Illustrative examples from elicitation are provided in (12.62) and (12.63).

(12.62)
$$tsa?o=k\acute{o}-k\acute{o}=k\acute{o}=k\acute{o}$$
 $sit=DISTR:ITR:SG\sim sit=DISTR:ITR:SG=DEC:NONP$

'He's (going around) sitting down everywhere (e.g. in every house)'

 $tsaya=bo?\acute{o}\sim tsaya=bo?\acute{o}=ki$
 $see=DISTR:TR/PL\sim see=DISTR:TR/PL=DEC:NONP$

'He is looking around everwhere (e.g. throughout the whole village).'

Distributive AM constructions are not well attested in my corpus. An example from my corpus is provided in (12.64). The speaker describes a woman's mother crying while looking for her daughter as she looks in multiple locations in the jungle.

Another example of distributive motion is provided in (12.65), which describes the practices of an old Chácobo man before he was hunted by the Maina. The distributive AM construction is used to express the fact that he sang everywhere he went.

AUX=DISTR:ITR:SG=REP

'When he (the old Chácobo) put the the feather of the currassow in his ear hole, and he (the old Chácobo) went about singing the song of the currassow.' TXT 003:018

An example of the plural allomorph from the corpus is provided in (12.66) below. This sentence is from the story of Caco and describes how when Caco was a child him and his brother Corachio used to play about in the jungle such that their mother could not get them to eat. Here the distributive construction is used to describe the brothers playing in multiple places.

i?i=bo?o i?i=bo?o=kan=(?)á=ka ma?itsa

play=DISTR:TR/PL play=DISTR:TR/PL=PL=NMLZ:P=REL in_vain

'When they (Caco and Corachio) were playing about going in different locations, their mother tried to feed (lit. make them eat) in vain.' TXT

111:176

12.5. PRIOR ANDATIVE =TA(N)

The prior andative *tan likely reconstructs to Proto-Pano (Guillaume 2017). A likely reflex of this morpheme is the formative =t an in Chácobo. The formative =t a(n) in Chácobo is associated with different meanings depending on the construction it occurs in, one of which is the prior andative. Older speakers (approximately 70 and over) retain the prior motion reading across all of the constructions, but for younger speakers the AM meaning is only consistently present in imperatives and intentional constructions. The non-AM readings that are now associated with this formative refer to the duration of the event (for a short period) or the timing of the event with respect to another (quick succession). Table 12.2 summarizes the different meanings associated with the formative =ta(n) depending on the construction. I discuss the prior motion readings first and then the other non-AM meanings after.

Table 12.2. Meanings associated with the formative $=t\acute{a}n$ for younger (approximately <70 year old speakers) across different construction types.

| Construction | Clause-type/rank morpheme | Meaning |
|--------------------------|---|-------------------------|
| Main clause intentional | Ø, = 'no | Prior motion |
| Main clause imperative | Ø, =w í | Prior motion |
| Main clause declarative | =ki, =ki | For short period |
| Nominalized clause | =?á, =?ái | For short period |
| Same subject clause | $=p\acute{a}ma,=?\acute{a}s,=s\acute{o},=(?)i,=k\acute{i},$ | Quick succession, |
| | =nosparí | Prior/Concurrent motion |
| Different subject clause | =kɨ, =no, =noṣparino | Quick succession, |
| | | Prior/Concurrent motion |

It is not clear to me whether the formative =ta(n) should be regarded as the same polysemous morpheme across all of these constructions or as distinct morphemes that are restricted in their distribution. I treat all of meanings associated with the formative =ta(n) in this section because of their likely historical connection. In light of this problem, a note on the allomorphy of =ta(n) is in order. The only case where the final /n/ surfaces is when the formative ta(n) is left adjacent to the concurrent same S marker =(?)i (see Section 6.1.2 on latent coda consonants). If one assumes there are actually multiple homophonous morphemes restricted to certain constructions, then in some constructions (e.g. the imperative) the formative $=t\acute{a}(n)$ should actually be written as $=t\acute{a}$.

12.5.1 =ta(n) in imperatives

Prior motion in imperative constructions is illustrated in (12.67) and (12.68). The norm for such constructions is that there is no overt imperative marker. It is for this reason that in such cases the $=t\acute{a}(n)$ could itself be understood as encoding imperative semantics (see Section 4.2.3).

While the clitic $=t\dot{a}(n)$ encodes imperative prior motion in the examples above there are some contexts where it seems to only encode an imperative function. For instance (12.67) is uttered in the context of a story where the addressee's mother lives in another village. (12.68) was addressed to Paë with reference to a merchant selling gasoline approximately 50 meters from the speaker and the addressee. The imperative =ta(n) can occur on deictic motion verbs where it seems to be redundant, as illustrated in (12.69).

(12.69)
$$ka=tiki(n)=t\acute{a}(n)$$
 $tf\acute{a}?i$ $go=AGAIN=IMPER:GO\&DO$ in_law 'Go again, in law.' TXT 034:013

The clitic = $t\dot{a}$ cannot combine with the venitive deictic lexical motion verb $ho\sim bi$ 'come'; *ho=ta is ungrammatical.

12.5.2 =ta(n) in intentional constructions

The formative =ta(n) also very commonly occurs in intentional constructions with first person subjects. Examples are provided in (12.70), (12.71), and (12.72).

(12.70)
$$n\dot{a}=so$$
 $\dot{a}-a$ $mana=w\dot{a}$ \dot{a} $bo\dot{a}$ $a(k)=t\dot{a}(n)=no$ here=A 1SG-ACC wait=IMPER 1SG yatorana do=GO&DO=INTENT 'Wait for me here, I am going to catch (lit. do) yatorana.' TXT 008:024

(12.72)
$$iwati='$$
 $tfi2i$ i $bi=ta(n)=no$

gra_mo=SPAT fire 1SG receive=GO&DO=INTENT

'I am going to go get fire where grandmother is.' TXT 061:772

Although it is not as common, the prior and ative intentional construction can occur without the morpheme = $\dot{n}o$. In this case the formative = $t\dot{a}(n)$ seems to encode prior motion and first person intention. An example is provided in (12.73). In this sentence a man tells someone that he is going to come and delouse him.

Recall that the imperative prior motion $=t\acute{a}$ cannot combine with a venitive lexical verb. However, an intentional prior motion $=t\acute{a}$ can as illustrated in (12.74).

The examples in (12.73) and (12.74) above also illustrate that when the =ta occurs in intentional constructions it seems to be unspecified for its path. In these two examples, the motion seems to be towards the point of reference (the addressee in (12.73) and the speaker's home in (12.74)). In contrast the prior motion $=t\acute{a}(n)$ in imperative constructions

always expresses away-from the point of reference semantics; it cannot be used to communicate that the addressee should move towards the speaker before performing some action.

12.5.3 = ta(n) in main clauses

The formative =ta(n) does not occur very frequently in main clauses in my texts. In the one example provided in (12.75) I have it is ambiguous between a "shortly" reading and a prior motion reading.

- (12.75) a. ipa amiko=ya=só no palmito no a(k)=ní=na
 uncle Amico=COM=A 1PL palm_tree 1PL do=REMP=EPEN
 'We took out palm trees with my uncle Amico.'
 - b. habi toa şaba hiko=tá(n)=ki pi hono
 surely DEM2 savannah enter=SHORTLY/GO&DO=DEC:NONP ANX taitetu
 'And for sure, in that savannah, a taitetu entered shortly / the taitetu travelled
 and enterred the savannah.' TXT 092:194-195

In elicitation contexts Caco Moreno, Miguel Chavez and Paë Yaquë all translate =tán in a main clause as "do for a short period". According to Caco Moreno and Miguel

Chavez the motion reading only prevalent in much older speakers. Younger speakers use $=t\dot{a}(n)$ in main clauses to denote that some action is done for a short period of time.

12.5.4 =ta(n) in same and different subject clauses

The formative $=t\acute{a}(n)$ occurs very frequently in same and different subject clauses. Examples where the formative occurs in same subject clauses marked by =(2)i 'concurrent, same S' are provided in (12.88), (12.89), and (12.90). Examples where $=t\acute{a}(n)$ occurs in combination with the same subject marker =ki 'concurrent, same A' are provided in (12.78) and (12.83). Examples where $=t\acute{a}(n)$ combines with the same subject clitic $=s\acute{o}$ 'prior, same A' are provided in (12.79), (12.80), (12.84). Examples where the formative $=t\acute{a}(n)$ combines with a same subject clause marked by the same subject clitic =pama 'concurrent, interrupted same {S,A}' are provided in (12.82) and (12.86). Examples where $=t\acute{a}(n)$ combines with a different subject clause marked by ='no are provided in (12.85) and

(12.87). Examples where =ta(n) combines with the different subject clause marked by =ki 'prior, different A,S'.⁴⁹

The most salient meaning associated with =ta(n) in same/different subject clauses is one of quick succession ("as soon as X Y"). Clear examples of quick succession meanings associated with presence or $=t\acute{a}(n)$ are provided below.

- (12.77)ha-?-iwa=kí ſìnó nia=**tán**=i tsi kiá 3-EPEN-mother=DAT monkey throw=GO&DO=CONCUR:S P5 REP hiníka ní tóa honi hawi bíni i=?ikiá DEM2 which INTER 3SG:GEN husband say=REP man 'As soon as he was throwing a monkey to her mother that man asked "Who is her husband?" TXT 111:048
- (12.78) atsa nia=ta(n)=ki atsa atsa

⁴⁹ I have no examples where =ta(n) occurs with the same/different subject markers $=2\dot{a}\varsigma$ 'prior, same S'

⁼nospari 'posterior, same A,S', =nosparino 'posterior, different A,S'.

(12.79)hatsi kiá ha $mis-a-ta(n)=s\acute{o}$ tsi kiá ha then grab-TR-GO&DO=PRIOR:A REP 3 Р5 REP 3 a(k)=ni=ki

do=REMP=DEC:P

'Then as soon as he grabbed it he hit (did) him.' TXT 061:287

(12.80) $matos=yo=ta(n)=s\acute{o}$ tsi $a(k)=a\acute{i}$ i $k\acute{o}pa=ki$ dice=CMPL=GO&DO=PRIOR:A P5 do=INTER:NONP:2SG say Copa=DEC:P $a(k)=k\acute{i}-a$

do=DEC:NONP=1SG

'After finishing dicing all of it (the yuca) Copa said "are you going to do it?" (I replied) "Yes, I will." TXT 093:026

(12.81)ha-ʔ-á *ha*?*i*=*bo* ma-pɨk-a tsi kiá yoşa head-open-TR 3-EPEN-SPAT P5 REP woman girl=PL atf-a=ta(n)=ktha wa=?ái=na ri-too grab-TR=GO&DO=PRIOR:D{A,S} nose-hit 3 TR=NMLZ:IPV=EPEN 'They opened it, and there were the girls, the moment that they grabbed them, he pegged her on the nose. Txt 007:275-276

(12.82)hɨnɨ paşa $oka=ta(n)=p\acute{a}ma$ tsi kiá water crude happen=DO&GO=CONCUR Р5 REP rii=ni=kihoni pia=yá man arrow=COM jump=REMP=DEC:P 'As the urine (lit. crude water) was pooring down (on this tapir's heads),

the man jumped (down) with his arrow.' TXT 067: 067

The reason I consider the quick succession reading to be the most salient is because quick succession is nearly always reflected in the Spanish translation from my text examples ("al momento que X Y" where X is the verbal predicate modified by =ta(n). The examples above are cases where no prior motion seems to be involved. This means that it is somewhat problematic to consider $=t\acute{a}(n)$ an AM morpheme in the context of same/different subject clauses.

However, there are many examples where a prior motion event seems to be implied or is at least plausible based on the context. Where such prior motion readings emerge, the quick succession meaning is still salient. One reason it is difficult to tell whether =ta(n) is really involved in expressing prior motion is because it typically combines with motion verbs that imply prior or concurrent motion anyways. The examples below illustrate this problem.

(12.83)kiá kamano=' hatsi naa yoşa a(k)=ni=kithen REP jaguar=ERG DEM1 woman kill=REMP=DEC:P bopina = ta(n) = ki = naturn around=go&do=CONCUR:A=EPEN 'And so (after becoming annoyed with the woman for not delousing him), the jaguar killed this woman, as soon as he (came and?) turned around.' TXT 026:093 bari=' (12.84)tawa $taki = ta(n) = s\acute{o}$ tsi wild cane harvest=GO&DO=PRIOR:A Р5 sun=SPAT hána=ki no-a leave=DEC:NONP 1PL-EPEN 'As soon as we (go and?) harvest the wild cane, we leave it out in the sun.' paka $mira=ta(n)=s\acute{o}$ hawí tsamití tsi bamboo look for=GO&DO=PRIOR:A P5 3sg:gen shaft ama=ki no-a put on=DEC:NONP 1PL-EPEN 'Right after looking for the bamboo we put the shaft (of the arrow) in it.'

TXT 089:010-011

- (12.85)i=ki0,Sŧ $tsiki=t\acute{a}(n)=no$ tsi kiá hawí be=DEC:P month come out=GO&DO=CONCUR P5 3sg:ge REP naabo ka=ni=kipeople go=REMP=DEC:P
 - 'Ready, the moment the (new) moon (goes and?) comes out, his family left.'

 TXT063:115
- (12.86)habokí yosa kini=' raa = ta(n) = pamari-șiși tsi now woman cave=SPAT put=DO&GO=CONCUR head-bite P5 kiá nobá hina rono sina rono ti?i=ka=bo1PL:GEN penis snake worm snake all=REL=PL REP 'And the moment he (went and?) put his penis in the woman's vagina (lit. hole), the snakes and worms bit his penis head (lit. our penis head) (stopping the act of penetration), all of the different types of snakes.' TXT 032:055
- (12.87)harí hawi hina pistia raa = ta(n) = notsi kiá still 3sg:gen penis small send=DO&GO=CONCUR P5 REP rono= hawi hina tis-a=ni=ki3sg:gen penis snake=ERG bite-TR=REMP=DEC:P 'And while his little penis was entering (her vagina) a snake bit his penis.' TXT 111:079

In very rare cases the prior motion emerges in the Spanish translation ("se fue y X" where X is the verbal predicate $=t\acute{a}n$ combines with).

(12.88)
$$tana$$
 $raka=tan=i=ro?á$ $pasna=i$ short_while lie_down=GO&DO=CONCUR:S=LIMIT hunt=CONCUR:S $ka=ki=a$ go=DEC:NONP=1SG 'He (went to his hammock). layed down a little while, and then said "I am going to go hunting.' TXT 054:746-747

In many cases where a clearer motion meaning emerges, it is unclear whether $=t \dot{a}n$ expresses prior motion or prior and concurrent motion. This is illustrated in the examples below.

(12.89)
$$\wp obo \ ak = (?)\acute a \ tsi \ tana \ raka = t\acute an = i$$
house make=NMLZ:P P5 shortly lie_down=G0&D0=CONCUR:S

 $ha - t\acute o \ iwat\acute i \ bi = mitsa = na$

3-ACC:PL gra_mo recieve=PROB=EPEN

 $a(k) = tan = i = bay\acute a \ tsi \ \wp obo$
do=G0&D0=CONCUR:S=D0&G0 P5 house

$$a(k)$$
= $bay\acute{a}$ tsi $ki\acute{a}$ ha bo = $ka(n)$ = ni = ki do = $Do\&GO:TR/PL$ $P5$ REP 3 go = PL = $REMP$ = $DEC:P$

'When he built a house (he went) and lied down shortly (waiting for) when his grand mother could receive them, he then built (another house) (and went) and built a house and went.' TXT 026:220

(12.90)
$$naa=ki$$
 $nig-a=tan=i$ tsi no

DEM1=DAT tie-TR=GO&DO=CONCUR:S P5 1PL

 $nika-wa=yami(t)=ki$

do_so-V:TR=DISTP=DEC:P

'When we tied them up to here (points to body part), we went like this.'

To conclude the data from my corpus suggest that the quick succession reading is the most salient meaning of $=t\acute{a}(n)$. Prior motion meanings may also be involved, but the presence of =ta(n) does not entail a motion reading.

12.6.DISTAL SOURCE / "COMING INTO VIEW" = TIARÍ

Txt 109:502

The clitic =tiari 'distal source' encodes that an event is occurring out of view and/or that the speaker is uncertain whether the event occurred or will occur. It is not clear whether this morpheme should be regarded as a dedicated AM morpheme or not, because it is not

clear whether it entails a motion event. I discuss it in this section because it very often occurs in contexts where motion is implied. In most of the examples I have of this morpheme from naturalistic speech it expresses that an {A,S} participant is coming into the view of the speaker.

An example of this morpheme is provided in (12.91) referring to a taitetu that will appear from out of view. It is not clear whether the taitetu will come into view by undergoing translational motion towards the speaker or whether the speaker himself will be the one who moves. Based on examples like these, it seems that the translational motion is implied rather than encoded directly by the clitic *=tiari*.

'Its possible that a taitetu will appear from out of view' TXT 075:061

An example of an implied "coming into view" reading is provided in (12.92). A woman tells her daughter to prepare something to drink for her husband who is coming back from hunting. The speaker combines the verbal predicate hawi pifa a(k) 'kill something small' with the clitic =tiari 'distal source' to express the fact that this is happening out of her view. The morpheme =tiari implies that the man is coming towards the speaker and her daughter as reflected in the translation and the context.

Another example of a coming into view reading emerging from context is provided in (12.93) is from a folk story about a village of only women. The sentence describes what the women said when a man approached them. From context it is understood that the man is the one moving, and thus a venitive reading emerges from the clitic *=tiari*.

The clitic =tiari can combine with the venitive lexical root $ho\sim bi$ 'come'. In this circumstance the morpheme encodes the source and the motion event is coded by the lexical verb. Illustrative examples are provided in (12.94) and (12.95).

TxT058:239

Chapter 13. Perspective: evidentiality, modality, and mirativity

This chapter is concerned with morphemes that encode perspectival semantics. The domain of perspectival semantics includes grammatical categories of modality, evidentiality and mirativity. Chácobo contains morphemes that encode the following modal category; conditionality, counterfactuality, prediction, intention volition, assertion, epistemic modality. Within the category of epistemic modality morphemes encode different degrees and shades of certainty, necessity and possibility. Chácobo only has one truly evidential category in the sense of a category that encodes information source; the reportative. There is no dedicated marker of visual evidentiality in Chácobo, although a common strategy for encoding visual information is to use the assertive $=r\acute{a}$ which encodes that the speaker has epistemic authority. Chácobo has one mirative morpheme that encodes that the situation described by the speaker runs counter to expectations. The language has grammaticalized two categories that relate to the speaker's emotional perspective; the regretative and the anxietive. These could be considered modal because they evoke alternative realities (e.g. Timberlake 2007: 315).

Finally there are a number of semantic distinctions that are diachronically and/or synchronically built out of the negation morpheme in Chácobo. For instance, the conjectural seems to combine negative with interrogation. I dedicate a section to discussing the negative and all modal categories that seem to be built out of the negation marker and something else. The markers of perspectival semantics are summarized in Table 13.1.

Some of the categories that are relevant for modality, evidentiality, and mirativity in Chácobo are discussed in other sections. For instance in Chapter 4, I discussed whether the reportative should be considered a clause-type along-side the declarative, interrogative and imperative (Section 13.16). This Chapter will provide a more detailed description of the semantics of this morpheme, rather than the extent to which it patterns morphosyntactically with other clause-type/rank morphemes. The semantics of the remote future is already described in Chapter 10 (Section 10.6). In this Chapter I will only describe its interaction with other modal categories in conditional clauses.

Table 13.1. Markers of modality, evidentiality and mirativity in Chácobo

| Form | Function | Structural class of | Other relevant functions of | |
|---------------|-------------------------|---------------------|-----------------------------|--|
| | | element it | same form | |
| | | combines with. | | |
| =pi | Condition, Ability | Verb | | |
| =gi | Prediction | Verb | Remote future temporal | |
| | | | distance | |
| =ro?á | Conditional | Predicate | Limitative | |
| =kia | Counterfactual | Verb | | |
| =no | Counterfactual | Verb | Hortative | |
| | Intentional | | concurrent marker, spatial | |
| | | | case, | |
| =kas | Volitional | Verb | | |
| | Ability | | | |
| mitsa~mɨtsama | Epistemic: Possibility | Verb | | |
| =kará | Epistemic: Inference | Predicate | Indefinite pronouns | |
| =tia | Espistemic: Possibility | Predicate | Speaker Enthusiasm | |
| =tíşo | Circumstantial | Verb | Purposive nominalizer | |
| | necessity / obligation | | (=tî) and non-verbal | |
| | | | predicate declarative (so) | |

Table 13.1, cont.

| =kiá | Evidential: | Predicate | |
|------------|---------------------|------------------|---------------------------|
| | Reportative | | |
| =i(tsi)kiá | Evidential: | Verb | |
| | Reportative | | |
| =rakana | Epistemic: | Predicate | |
| | Certitudinal | | |
| =ra | Assertive | Predicate | Admonitive, empathetic in |
| | | | combination with nouns |
| =pá | Mirative: | Predicate | Obligation, Imperative |
| | Counter-expectation | | |
| =yáma~=ma | Negation | Predicate, Verb, | Conjectural, Imaginative, |
| | | Adjective, Noun | Similative |
| =pi | Anxietive | Predicate | |
| $=r_i'$ | Regretative | Predicate | |

13.1. CONDITIONAL AND ABILITATIVE pi

The clitic *pi* marks condition and ability. It occurs in position 6 of the sentence. It can occur in the first clause of a biclausal construction, made up of a protasis ('if' clause), followed by an apodosis ('then' or consequent clause). The order of these clauses is flexible and 1007

either may be dropped if recoverable from context. The morpheme is also used to express ability, permission and possibility. Note that in this function the morpheme pi is incompatible with past tense or anterior marked clauses. Chácobo use a distinct morpheme for encoding (counterfactual) conditions in the past (see Section 13.3).

Conditional pi is used for both realis conditions (those that refer to events that are expected to occur based on past experience) and irrealis conditions (events that purely hypothetical). The difference is typically marked by the presence or absence of the remote future morpheme. Where the remote future morpheme =gi is not present the interpretation of the apodosis clause is typically understood as realis; a consequence based on experience. Examples of the realis interpretation of the conditional clause are provided in (13.1), (13.2), (13.5) and (13.6).

'When he (the man) sleeps with the other (woman), the other (woman) gets angry.'

TXT 100:030-031

(13.2)nika mi-ʔ-iwa pi toka=no hakiriki 2sg-epen-mother cond do so=concur like so after that tóka=kí mi-ʔ-iwa mí-a tres vese tsi three times 2-EPEN-mother do so= $PRIOR:D\{A,S\}$ P5 2sg-acc his=baya=si=ki=asee=DO&GO:TR/PL=REMF=DEC:NONP=1SG

and then go).' TXT 008:077-078

'If your mother does this (criticizes me in this way) and after that when/if your mother does this (criticizes me in this way), I will leave you (lit. see

Examples (13.3) and (13.4) illustrate irrealis or hypothetical conditional situations using the clitic pi. These are signaled by the use of the remote future morpheme =gi (in bold below). (13.3) is uttered in the context of a description of police officers coming to the community of Alto Ivon to arrest someone for murder. The speaker is stating that the community wants to conduct an internal investigation. The situation is hypothetical, because the community members would only write a letter in order to justify the arrest if their internal investigation justified this.

(13.3)
$$papi$$
 no $ak=(?)\acute{a}$ tsi $kini=yo=?\acute{a}$ tsi toa letter 1pl do=nmlz:p p5 write=cmpl=nmlz:p p5 dem2 pi no $a(k)=tiki(n)=no$ tsi $haboki$ tsi $no-ki$ COND 1pl do=again=concur p5 now p5 1pl-acc $bo=si=ki$ $polisia=bo$ carry_away=remf=dec:nonp police=pl 'When we make a letter and write everything down, if we do this again, the

The following hypothetical situation is uttered in the context of a description of a community meeting where speakers are debating whether and perhaps how to retaliate against Bolivians who have killed them. The situation is hypothetical because the Chácobo

police will take us (to prison) only then (lit. now).' TXT 090:088

had not necessarily decided to do retaliate at the time this sentence was uttered.

(13.4)
$$no\text{-}ki$$
 pi $karayana$ $a(k)=no$ tsi $ka=si=ki$
 $1PL\text{-}ACC$ $COND$ bolivian $do=CONCUR$ $P5$ $go=REMF=DEC:NONP$
 $karayana=ri$ $hama$ $ha-to$ pi no $a(k)=ki$
 $bolivian=TOO$ but $3\text{-}PL:ACC$ $COND$ $1PL$ $do=D\{A,S\}$
 $ka=si=ki$ $no-a$
 $go=REMF=DEC:NONP$ $1PL-EPEN$

'When the carayana kills us (the Chácobo), the carayana goes (escapes) and if we kill them "we will escape (lit. go)!" TXT 090:090-091

The conditional pi can occur in contexts of verbal and non-verbal predicates. The examples in (13.1-13.5) are cases where pi occurs in verbal predicate constructions. An example of non-verbal predicate is provided in (13.5) below.

It can occur in negative clauses as illustrated in (13.6) and (13.7). The conditional can occur as the protasis of an interrogative as in (13.7) and (13.8).

 $hini=ro?\acute{a}$ mi $ak=(?)\acute{a}$

how=limit 2sg do=inter:p

'Then, when similarly when we do not know (something), if we do not know (something), we ask them how to do it (homework)' TXT 019:009

(13.7)
$$haska$$
 pi $siati$ $yáma=no$ $a(k)=kan=ai$

similar COND medicine NEG =CONCUR do=PL=INTER:2

 $wis-a=s\acute{o}=na$ o $kiis-a=s\acute{o}=na$

scrape off-TR=A=EPEN or cut-TR=A=EPEN

'If there is nothing like medicine, what do you (pl.) do after scraping off (of some medicinal plant) and cutting (something)?' TXT 105:333

COMP COND fight-INTRC=PL=CONCUR 3-PL:ACC counsel=PURP

mɨtsa ní mi-a

POSS INTER 2SG-EPEN

'When they fight with each other very seriously, do you perhaps counsel them?' TXT100:150

The morpheme pi has a distinct function when it occurs in position 9 of the sentence before the V-constituent. In this position the clitic encodes ability. Illustrations of this

function as provided in (13.9), (13.10) and (13.11). Similarly to the conditional pi this morpheme cannot combine with past tense anterior marked sentences.⁵⁰

(13.9) nika nika riti=pi=ki=a

like_so like_so unplug=ABL=DEC:NONP=1SG

'(As he shook the door he said), in this way I can unplug it (the pineeaple stuck in the ground).' TXT 007:246

(13.10)hama ak-(?)aka=pi=kiháma yáma tsi ŞO but do-PASS=ABL=DEC:NONP but NEG Р5 DEC hawi=kará=ka=rí kará wifa=ti what=EPIS=REL=REG rubber tap=PURP

'But they (leather sandals) can be made, but unfortunately, there is no whatamacallit (lit. that which is perhaps what), rubber to tap.' TXT 115:237

 $^{^{50}}$ There are also no examples in my corpus where pi combines with interrogatives or imperatives. I have not tested the possibility of pi occurring in such clauses with elicitation data, however.

(13.11)sani=**pi**=?ái ka=ſari=kí tsi bikobí sɨni-wa=tí fish=ABL=NMLZ:IPV go=CRAS=CONCUR:A P5 arrow polish-TR=PURP t/a?ita boka yóa=?i i=pao=nigra fa Boca tell=CONCUR:S AUX=HAB=INTER:REMP 'Granfather Boca used to tell about how one would polish the arrow in order to be able to go and fish the next day.' TXT 040:085

Although it is not common in my texts the morpheme =pi can function as a jussive meaning 'let's go and do' as in (13.12 and (13.13).

- (13.12) tfa?ita boi kania=pi

 uncle woodpecker shoot=HORT:ABL

 i=yáma=tsi=so=wí

 say=NEG=IMM:ITR=REMF=IMPER

 "You are never going to say, let's shoot the uncle woodpecker." the wood pecker said.' TXT 062:050
- (13.13) tsik-i=pi i tsi $ki\acute{a}$ ha $=n\acute{i}=ki$ $take_out-ITR=HORT:ABL$ say P5 REP 3 =REMP=DEC:P "It's better if I leave (lit. take myself out)" he said.' TXT061:504

13.2. REMOTE FUTURE AND PREDICTION = st

The modal semantics of the remote future and their relationship with temporal distance are described in Chapter 10 (Section 10.6). The most important function of =si with respect to modality is that it functions as a consequent in an irrealis conditional construction which is discussed in Section 13.1 above.

13.3. COUNTERFACTUAL =kiá

The clitic =kia occurs in position 9 of the sentence and encodes counterfactual semantics. It typically occurs in the apodosis (consequent clause) of a biclausal conditional construction. In such constructions, the protasis is marked with the limitative $=ro2\acute{a}$. The counterfactual $=ki\acute{a}$ is incompatible with the conditional pi. Unlike the conditional morpheme pi described in the previous section, $=ki\acute{a}$ is only compatible with irrealis constructions.

(13.14)
$$pia=y\acute{a}=ro?\acute{a}$$
 go yawa i arrow=COM=LIMIT DEC white_lipped_peccary 1sG $a(k)=ki\acute{a}=ki=ram\acute{a}$ do=CNTRFCT=DEC:P=ASS:1sG

'If I had had only had my arrow, I would have killed the white lipped peccary.' TXT 007:318

(13.15) $ha-mi=ro?\acute{a}$ go tsi tfa?ita ahira 3-RFLX=LIMIT DEC P5 gra_fa Ajira a(k)=kia=ni=ki tia do=CNTRFCT=REMP=DEC:P EPIS2

'If he had been alone, sir (lit. grandfather) Ajira would have had sex with (lit. did) her.' TXT 054:500

(13.16)toá ka=ro?a=só tsi tápa *i*−a=rí DEM2 go=LIMIT=PRIOR:A Р5 almond 1sg-epen=aug $a(k)=kia=it\acute{a}=ki=r\acute{i}$ nápo ratíbaika=só=na do=CNTRFCT=REC:P=DEC:P=REGRET Napo exchange=A=EPEN

'If I had gone over there (to the camp), I could've gathered (lit. done) almonds so that I could have exchanged with Napo.' TXT 109:136

cross=CAUS=CNTRFCT=DEC:P

'(Nahuapaxahua criticized the caiman), if you were a human, you would have helped me cross.' TXT 071:104

The counterfactual $=ki\acute{a}$ does not require an apodosis in order to surface. It can be used for hypothetical situations. For instance, in the excerpt from a conversation in (13.18), the speaker describes the traditional clothing all of the members of her household would be wearing had the Chácobo not adopted European clothing some years earlier. The counterfactual morpheme $=ki\acute{a}$ is used throughout.

- (13.18) a. riki hoşo=ba=' habi tsi no bi=ni=ki
 nose white=PL=GEN custom P5 1PL receive=REMP=DEC:P

 'We took (lit. receive) the customs from the white people (lit. white noses).'
 - b. $h\acute{a}ma$ $t\acute{o}a$ $y\acute{a}ma=ro?\acute{a}$ no tsi $no-ki=r\acute{i}$ but DEM2 NEG=LIMIT 1PL P5 1PL-EPEN=AUG $hay\acute{a}=ki\acute{a}=ki$ tia

have=CNTRFCT=DEC:P EPIS2

'But if it hadn't been like that then we would have had (those traditional clothes).'

pa?ostí =kia=kihaya haya risotí c. no earring have 1PL =CNTRFCT=DEC:P nose ring have $=ki\acute{a}=ki$ no 1_{PL} =CNTRFCT=DEC:P

'We would have had earrings and we would have had nose rings.'

- d. fapocoti=yá tsi naa pistia **kiá**=ki

 dress=COM P5 DEM1 little **CNTRFCT**=DEC:P

 'This little one would have had a dress.'
- e. *ninia tsi haʔarí tsóboko kiá=ki*Ninia P5 STILL naked CNTRFCT=DEC:P

 'Ninia would be still be naked.' TXT115:163-170

The sentences in (13.18d-e) above illustrate that the counterfactual can also function as a copula in the sense that it can head a copulative construction but without the auxiliary/copula *i*. The counterfactual *kia* is also used to describe situations which very nearly came to pass, having a 'almost' type meaning. Examples of this function are provided in (13.19) and (13.20).

(13.20) a. honi hawi raisi= tsipisi= nami=kas=ni=na
man 3sg:gen in_law=erg fart=spat kill=vol=remp=epen

'He wanted to kill his in law by farting (lit. while farting).'

b.
$$tsipisi=$$
 ' $nami=kia=ni=na$ fart=SPAT kil=CNTRFCT=REMP=EPEN

'And he almost did kill him by farting.' TXT 084:003-004

There is one lexicalized form akia that seems to derive from combination with the morpheme a(k) 'do, take, kill, drink, catch' with the counterfactual =kia. An example of this morpheme is illustrated in (13.21) below.

13.4. DESIDERATIVE = no

The morpheme = no has a wide array of related functions. It is used for sentences with hortative meanings, as described in Chapter 4. In combination with the prior motion AM

=ta it encodes first person intention which is described in Chapter 12 (Section 12.5). It can also combine with negative to mark prohibitive constructions.

This section describes the intentional meaning of this morpheme in more detail. The desiderative = 'no typically encodes the intention or desire of one of the participants, when it occurs in position 15 of the sentence in the position of clause-type/rank morphemes. In the vast majority of cases in my texts the first person (either singular or plural) is the {A,S} subject and the intentional participant. Examples of this are provided in (13.22) and (13.22).

| (13.22) | i=bita=şó | kará | mɨstia=wɨ | mi=ba |
|---------|-----------|--------------|---------------|-----------|
| | 1sg=com=a | rubber | tap=IMPER | 2sg=benef |
| | ŧ | moskitero | bí= no | |
| | 1sg | mosquito_net | get=DES | |

^{&#}x27;Tap rubber with me! I intend on getting you a a mosquito net.'

TXT 054:387

(13.23)
$$mi$$
 ia i pi = no i tsi $kiá$ $yosa=ki$

2SG:GEN lice 1SG eat= DES say P5 REP woman=DAT

 ha $=ni$ = ki $hatsi$ $kiá$ $yosa$

3 $=REMP=DEC:P$ then REP woman

 ha $piro=ni$ = ki

3 $delouse=REMP=DEC:P$

"I will eat your lice!" she said to the woman. Then she started delousing the woman. TxT 010:007-008

It is fairly rare but the desiring participant can be the P as in (13.24), where *noki* 'we' is simultaneously the P argument and the one who wants the action to be carried out.

The desiderative = no does not seem to be compatible with past tense events, unless it combines with the volitional = $k\acute{a}s$. The volitional = $k\acute{a}s$ is described in the next section. Its interaction with the desiderative = no is also discussed.

13.5. VOLITIONAL =kás

The morpheme $=k\acute{a}s$ is primarily used to express volitive semantics (i.e. "want"). It can also be used to express approximative ("nearly", "almost"), and purpose meanings. The

volitional meaning is always found in clauses in the present or future tense. Examples of $=k\acute{a}s$ with its volitional meaning are provided in (13.25), (13.26), (13.27), and (13.28).

(13.25)
$$mi$$
- a ni ma - to = $bita$ = so $hini$ $pistia$

$$2sG$$
-EPEN INTER $2pL$ -EPEN=COM=A chicha little
$$a(k)$$
= kas = ki = a

do=VOL=DEC:NONP=1SG

'(People used to talk as follows when there was a festival) "And you? (why are you here?)" (one would say) "I want to drink (lit. do) chicha with you (pl.)." TXT 054:007

(13.26) tobi go boi pistia firi ma-to DEIC2 DEC yatorana small boiled 2PL-EPEN pi=ma=kas=ki=a

eat=CAUS=VOL=DEC:NONP=1SG

'It is there, I want to invite you (pl.) (lit. cause you (pl.) to eat) a little bit of boiled yatorana.' TXT 068:331

kia=ki (13.27)mi-a pi=**kás**=ki mí-a i-a lie=dec:nonp 2sg-epen 1sg-epen eat=VOL=DEC:NONP 2sg-epen i ka?i=?=ikiá $yoba=ka(n)=(?)\acute{a}=na$ kiá yosa know=epen=rep counsel=PL=NMLZ:P=EPEN say REP woman

"You are lying! you want to eat me!" The woman said, she knew because they told her (about the jaguar woman' TXT076:092

Examples of the volitional meaning of $=k\acute{a}s$ occurring in constructions in the past tense are provided in (13.29) and (13.30).

Txt111:365

'The bolivians wanted to kill them with a gun.'

In subordinate clauses the morpheme $=k\acute{a}s$ can take a purpose function. A case where the morpheme $=k\acute{a}s$ is ambiguous between a purpose and a volitional meaning is provided in (13.31).

(13.31) fita=kás=i tsi kiá kini ha wa=ní=ki

cross=VOL=CONCUR:S P5 REP go_along_shore 3 TR=REMP=DEC:P

'(When Nahuapaxahua arrived at the lake), he (Nahuapaxahua) was walking

(lit. going) along the shore with the intention of crossing (lit. wanting to cross.).' TXT 071:097

In (13.32), the volitional $=k\acute{a}s$ has a purpose-like function in same subject subordinate clause $pikask\acute{n}a$ 'wanting to eat'. The volitional meaning is found in the first verb of the same sentence $a(k)=kas=?\acute{a}i=na$.

(13.32)
$$i$$
- a i w ati = $'$ $a(k)$ = k a s = $(?)$ á i = na

1SG-ACC gra_mo=ERG do= V OL=NMLZ:IPV=EPEN

 pi = k a s = k i= na

eat= V OL=CONCUR:A=EPEN

'(My) grandmother (the jaguar) wanted to kill (lit. do) me in order to eat me (lit. wanting to eat me.)' TXT 054:089

In past tense contexts, it is common for $=k\acute{a}s$ to have an intentional meaning. A typical context where the intentional meaning arises is in combination with the frustrative $ma?itsa\sim ma?is$ 'in vain'. An example of an intentional (failed-attempt) reading of the morpheme $=k\acute{a}s$ in combination with the frustrative is provided in (13.33).

The intentional meaning found above is distinct from that of = no described in Section 13.4 above. The intentional meaning of = no never refers to an event that the speaker knows is counterfactual; rather, it always refers to present or future plans.

Another example of failed attempt reading in is provided below in (13.34). This sentence describes a cow who attempts in vain to escape an anaconda who is pulling it into the river.

In the next sentence of the same narrative provided in (13.35), the speaker uses $=k\acute{a}s$ to modify the action of the anaconda referring to the anaconda pulling the cow into his cave. In this sentence the volitional $=k\acute{a}s$ is used to express an approximative ("almost") meaning. Another example of the approximative meaning is provided in (13.36).

(13.35) a.
$$hawi$$
 $mawi$ $atf-a=tsi=so$ $hawi$

3SG:GEN horn grab-TR=P5=PRIOR:A 3SG:GEN

 $kini=ki$ tsi $bo=kas=ki$
 $cave=DAT$ P5 $bring=Vol=DEC:NONP$

'He grabbed his (the cow's) horn and almost brought him into the cave.'

- b. hawí mawi tsi şo tima=?ai=na

 3SG:GEN horn P5 DEC jam=NMLZ:IPV=EPEN
 - 'His (the cow's) horn would not enter (jammed the cave of the anaconda).'

 TXT116:33-36
- (13.36) a. hakiriki tsi ina kamano=' a(k)=ni=ki after_that P5 dog jaguar=ERG do=REMP=DEC:P
 - 'Then, the jaguar killed the dog.'

b.

no

1PL kill=vol=remp=dec:p

tipas=kas=ni=ki

^{&#}x27;We almost killed him (the jaguar).' TXT011:003

The volitional morpheme can function as a full verb as in (13.37).

(13.37)
$$awi=y\acute{a}$$
 $kas=k\acute{i}=a$ $i=ki\acute{a}$ woman=COM **want**=D:NONP=1SG say=REP "I want a woman." he said' TXT 50:1047

There is a form where $=k\acute{a}s$ combines with the negative morpheme =(y)ama where they occur in a predicative position of a non-verbal predicate construction. Examples of these are provided in (13.38), (13.39), and (13.40).

(13.38)nɨa=**kas=áma** SO ί−a here=vol=neg 1sg-epen DEC 'I do not want to be here.' OBSV (13.39)ka=kas=áma SO i-a ánoma matsi go=VOL=NEG DEC 1sg-epen too much cold 'I don't want to go, it's too cold.' Txt 107:109 (13.40)ara=tsi=?ikiá honi ina=**kas=áma** cry=IMM:SG=REP go up=VOL=NEG man 'The man was crying because he didn't want to go up.' TXT 052:048 The formative $=k \acute{a}s$ cannot have the function displayed in the examples in (13.38), (13.39), and (13.40), when it does not combine with negation. The =(y)ama cannot be dropped in any of the constructions above. This suggests that kas(y)ama should be regarded as a morpheme independent from $=k \acute{a}s$.

As noted above, the volitional $=k\acute{a}s$ can combine with the desiderative = no. When it does this the meaning found is one of counter-factual attempt. Examples are provided in (13.41) and (13.42).

- (13.41) a. motoro tsi i bitſ-i i=ní=ki

 motor P5 1SG get=CONCUR:S AUX=REMP=DEC:P

 'I was planning on getting a motor.'
 - b. motoro tsi i $bi=k\acute{a}s=no$... i tfata motor P5 1SG get=VOL=INT ... 1SG hull $kopi=n\acute{i}=ki$

buy=REMP=DEC:P

'I wanted to and tried to get a motor, (but) I just bought the hull (I was not able to save up enough money for the motor, only the hull).' TXT049:053-054

(13.42) hía=ka=kirí riití no pi hía=ka yonóko hía=ka
good=REL=DIR leave 1PL COND good=REL work good=REL

'When we leave towards something good (lit. that which is good) and if we have work that is good, and we had wanted to go down a path that is good.'

Txt101:128

13.6.Possibilative 1 mitsa

The morpheme *mitsa* expresses an array of different meanings associated with possibility. A typical possibilative meaning of *mitsa* is participant internal in the sense that it refers to the ability of one of the participants to carry out an action (van der Auwera & Plugian 1998).

An example of the (participant-internal) ability meaning of *mitsa* is provided in (13.43) in the context of the folk story of Nahuapaxahua. In the previous discourse context, a group of Chácobo women had used magic to endow their previously decapitated husbands with heads. The next day, one of them suggests they all go see their husbands in (13.43a). In (13.43b) a shaman warns against this saying that this could have dire

consequences.⁵¹ The women do decide to sleep with their husbands, resulting in them getting eaten by their respective partners. In the shaman's warning in (13.43b), *mitsa* is used to refer to the possibility that the woman may unintentionally botch the necromancy that brought the men back to life, by sleeping with them.

(13.43) a. wia=nonobá bini=bowiaki tsi kiá next day wake up=CONCUR P5 REP 1PL:GEN husband=PL no-ki=rí his=?i ka=no=ma=ni/mani 1PL-DAT=TOO see=CONCUR:S go=HORT=NEG=INTER/CONJECT "And the next day when they woke up, (the women said) "Let's go see our husbands! (lit. Should we not go see our husbands again?)"

b. ma-to bɨnɨ=bo=kí bo=yama=kan=so=kan=wi husband=PL=DAT go=NEG=PL=REM:FUT=PL=IMPER 2PL-GEN yo/i-wa=**mitsa** i=kiá ha = ni = kiha-to ma 3PL-ACC 2PLruin-V:TR=**POSS** say=REP 3 =REMP=DEC:P "Do not go to your husbands, because you could bewitch/botch/ruin them." (said the shaman)' TXT062:107-108

same bed with one's wife.

⁵¹ For the Chácobo and Pacahuara there are a number of taboos surrounding having sex after one has killed someone. For instance, Maro Yaquë states that after killing someone, it is considered taboo to sleep in the

Another abilitive (participant-internal possibility reading) of *mitsa* is from the story of Antonio, about a young man who makes a practice of having sex with his aunt behind his uncle's back. After copulating with his aunt, Antonio's aunt suggests that he sleep outside, exposing himself to the mosquitos. Antonio protests in (13.44a), and suggests that he sleep on a different end of the same bed. His aunt protests in (13.44b) that his uncle will be able to smell him/them using *mitsa* to denote the (participant-internal possibility) ability of his uncle/her husband to do this.

(13.44) a.
$$i$$
- a = ri $gati$ $raka=ki$ = a

1SG-ACC=TOO half lie=DEC:NONP=1SG

""(Because there are too many mosquitos), I'm going to sleep on this half (beside your feet)" (said Antonio to his aunt)'

b.
$$koko='$$
 no-kí giti=mitsa

uncle=ERG 1PL-ACC sleep=POSS

"But your uncle (my husband) could smell us!" (said his aunt)'

TXT052: 564-566

Later on in the same story, Antonio's aunt, warns Antonio about the consequence of telling anyone about their sexual encounter using *mitsa* in (13.45).

The possibilitive mitsa can also be used to mark the consequence of a conditional construction. Examples of the use of =mitsa in consequence clauses are provided in (13.46) and (13.47). In these cases the possibilative still refers to participant-internal possibity. (13.46) is uttered in the context of a narrative where the speaker was being chased by a jaguar.

(13.47) has another case where *mitsa* is used in a consequence clause. In this sentence the possibility seems to refer to something that happens outside of the control of the participant.⁵²

⁵² It is not clear to me whether this is an example of participant-internal or participant-external possibility.

The examples above are all examples of hypothetical future situations. Possibilative *mitsa* can also refer to possible occurrences that the speaker thinks are happening at the time of speech. A typical use of *mitsa* is to refer to possible events that are outside of the vision of the speaker. An example of this provided in (13.48), where *mitsa* encodes the fact that a jaguar is killing the main character's chickens outside of his vision.

(13.48) a.
$$hisa$$
 $ka=ima=ki=a$ $papa$

EXCLAM $go=NEG=DEC:NONP=1SG$ father

 $no?o$ $hawi$ $mifi=bo$ go

1SG:GEN thing little=PL DEC

"Look father, I'm not going as I have my things (to take care of) (lit. there are my many things)".'

b.
$$i=tfo=ri$$
 patiari kamano= $a(k)=mitsa$

1SG=BEHIND=TOO chicken jaguar=ERG kill=POSS

'The jaguar must be killing the chickens behind me (outside of my vision).'

Txt 054:019-020

Another example of the nonvisual use of *mitsa* is from an acted-out dialogue between speakers who are trying to steal corn in a folk legend about the evolution of human beings from monkeys. The morpheme *mitsa* refers not to the possibility of the owner seeing them, but rather that the owner saw the main characters outside of their field of vision.

"This is the corn" he said to the other woman."

b.
$$wisti$$
 pa $bi=pa=iki\acute{a}$ other MIR $get=MIR=REP$

"How do you think we should take (steal) it" one of them said'

c.
$$ibo=ba='$$
 no-kí tsaya=**mítsa** kiá
owner=ASS/PL=ERG 1PL-ACC see=**POSS** REP

'But from over there the owner was watching us (outside of our vision)'

TXT 041:036-038

The abilitative mitsa cannot occur with interrogative and negative clauses. The possibilative mitsa(-ma) is used in interrogative and negative contexts. It cannot be straightforwardly seen as an an allomorph of mitsa because it has different syntax.

13.7. Possibilative 2 mitsa(ma)

The possibilative *mitsa* heads a construction where it functions as the predicate of a non-verbal predicate construction. It combines with a verb nominalized by the purpose marker =ti. It occurs in two clause-types; interrogative and declarative. Semantically, the possibilative *mitsa* displays a wider array of meaning than possibilative *mitsa*, including ability, and social and goal oriented obligation. Examples of ability meanings of *mitsa* in interrogative clauses are provided in (13.50), (13.51), and (13.52).

(13.50)
$$toa$$
 $tapa$ mi $a(k)=ai=ka$ $hawinia$ $tapa$

DEM2 almond $2sG$ $do=NMLZ:IPV=REL$ where almond $a(k)=ti$ $mitsa$ ni $mi-a$
 $do=NMLZ:PURP$ $POSS2$ $INTER$ $2sG-EPEN$

'And the almonds that you gather (lit. do), where are you going to be able to take it out?' TXT 099:136

kara?ina=ba='=rama (13.51)hawi kopí=sini=kato what carayana=PL=?=ASS spend=N/ADJ=REL $i=kan=(?)\acute{a}i=ka$ piſa kopí=sina=ka naa mi say=PL=NMLZ:IPV=REL DEM1 2sg little spend=N/ADJ=REL bi=tí $bi=kas=(?)\acute{a}i=ka$ hawi mitsa what receive=NMLZ:PUPR receive=DES=NMLZ:IPV=REL POSS2 fina=?aí think=INTER:NONP:2SG

'Something, as the carayana say, that is they say is expensive (lit. a thing that costs a lot), this little expensive thing, are you thinking about what you want to receive that you can perhaps buy (lit. receive)?' TXT 009:143

(13.52) $\dot{a}(k)=i$ ká=ki hakirɨkɨ palmito ma-to i do=concur:s go=dec:nonp 2pl-epen and after that palm tree $\dot{a}(k)=ki$ toa=na=?ás wai i ma-to i farm plot and do=DEC:NONP 2PL-EPEN and DEM2=EPEN=S tsi hawi a(k)=timitsa пí ma-to Р5 what do=NMLZ:PURP POSS2 INTER 2PL-EPEN

'You (pl.) go to gather (lit. do) palm trees and after that the farm plot, and you (pl.) gather (lit. do) and from there what would you be able to do?'

TXT 101:113

Ability readings are the most common modal readings of the possibilative *mitsa*. The possibilative *mitsa* is also used to mark social obligation. An example is found in an interview between Miguel Chavez and Iba (on the Benicito) in (13.53). Miguel Chávez asks what Iba does when she sees people in her community fighting. Miguel is concerned with what is the most acceptable social practice in the communities on the Benicito river. He uses the possibilative *mitsa* to ask what Iba is *socially* obliged to do when she sees people fighting.

(13.53) MIGUEL:

ha-to yoba=?a=mai-a-rí ma-to=bɨtá 3-PL:ACC counsel=NMLZ:P=NEG 1sg-epen-aug 2PL-EPEN=COM ha-to=kí nia-na=ki=á tsami=tí fight-INTRC=DEC:NONP=1SG 3PL-EPEN=DAT jump on=NMLZ:PURP mí-a yoba=tí mɨtsa пí ha-tó POSS2 INTER 2sg-epen or 3-ACC:PL counsel=NMLZ:PURP mítsa пí mi-a POSS2 INTER 2SG-EPEN

'Without counseling them, "I am going to fight with them." would you criticize (lit. jump on) them or should you counsel them?'

Iba responds using *mitsa* in a negative clause stating that she would not get directly involved in a conflict but rather counsel people instead in (13.54).

(13.54) IBA:

| tsami=tí | mɨtsa=ma | şo. | i -a | ha-tó |
|---------------------|-----------|---------|-------------|----------|
| jump_on=NMLZ:PURP | POSS2=NE | G DEC | 1sg-epen | 3-PL:ACC |
| yoba=ki=a | háska | no?ó | naabo | yoi |
| counsel=DEC:NONP=1s | G similar | 1sg:gen | relative | poor |
| ha=bɨta=rí sok | robo á(k) | =no | | |
| 3=com=aug chi | ld do= | CONCUR | | |

'I cannot criticize/get involved (lit. jump on) (them), as (I do) with my children when (other) children (want to) fight (lit. do) with them.' TXT 101:143

In declarative contexts such as that (13.54) above, the possibilative *mitsa* always occurs with the negative clitic =ma. There are very few text examples of declarative uses of the possibilative *mitsa* without the marker of negation. In all cases I have it seems to mark obligation. Another example where the possibilative marks obligation is provided in (13.55). Nahuapaxahua uses the a negative possibilative construction mitsa=ma in order to assure the woodpecker that he and his tribe are now socially obliged to not kill the woodpecker, since the latter helped him arrive at his village.

Another obligation reading emerges in the context of a strict work schedule where the speaker is describing his social obligation to not rest during the almond season.

'The next day we went to work again, and there was no rest.' TXT 107:108

13.8. EPISTEMIC 1 kará

The epistemic *kará* marks lack of knowledge on the part of the speaker. It can have scope over an entire sentence or add epistemic content to a noun phrase. When *kará* has scope over a sentence it characteristically encodes that the speaker believes the sentence to be

true, but does not have direct evidence of its truth, or has no idea how the sentence came about. Examples of this meaning are found in (13.57) is uttered in the context of a woman finding that her husband has left. Her brother-in-law tells her that he thinks her husband transformed into a jaguar and went to live in the jungle. He does not have direct evidence of this (he did not see her husband leave, but only witnessed parts of his transformation) and thus marks his statement with the epistemic *kará*.

The sentence in (13.58) is uttered by an ancient shamanic jaguar after he attempts to have sex with a woman but is thwarted by the fact that every time he penetrates her the tip of his penis is bitten by something. He uses the epistemic $kar\acute{a}$ to mark his belief that the woman had put something in her vagina (in fact, she was pregnant with snakes and worms from her previous "husband").

The sentence in (13.59) is uttered in the context of the story of Caco. Caco's mother accuses Caco of killing his relatives when he arrives at her mother's town. She uses $kar\acute{a}$ to mark that she infers this from the evidence (everyone is dead), despite not having been in the village at the time.

The sentence in (13.60) is uttered by a Chácobo whose father had turned into a monkey by eating pataju fruit. He thinks he recognizes his father among a group of monkeys, marking his belief with the epistemic *kará*.

| (13.60) | ſìnó | kará | ha | manɨ=kan=ʔitá=kɨ |
|---------|---------|---------|------------------|--------------------------|
| | monkey | EPIS1 | 3 | transform=3PL=RECP=DEC:P |
| | i=kiá | hawi | bak í | |
| | say=REP | 3sg:gen | child | |
| | | | | |

"It looks like (I believe) he converted into a monkey (but I don't know how)." said his child'

TXT067:122

In the examples above the speaker has some direct evidence of the event marked by the epistemic $kar\dot{a}$. In such circumstances, $kar\dot{a}$ can be interpreted as inferential. The epistemic $kar\dot{a}$ can also be used to denote belief even in the absence of any clear (direct) evidence. An example of this is provided in (13.61). Rabi is retelling a story that was told to him by his father, using the reportative $ki\dot{a}$ throughout the story to denote the evidential source as in (13.61a). The interviewer asks Rabi for clarification regarding whether the protoganists travelled far in (13.61b), and Rabi responds with the epistemic to mark the fact that he believes this to be true in (13.61c).

(13.61) RABI:

| a. | n i á=ma | kiá | no?iria | ha | bo=kan | =pao=ní=k i | |
|----|---------------------|--------|--------------------|--------|--------|------------------------|---|
| | here=NEG | REP | people | 3 | go=PL= | HAB=REMP=DEC:F |) |
| | no?íria | tsaka= | ș i =na | ha-mɨ | tsi | no?iria | |
| | people | shoot= | REMF=SUB | 3-refl | Р5 | people | |

bother=PL=REP

'The native people went very far in order to shoot each other, and they themselves would bother/attack other native people.'

SHËCARA:

distance P5 go=INTER:NONP

'They went far (lit. a distance)?'

RABI:

c. hátsi **kará** şo náa

so **EPIS1** DEC DEM1

'So, I believe this (is true).' TXT 006:180-182

When a speaker is recalling some event they experienced, the epistemic *kará* can be used to mark doubt concerning whether they remember some specific detail correctly. For instance, the epistemic *kará* marks the fact that the speaker cannot remember whether he precisely waited for a week in Alto Ivon or not in (13.62). Another example where *kará* marks lack of certainty concerning details of an experienced event is provided in (13.63).

(13.62)
$$toa=\$\acute{o}$$
 $t\acute{s}i$ $wisti$ $semana$ $kar\acute{a}$ no

DEM2=A P5 one week EPIS1 1PL

 $raa=yami(t)=ki$ $i=k\acute{t}=a$

wait?=DISTP=DEC:P say=DEC:NONP=1SG

'From there we were waiting for one week, I think, I say.' TXT 099:042

(13.63) a. $miki=y\acute{a}$ $kar\acute{a}$ no $h\acute{o}=ki$ $i=k\acute{t}=a$

hand=COM EPIS1 1PL come=DEC:P say=DEC:NONP=1SG

'We had been arriving without anything (lit. with hands).'

b. $om\acute{a}ka$ $kar\acute{a}$ no $a(k)=k\acute{t}$

tucunare EPIS1 1PL do=DEC:P

'I think we caught tucunare.' TXT 094:078-079

Epistemic $kar\acute{a}$ can also also have scope over noun phrases. In such cases, epistemic $kar\acute{a}$ always occurs beside the relativizer =ka(to). One function of the morpheme in such contexts it to denote lack of certainty about the identity of a referent. Examples of this function are provided in (13.64) and (13.65).

The epistemic $kar\dot{a}=ka$ has an indefinite pronoun-like function in combination with the question word hawi 'what' as shown in (13.66).

Noun phrases modified by kara=ka can contain adjectives as in (13.67), where the epistemic marker has a similar indefinite-pronoun like interpretation.

(13.67)
$$paşa$$
 $kar\acute{a}=ka$ i $p\acute{i}=na$ raw EPIS1=REL 1SG eat=EPEN 'I am going to eat something raw (lit. that which is unknown and raw).' TXT 058:202

The most typical function of the epistemic $kar\acute{a}$ in the context of noun phrases is to indicate that the referent has some property associated with it unknown to the speaker ("some type of X..."). It is difficult to render such sentences with a "literal" translation in Spanish or English. The Chácobo typically translate them as questions in Spanish (que clase de, que será ...), although they are not structurally interrogatives and they do not have the illocutionary function of a question. Examples of this function is provided in (13.68), (13.69), (13.70), and (13.71).

(13.68)
$$hawi$$
 $no?iria$ $kar\acute{a}=ka$ $t\acute{o}a$ $no-k\acute{t}$ what people EPIS1=REL DEM1 1PL-ACC $ak=(?)\acute{a}i=na$ do=NMLZ:IPV=EPEN

'What type of people are killing us (lit. those unknown type of people are

TXT 054:578

(13.69) hawi kará=ka nifi_pára tfa?itá=sini
what EPIS1=REL vine large=N/ADJ

killing (lit. doing) us.'

'It was some type of large vine.' TXT 073:029

(13.70)kará=ka karnása here EPIS=REL bate 'The bait is somewhere here.' 'I think the bate is here (somewhere).' TXT 109:411 (13.71)boo $i=kan=(?)\acute{a}i=ka$ kará=ka yoſini hawi toa spirit be=PL=NMLZ:IPV=REL what EPIS1=REL hair DEM2 yoſini boospirit hair 'They used to call it (pubic hair) the spirit/demon hair, that is some type of spirit hair.' TXT117:114

The expression $hawi kar \acute{a}=ka$, which contains the epistemic $kar \acute{a}$ is used to fill a space in the discourse left open by a mental block (Epps 2008: 714 for the concept in Hup). An example is provided in (13.72).

13.9. Epistemic 2 tiá

The morpheme *tia* has epistemic functions related to uncertainty and non-epistemic functions related to lack of commitment, interest or volition. It is very common for the morpheme *tia* to combine with the epistemic *kará* described in the previous section. In such cases the function of *tiá* is strictly epistemic. The combination of *kará* and *tiá* seems to express that a proposition is true out of necessity even in the absence of information concerning how it came about.

The combination of $kar\acute{a}$ and $ti\acute{a}$ typically occurs with a constituent interrogative. The sentences are not structurally interrogative in the sense that they do not contain an interrogative clause-type morpheme. They also do not have the illocutionary force of a question. Examples are provided in (13.73) and (13.74).

| (13.73) | hawinia | kará | h | а | bo=ka | u(n)=ni=ki | | tiá |
|---------|--------------------|----------|---------|--------|---------|-------------|---------|-------------|
| | where | EPIS1 | 3 | | go=PL | =REMP=DEC | C:P | EPIS2 |
| | 'Where could | they pos | sibly h | ave go | ne?' (T | hey went so | mewhere | , I have no |
| | idea where)' | Тхт 026 | 5:020 | | | | | |
| (13.74) | w i aki | awini= | • | toa= | ?á=ka | | kono | kono |
| | next_day | wife=ER | RG | stir=1 | NMLZ:P | =REL | IDEO | IDEO |
| | hɨna-wa=ria | | kara | j | ha | wa=tɨkɨ(n) | =ki | tiá |
| | do_how-TR=A | AUG | EPIS1 | 3 | 3 | TR=AGAIN | =DEC:P | EPIS2 |

'The next day his wife was stirring (the chicha), how did she ever make the chicha bubble so much.' TXT 063:043

There are only a few cases where $ti\acute{a}$ occurs in a construction with a constituent interrogative without epistemic $kar\acute{a}$. One example is provided in (13.75).

(13.75)
$$tsaya=kan=(?)\acute{a}=ka$$
 $hin\acute{a}-wa=ria=s\acute{o}$ $see=PL=NMLZ:P=REL$ $do_how-TR=AUG=PRIOR:A$ $his=k\acute{a}(n)=ki$ $ti\acute{a}$ $see=PL=DEC:NONP$ $EPIS2$

'Then they (the man and the woman) saw him (the tapir), how could they (the man and the woman) have seen him (I don't know).' TXT 071:008

In combination with $kar\acute{a}=ka$, the epistemic tia expresses lack of knowledge concerning some detail of a referent denoted by a noun phrase. Examples are provided in (13.76) and (13.77).

'He is our relative, that one (I mentioned), whatever, that shaman's name is (or what was his name again) TXT068:088

(13.77)
$$wi\acute{a}=no$$
 $haw\acute{i}$ ora $kar\acute{a}=ka$ $h\acute{a}a$ $sun_rise=CONCUR$ what hour EPIS1=REL yes $ka?\acute{i}=ka(n)=n\acute{i}=k\acute{i}$ $ti\acute{a}$ $arrive=PL=REMP=DEC:P$ EPIS2

TXT 050:704

Examples where epistemic $ti\acute{a}$ occurs without a constituent interrogative or without the epistemic $kar\acute{a}$ are not particularly common in my texts. The epistemic $ti\acute{a}$ can be used in a consequent clause of a conditional construction to denote something that is done out of social obligation or necessity. An example of this is provided in (13.78).

(13.78)
$$toa$$
 $kako$ $toka=y\acute{a}ma=ro?\acute{a}=no$ tsi

DEM2 Caco $do_so=NEG=LIMIT=CONCUR$ P5

 $toka=y\acute{a}ma$ no $=ki\acute{a}=ki$ $ti\acute{a}$
 $do_so=NEG$ 1PL =CNTRFCT=DEC:P EPIS2

'If Caco had not done it this way (eaten the eye of the toucan), we would never have done it either (he is the one who sanctioned this practice).'

Txt 026:163

^{&#}x27;When the sun was rising, they arrived at house but at what time?'

In elicitation contexts, evidence suggests that *tia* can mark epistemic necessity without being in a conditional construction. For instance, Caco Moreno states that the sentence in (13.79) could be uttered if a speaker feels the temperature drop and can hear rain drops on his roof. Text examples are not particularly common, but one is provided in (13.80).

know=REMP=DEC:P

3-PL=too

'They were having sex with that monkey, surely while they were having sex, they must have known them too' TXT 067:092

EPIS2

The morpheme $ti\acute{a}$ is also used to mark social obligation outside of conditional constructions as in (13.81).

Data from naturalistic speech suggest that *tiá* 'epistemic' can express acquiesience to a situation without enthusiasm. This can be seen as a semantic extension of the social obligation meaning of *tia*. It seems plausible that lack of interest on the part of a participant is a natural implicature from a sentence that is marked explicitly as something performed out of social obligation or necessity. For my Chácobo consultants, the lack of participant enthusiasm is one of the most salient readings of the morpheme *tiá*. An example of the lack of enthusiasm reading is found in (13.82). I uttered (13.82a) to Yoca asking her if she wished to begin recording. She responded with (13.82b). According to Miguel Chávez she used the expression in (13.82b), rather than simply stating *hinima* 'good, ok', which is the typical response, to indicate that she was going to help with the recording because she said she would, but that she was generally unenthusiastic about it.

Other examples of the unenthusiastic acquiesence meaning under social obligation are provided in (13.83) and (13.84).

(13.83) a.
$$mi$$
- a ni ma - to = $bita$ = so $hini$ $pifa$

2SG-ACC INTER 2PL-EPEN=COM=A water a_little
$$a(k)=kas=ki=a$$

$$do=Vol=Dec:Nonp=1sg$$

- "And you? (what do you want?)" I want to drink chicha with you.
- b. hinima $k\acute{a}=ki$ no-a $ti\acute{a}$ good go=DEC:NONP 1PL-EPEN EPIS2

'Good, I guess we should go then (lit. we are going, although I'm not very interested).'

TXT 054:007-008

(13.84) a.
$$tana$$
 tsi $hoi=ko=pama$ tsi $ki\acute{a}$ $y\acute{a}ma$ distance P5 speak=CNRTDIR:ITR:SG=CONCUR P5 REP NEG tsi so i $ki\acute{a}$ $haw\acute{i}$ $y\acute{o}sa=ka$ $=n\acute{i}=k\acute{i}$ P5 DEC say REP 3SG:GEN woman=REL =REMP=DEC:P

'After awhile (lit. some distance), "there is nothing left" his (the man's) sister said.'

b.
$$i=ki$$
 $ti\acute{a}$ $p\acute{i}=ki$ $ma-to$ $be=DEC:P$ $EPIS2$ $eat=DEC:P$ $2PL-EPEN$

'It's fine, you have already eaten (her brother said).' TXT 026:090-091

The epistemic *tiá* can be used in imperative constructions as in (13.85).

The formative *tiá* appears in the very frequent expression *haatia* 'I have no idea'. Examples are provided in (13.86) and (13.87).

(13.86) a.
$$hini=2ás$$
 $awi=yá$ $oriki=yáma=2ini$ $náa$ $honi$ how=S $wife=COM$ $eat=NEG=INTER:NONP$ $DEM1$ man i tsi $kiá$ $ifa='$ $rais$ $=ni=ki$ say P5 REP Isha=GEN in_law =REMP=DEC:P ""Why doesn't this man eat with his wife?" Isha's in law's said (to Isha's wife)."

(13.87) a.
$$hini=?\acute{a}$$
 $ara=?in\acute{i}$ $profesora=it\acute{a}=ki$ why=S cry=INTER:NONP profesor=RECP=DEC:P

"Then the profesor (asked), "why is she crying?""

b. **haatia** i ha
$$=ka(n)=it\acute{a}=ki$$
I_don't_know say 3 $=$ PL=REC:P=DEC:P

"I don't know", they said.' TXT 019:026-027

13.10. OBLIGATIVE =tiso

The morpheme $=ti_{SO}$ marks circumstantial obligation. By circumstantial obligation I mean something that is obligatory to perform under a certain circumstance. The obligative $=ti_{SO}$ is always goal oriented in that it relates to some desired result of the speaker. Examples are provided in (13.88), (13.89) and (13.90).

The circumstances under which (13.88) is uttered are that a man had left the village and his farm plot and that his corn will rot unless it is not harvested.

(13.88)
$$bama$$
 $ha = 2\acute{a} = ka$ $haw\acute{a}$ $giki$ $bi = tiso$ forget 3 = NMLZ:P=REL 3SG:GEN corn get/harvest=OBLIG

do_how-tr=inter:nonp 1pl-epen

'(Because he (the old man that left) forgot) someone needs to harvest his corn now and how are we going to do it?' TXT054:144

The sentence in (13.89) is from a folk story about Ashina. The folk story describes a time when the Chácobo did not have farm plots and therefore needed to steal all of their food from Ashina.

The following sentence is uttered in the context of a conversation where speakers are discussing why they cannot catch any fish in a specific stream (on the Geneshuaya). The obligative =tiso is used to indicate that they must look into the water to catch fish in this particular stream.

(13.90) ni-is=i ka=tiso i pi ha =yami(t)=ki inside-see=CONCUR:S go=OBLIG say ANX 3 =DISTP=DEC:P

'We need to go and look inside (the water to catch the fish), he (my father)
said.' TXT091:042

13.11. ASSERTIVE = $r\dot{a}$

The morpheme $=r\acute{a}$ encodes assertion. A direct evidence meaning is associated with the assertive $=r\acute{a}$. However, the data suggest that the evidential meaning of this morpheme is an implicature and that it is, therefore, more accurate describe sentences marked by $=r\acute{a}$ as ones which the speaker vouches for even where they do not have direct evidence (Bruil 2014: 241-243). In assertive morpheme $=r\acute{a}$ occurs in position 15 of the sentence. It allows a first person singular to drop (normally SAP pronouns cannot drop). This is illustrated in (13.91).

Direct evidence semantics are one of primary functions of the assertive $=r\acute{a}$. A clear example where $=r\acute{a}$ is used to mark direct evidence is provided in (13.92). The morpheme $=r\acute{a}$ is used by a Maina when he sees another Maina entering with a dead Chácobo.

Recall from Chapter 9 that the reportative $ki\acute{a}$ is used throughout a narrative that is based on reported information. Despite the fact that $=r\acute{a}$ can function to mark visual evidence source, it is does not repeat throughout discourse for narratives that are directly experienced. Textual evidence suggests that the visual evidence is at least a strong implicature. This is revealed in the following retelling of the story of Nahuapahuaxa. In the relevant part of the story, Nahuapaxahua is sleeping after having drank some chicha that was offered to him by some agoutis. With his eyes half shut he watches the agoutis mix their snot into the chicha as is described in (13.93a). In (13.93b), Nahuapaxahua makes use of the morpheme $=r\acute{a}$ to indicate his realization that he had just drank agouti snot. Picking

up on the direct evidence implicature of the assertive $=r\acute{a}$, the interviewer then asks Caco whether Nahuapaxahua is still watching the agoutis throw their snot into the chicha in (13.93c).⁵³ Caco responds with further details in (13.93d).

(13.93) CACO:

- a. hama ha-kí habi=?ái=ka awí
 but 3-ACC learn=NMLZ:IPV=REL woman
 sih sih pas
 IDEO IDEO IDEO
 - "...But the agouti woman was accustomed to shooting her snot into it (the chicha) with the sounds "sih sih pas"."
- b. tsakaka=' rifo i $a(k)=ita=?a=r\acute{a}$ agouti=GEN mucus 1sG do=RECP=NMLZ:P=Ass $i=iki\acute{a}$ naa honisay=REP DEM1 man

"Dammit! I drank the mucus of the agouti!" Nahuapaxahua said'

⁵³ In Chácobo stories there is near obligatory interaction between the story teller and the listener. Paë does not necessarily utter his question in (13.93c) because he does not know that Nahuapaxahua saw the agoutis (in fact all Chácobo familiar with the story know this), but rather to index his continued involvement in the discourse.

PAË:

c. tsayá~tsaya=?iní

see~see=INTER:NONP

'Is he (Nahuapaxahua) watching?'

CACO:

d. bi-kawa=ro?á tsayá~tsayá=?ikiá

eye-ajar=LIMIT see~see=REP

'He (Nahuapaxahua) was looking (at the agoutis sneezing into the chicha)

with his eye partially open.' TXT 061:692-695

A direct evidence interpretation of $=r\acute{a}$ in the context of a non-verbal predicate construction is provided in (13.94).

(13.94) a. $kar\acute{a}$ mifni=bo no inia=i $i=pao=n\acute{i}=ki$

rubber small=PL 1PL sell=CONCUR:S AUX=HAB=REMP=DEC:P

toro=kí

Toro=DAT

'We used to sell a little bit of rubber to Toro.'

b. $nia=r\acute{a}$ mi/ni=bo komiso mi/ni=bo

here=ASS small=PL commision small=PL

'(The rubber) was small like this (I assert) and the commision was small.'

The assertive content of $=r\acute{a}$ is revealed in contexts where it is used to mark speaker certainty of a proposition whose truth is disputed. (13.95) contains a re-enacted dialogue between a Chácobo who witnessed the death of a member of his community at the hands of the Siriono and other Chácobo. In (13.95a), the protagonist who witnessed Huëra's death is asked where Huëra is. He responds that Huëra was killed without any marker of evidentiality or modality. It is understood he would have direct evidence that the event took place.

(13.95) a. wira

Huëra

'And Huëra? (the (first) community asked)'

b. $n\acute{a}ama$ ak- $(?)ak\acute{a}=ki$ $i=?iki\acute{a}$... already do-PASS=DEC:P say=REP

'-He was already killed (by the siriono) - he said (it is said)' TXT 058:348

A few sentences later in the discourse, the same protagonist finds himself in another village, where the father of Huëra lives. A child who had already heard the news mentions that Huëra is dead in (13.96a), and Huëra's father overhears this, challenging the claim with the exclamative *maa* in (13.96b). In response to the challenge, the protagonist

essentially repeats what he told the first community (although he embellishes it in a personal anecdote that relates him to the deceased Huëra), but uses the assertive evidence $=r\dot{a}$ countering the old man's protest in (13.96c).

- (13.96) a. naama ak-(?)aká=ki kiá wira papa

 already do-PASS=DEC:P REP Huëra father

 'They have already killed the (now) deceased Huëra (he said/I heard), father

 (a child says).'
 - b. maa

c.

EXCL

no?ó

'What/that can't be!?' (Huëra's father says from the second community)

hariaparí

i=ki

1SG:GEN nephew first 1SG=DAT

$$fina-2\dot{a}(k)=imit=(?)\dot{a}=ka$$
 $ak-(?)ak\dot{a}=ki=r\dot{a}$

grow-CAUS/APPL=DISTP=NMLZ:P=REL do-PASS=DEC:P=ASS

'My nephew, the first one of mine that I raise... he was killed (by the

tʃaʔita

Siriono) (I am sure of this).' TXT 058:351-353

Another example where $=r\acute{a}$ is used to counter someone else's assumption is given in (13.97) below, where one of my consultants (Jose Zapo) asked his father-in-law (Bari Roca) to tell the Ashina story. This example seems to suggest that $=r\acute{a}$ expresses an

assertive reading (Why would Bari need to mark that he has direct evidence of himself telling the story when $=r\acute{a}$ is an optional morpheme?).

afina=ní

Ashina=INTER

'How about Ashina?'

BARI ROCA:

afina yoa=ki i-a= $r\acute{a}$

Ashina tell=DEC:P 1SG-EPEN=ASS

'I already told Ashina (recently).' TXT 052:882

More evidence that $=r\acute{a}$ is assertive comes from the fact that it is compatible with present tense or future tense clauses where direct evidence cannot be an issue (Bruil 2014 for discussion). Examples are provided in (13.98) and (13.99).

'He was looking at the majo plant from multiple directions like this (speaker moves his head around), and here (he said) "I am going to climb this".' TXT 061:424-425

(13.99) hia
$$ka=fari=ki=a=r\acute{a}$$
 biriri tsi ki \acute{a} good go=CRAS=DEC:NONP=1SG=ASS clean P5 REP $tsakaka='$ ba $?i=tik\acute{a}(n)$ agouti=GEN path=AGAIN

'Good, tomorrow I am leaving, because the path of the agouti is clean.'

TXT061:685

The assertive morpheme $=r\acute{a}$ can have scope over markers of participant internal modal marker mitsa; marking speaker certainty of a probable event. An example is provided in (13.100).

The assertive can also occur in structurally interrogative sentences. When an assertive marker combines with an interrogative sentence the force seems to be exclamative. Examples are provided in (13.101) and (13.102).

Additional evidence that $=r\acute{a}$ is a marker of assertion comes from elicitation. The direct evidence reading of the assertive can be cancelled with the sentence remaining

this moment (it is said)' TXT 054:845

felicitous as in (13.103). This show that the direct evidence meaning associated with $=r\acute{a}$ is an implicature.

The assertive $=r\acute{a}$ can also combine with the reportative as in (13.104). A speaker can still mark themselves as having strong epistemic authority even when their evidence is from a second-hand source. The fact that the assertive can combine with the reportative provides further evidence against treating $=r\acute{a}$ as an evidential marker. In these sentences the assertive does *not* have scope over the reportative; the speaker is not vouching for the truth of the fact that the proposition is said to be true, but rather that the proposition is true.

The assertive $=r\acute{a}$ implies that the speaker vouches for the truth of the proposition at the time of the utterance. It cannot mean that the speaker vouched for the truth of the proposition in the past but now does not. This is shown by the fact that one cannot cancel the speakers belief that the proposition at the time of speech. The sentences in (13.105) are considered infelicitous.

13.12. CERTITUDINAL =rákana

The certitudinal $=r\acute{a}kana$ either modifies a non-verbal predicate construction where it occurs sentence finally or combines with a nominalized clause marked with the anterior

marker = $2\acute{a}$. Examples of the certitudinal appearing in non-verbal predicate constructions are provided in (13.106) and (13.107).

In $(13.106) = r\acute{a}kana$ marks the speaker's certainty that an anaconda was huge based on the size of the anaconda's cave.

TXT 116:035

cave) was huge.'

(13.107) is a dialogue that appears between two speaker in the context of a retelling of the story of Ashina. Miguel asks Iba (the one telling the story), whether Ashina cried when her son left her. Iba responds that she wasn't using the certitudinal = $r\acute{a}kana$ to denote her certainty as to why; Ashina is made out of stone.⁵⁴

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⁵⁴ Ashina, the stone-bodied goddess of the earth and everything else that is bad, eventually transforms into an armadillo.

(13.107) MIGUEL:

cry=NEG=INTER:NONP DEM2 woman

'And after that son of hers, Huirica, goes to the sky did that woman (Ashina) cry?'

IBA:

b.
$$his=(y)\acute{a}ma=?iki\acute{a}$$
 ... $mas\acute{a}sa=r\acute{a}kana$ see=NEG=REP stone=CERT

'(It is said) that she didn't even say bye to him (lit. she didn't look at him), in fact (certainly), she was just stone (which is why she had no emotions).'

TXT 113:166-168

Examples of the certitudinal in combination with verbal predicate constructions are provided in (13.108), (13.109) and (13.110). The certitudinal $=r\acute{a}kana$ can only combine with anterior nominalized clauses marked with $=?\acute{a}$. The certitudinal cannot combine directly with verbal predicate constructions.

(13.108)a. $ka?i=y\acute{a}ma=ki$ mi-a tsowi=' mi-a know=neg=dec:nonp 2sg-epen who=erg 2sg-epen $soo-2ak=(?)\acute{a}$ blow-caus/appl=inter:p

'(As you get skinnier and skinnier dying) you don't know (what happened), who bewitched me? (you might think).'

- b. hama honi=só mi-a ha soo-?ak=(?)a=rákana
 but hidden=A 2sG-ACC 3 blow-CAUS/APPL=NMLZ:P=CERT

 'But surely someone cast a spell on you in hiding.' TXT114:035
- (13.109) hini=wi no-ki $pi=ita=?\acute{a}=ka=r\acute{a}kana$ $move_away=IMPER$ 1PL-ACC eat=RECP=NMLZ:P=REL=CERT i $ki\acute{a}$ tiçi=bo ... say REP other=PL ...

'Leave her (the Maina woman), certainly she has recently just eaten our relatives (lit. us), the other Chácobo said.' TXT053:193

(13.110)awini=' yoba?ita=?á nɨa-ma=ka kini mai close-NEG=REL woman counsel=RECP=NMLZ:P earth hole tsi raka=so=wi i awí ita=?a**=rákana** P5 lie=REMF=IMPER say woman RECP=NMLZ:P=CERT 'When the woman advised him (Nahuapaxahua) she certainly said "Lie deep into the cave (so that the tapir witch cannot find you).' TXT 061:656

The certitudinal = $r\dot{a}kana$ expresses similar semantics to the assertive = $r\dot{a}$ except that the speaker's certainty is not temporally anothored to the assertion time. The certitudinal = $r\dot{a}kana$ can express that some proposition seemed certain at some time prior to the speech time. The flexibility in the temporal anchoring of rakana is illustrated by the fact that the proposition that = $r\dot{a}kana$ has scope over can be felicitously cancelled as in (13.111); compare this with the examples in (13.105) which illustrate that the same cancelation test has different results with the assertive = $r\dot{a}$.

'I was convinced (certain) that Tani spoken with the foreigner, but he didn't in fact speak with him.' ELIC

The assertive $=r\acute{a}$ and the certitudinal $=r\acute{a}kana$ are plausibly diachronically related. They are similar in that they both mark speaker certainty and they both contain the formative $=r\acute{a}$. I do not have a plausible diachronic account of how these morphemes are related to one another; where does the extra phonological material in $=r\acute{a}kana$ come from and why is $=r\acute{a}kana$ not temporally anchored to speech time?

13.13. MIRATIVE = $p\acute{a}$

The mirative $p\acute{a}$ marks counter-expectation or deferred realization (cf. Hengeveld & Olbertz 2012 for discussion of these concepts). The surprise can be associated with the speaker, the listener or some third person discourse participant. The morpheme $p\acute{a}$ is also associated with sensory evidence, but it seems that this meaning is an inference that emerges out of certain discourse contexts (see DeLancey 1997, 2001, 2012; Hill 2012 for some relevant discussion).

Examples where the mirative $p\acute{a}$ marks anticipated counter-expectation of the addressee are provided in (13.112), (13.113), (13.114) and (13.115). (13.112) is uttered in the context of a folk story about a village where women have taken on the traditional gender roles of men. In the example below, the narrator describes the fact that one of the women was a better hunter than her husband. The counter-expectational reversal of gender roles is marked by the mirative $p\acute{a}$.

| (13.112) | a(k)=yáma | tsi | kia | pá | honi=' | wa=ní=ki |
|----------|-------------|-----|--------|-------------------|---------|---------------|
| | do=NEG | Р5 | REP | MIR | man=ERG | TR=REMP=DEC:P |
| | awini=' | tsi | kiá | iso | | pia= ' |
| | woman=ERG | Р5 | REP | spider_m | onkey | arrow=SPAT |
| | a(k)=kí | | bɨbo= | ní=k i | | |
| | do=CONCUR:A | | beat=1 | REMP=DEC | :P | |

'(Even though the man was an excellent hunter), surprisingly he couldn't kill anything and his wife surpassed him killing a spider monkey with an arrow.'TXT 012:48-49

(13.113) is uttered in the context of the story of Caco. It describes how Caco and his siblings murdered their grandmother. The other uses $p\acute{a}$ to mark the callousness and lack of concern with which this was done, personality traits of Caco and siblings that are illustrated throughout the folk story.

(13.113) ha
$$ak=(?)\acute{a}=ka$$
 ha-to $iwati$ mai-wa=ro?a $p\acute{a}$

3 do=NMLZ:P=REL 3-PL:ACC gra_mo burry-V:TR=LIMIT MIR

 $ki\acute{a}$ ha $wa=ka(n)=n\acute{i}=ki$

REP 3 TR=PL=REMP=DEC:P

'(He lived with his grandmother for a long time), and when he killed his

grandmother he just buried her (as if it was nothing).' TXT 032:121-122

(13.114) is uttered in the context of a folk story about the genesis of human sexuality. In the following sentences the speaker describes how babies were born before men and women learned to copulate with each other. Men would ejaculate into a coconut shell, hang the coconut shell up on a hook in the house and then after some number of days

a baby would hatch out. The mirative $p\acute{a}$ combines with mini 'crawl' to encode how surprisingly quickly a baby would be born and then crawling.

crawl=MIR=IMM:ITR=REP

'The coconut shell would fall "toj", and then the baby would cry "huëahuëa" and they (the women) would already be bathing them. After some number of days, the baby has <u>surprisingly</u> already started crawling!' TXT. 052:502-505

(13.115) shows the use of the mirative in the context of a non-verbal predicate construction. It refers to the surprising fact that the panther had began to wear human clothes.

| (13.115) | şapokotí | saw i | yoşni=bo | tʃaʔita | saw i |
|----------|----------|------------------|-------------|---------|------------------|
| | sheath | put_on | belt=PL/ASS | big | put_on |
| | pá | kiá | kamáşoa | | |

MIR REP panther

'And the panther had put on the sheath and the other big belt.' TXT 037:066

It is not clear whether (13.115) should be interpreted as a case of addressee of third person participant counter-expectation (the speaker could be anticipating surprise in the addressee, or it could refer to surprise of the protagonists of the story upon seeing the panther). A clearer case of the use of the mirative referring to protagonist surprise is provided in (13.116). The narrator describes a man walking in on his wife having sex with another man. The mirative $p\acute{a}$ seems to denote the protagonist's counter expectation, because it had already been established in previous discourse that his wife was with someone else.

(13.116) a.
$$his=pari$$
 $ka=ki=a$ $ka=tsi=?iki\acute{a}$ $see=FIRST$ $go=DEC:NONP=1SG$ $go=IMM:ITR=REP$ $ka=ri=ama$ toh $pasi=iki\acute{a}$ $go=AUG=NEG$ $IDEO$ $be_quiet=REP$

"I'm going to go see her first" (said her husband), and he went, but before going far (he heard) "toh" and he became quiet."

b.
$$kasti$$
 $kasti$ $n\'aama$ $a(k)=p\'a=?iki\'a$ creep creep already do=MIR=REP

'As the man was creeping up, he witnessed (some other man) was already having sex with (lit. doing) (his wife)'

TXT 058:559

In all of the cases above ((13.112), (13.113), (13.114), (13.115), and (13.116)) the mirative co-occurs with the reportative. In such cases the mirative refers to addressee or protagonist surprise. Outside of the context of a reportative construction, the mirative marks the counter-expectation of the speaker. Examples where the mirative refers to speaker surprise are found in (13.117), (13.118) and (13.119).

. In (13.117) the mirative $p\acute{a}$ refers to the speaker's (Bari's) surprise at having caught the fish that he will be married to.

(13.117)
$$hatsi$$
 $ki\acute{a}$ toa $hawi$ $wit\acute{i}$ $bi=bay\acute{a}$ tsi then REP DEM2 3SG:GEN fish_hook grab=DO&GO:TR/PL P5 $bawino$ $a(k)=n\acute{i}=ki$ $nib\acute{i}$ $bawino$ pa i tsi cat_fish do=REMP=DEC:P here cat_fish mir say P5 $ki\acute{a}$ ha $=n\acute{i}=ki$ REP 3 =REMP=DEC:P

'Then when he (Bari) grabbed the fish hook and went, he (Bari) caught (lit. did) the cat fish, and "here is the cat-fish!" He (Bari) said with surprise (to the shaman).' TXT 068:082-083

The sentence in (13.118) was uttered by a Chácobo when I arrived at his house in Alto Ivon. According to Miguel Chávez, this utterance suggests that he was not expecting me, and, therefore indicates counterexpectation.

'Adam has arrived (to my surprise, without me waiting for him).' OBSV

(13.119) is uttered by a Chácobo woman to her husband. She uses *pa* to indicate her surprise communicating to her husband that it was not something she intended to have happen.

The mirative can also mark obligation. Chácobo speakers offer alternative translations of the morpheme $p\dot{a}$, one which corresponds to a deontic reading and one which corresponds to a mirative reading.

An example from naturalistic speech where the formative $p\acute{a}$ has a deontic modal reading is provided in (13.121).

(13.121)paráta pa í bibi=kí i no=?á=ka kiahói MIR 1SG guard=D{A,S} say 1PL=NMLZ:P=REL problem money yoanoma wistí semána tsi hó=ki Р5 some time week one come=DEC:NONP kiahoi nobá 1PL:GEN problem

'When I had to guard the money as we say, there was a problem, after some time, one week, our problem came.' TXT 101:136

It is not clear whether instances of the formative $p\acute{a}$ marking deontic modality should be considered a separate morpheme from the mirative $p\acute{a}$. The relationship between deontic modality and mirativity in Chácobo, to the extent that there is one, is unclear and requires future research.

The obligatory counter-expectation associated with the speaker in non-reportative contexts can be further shown with cancellation tests. For instance (13.122b) is considered infelicitous, presumably because it cancels the entailed semantics of $p\dot{a}$ as marking speaker counter-expectation. Note speakers do not judge the sentence to be contradictory when a reportative morpheme is added. Presumably the reportative allows the surprise to be associated with a non-speech act participant.

- (13.122) a. riso=ki hama toa ka?i=ki i-a
 die=DEC:P but DEM2 know=DEC:P 1SG-EPEN
 'He died (he is dead), but I already knew that.'
 - b. #riso=ki pá hama toa ka?i=ki i-a
 die=DEC:P MIR but DEM2 know=DEC:P 1SG-EPEN
 'He is dead (contrary to be expectation), but I already knew that.'
 - c. riso=ki kiá pa hama toa ka?i=ki i-a

 die=DEC:P REP MIR but DEM2 know=DEC:P 1SG-EPEN

 'He is dead (contrary to someone's expectation), but I already knew that.'

 ELIC

The mirative *can* have scope over the reportative, but its interpretation seems to be ambiguous in this regard as is illustrated by the translations of (13.123) below.

(13.123) nami pi=ki $ki\acute{a}$ hima pa meat eat=DEC:P REP Jëma MIR

'I am surprised that and it is said that Jema ate the meat.'

'I am surprised that it is said that Jema ate the meat.' ELIC

13.14. REGRETATIVE =ri

The regretative =ri occurs in position 16 of the sentence and marks speaker regret concerning the outcome of some situation. The regretative strongly evokes a counterfactual action that could have been performed by the speaker to avoid the undesirable situation. The regretative can combine with declarative sentences in the past or present tense. Examples of the regretative combining with declarative verbal predicate constructions are provided in (13.124), (13.125) and (13.126).

(13.124) is uttered by Nahuapaxahua when he realizes he has been drinking chicha with agouti snot in it. He marks the sentence with =ri to express his regret at having drank the chicha against his better judgement.

(13.124) $ts\acute{a}kaka$ hini $a(k)=ki=a=r\acute{i}$ $rifo=y\acute{a}=kato$ agouti chicha do=DEC:NONP=1SG=REGRET snot=COM=REL 'What a shame that I am drinking the agouti's chicha, that which is with snot.'TXT 071:210

Later on in the same story, Nahuapaxahua is led down a path by the agouti who is leading him to his mother's village. When Nahuapaxahua laughs at the agouti's anus, the agouti takes off, leaving the protagonist stranded and lost in the jungle. Nahuapaxahua uses =ri in (13.125) to mark his regret at having laughed at the agouti.

(13.125)osá nawapasáwa tsi kiá masara= kiá laugh at Nahuapaxahua Р5 REP bush=SPAT P5 REP masara=' nawapasáwa nii=ni=kiNahuapaxahua stop=REMP=DEC:P bush=SPAT níi=ki i-a=rii kiá =ni=kiha stop=DEC:P 1sg-epen=**regret** say REP 3 =REMP=DEC:P 'When Nahuapaxahua laughed (at the agouti causing him to run away) Nahuapaxahua was stuck in the bush (in the sense of not knowing where the pathway was) (Nahuapaxahua said) what a shame that I am stuck in the bush!' TXT071:226-227

In the following sentence the regretative =ri expresses lament on the part of the speaker. The first clause in (13.126) is uttered by a woman who is being pulled into a tree by the rubber demon. Based on the context it is unclear to me whether a counterfactual situation is evoked by =ri in this situation.

The regretative can have scope over a full conditional construction. An example is provided in (13.127).

(13.127)
$$toa=$$
 $ka=ro2a=só$ tsi $tapa$ $i-a=ri$

DEM2=SPAT go=LIMIT=A P5 almond 1sG-EPEN=too

 $a(k)=kia=it\acute{a}=ki=ri$ $napo$ $ratibaika=s\acute{o}=na$
 $do=CNTRCT=RECP=DEC:P=REGRET$ Napo exchange=A=EPEN

'If I were to go over there, I could have harvested almonds to exchange with Napo (what a shame that I didn't).' TXT 109:136

The regretative can combine with non-verbal predicate constructions. This is illustrated in (13.128) and (13.129).

Notice that all of the examples above where $=\mathbf{r}i$ combines with a verbal predicate construction are affirmative. As described in Chapter 4, Chácobo has a special regretative auxiliary construction that involves the auxiliary verb i and a bare verb root with the

negative morpheme =ma (Section 4.1.4). This is the typical strategy for expressing regret over not having done something. In this construction the counterfactual event is not just evoked but expressed directly. Examples are provided in (13.130), (13.131), and (13.132). The negated verb is underlined in each example.

- (13.130)i-a=riyawa kiá ha a(k)=kiwhite lipped peccary REP 3 do=DEC:P 1sg-epen=aug <u>ka=ma</u> i=ki=riwistí ha=norí go=NEG AUX=DEC:P=REGRET one 3=SPEC 'He killed a white lipped peccary, I regret not having gone, there would have been one (that I could have killed).' TXT 034:283 (13.131)i=ni=ki=rieskuela i-a=ria(k)=maschool 1sg-epen=aug do=NEG AUX=REMP=DEC:P=REGRET 'I regret that I did not go to school.' TXT 049:165
- (13.132)papa pia wistí bi=maį i=ita=ki=rifather <u>bring=NEG</u> 1SG AUX=RECP=DEC:P=**REGRET** arrow one a(k)=si=nawistí yawa white lipped peccary one do=remf=epen 'I regret that I did not bring one of my father's arrows so that I could kill

one white lipped peccary.' TXT 007:322

The regretative can occur with interrogatives. Examples are provided in (13.133) and (13.134).

13.15. Anxietive pi

The morpheme p_i marks speaker preoccupation, urgency, frustration or anxiety. The morpheme is extremely frequent in conversations, and a little less so in narratives and in

the context of traditional folk stories. It is often difficult to tell what the precise semantic and/or pragmatic contribution of the anxietive pi is in discourse because it seems mark subtle aspects of the speaker's psychology. Speakers vary quite a bit with respect to how extensively they use the morpheme in their speech.⁵⁵

Examples where $p\hat{t}$ marks urgency of a situation are provided in (13.135), (13.136) and (13.137). (13.135) was uttered by a Chácobo speaker when I arrived at Alto Ivon late at night. According to Caco Moreno the use of $p\hat{t}$ in this context expresses the speaker's lack of preparedness for the situation and his sense of urgency in needing to get a bed ready for me since he was my host. In the context that this was uttered there was nowhere for me to sleep when I arrived.

(13.135)
$$h \acute{o} = ki$$
 $h \acute{i} r \acute{i}$ $h \acute{o} g o$ $p \acute{i}$ come=DEC:P Gere white ANX

'Adam (white Gere) has arrived (we need to get things ready)!' OBSV

(13.136) was uttered in a conversation I was having with a Chácobo woman who was trying to convince me to give her my remaining fish hooks. After she asked for the

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Some speakers (e.g. Caco Moreno and Miguel Chavez) associate prolific use of pi with speakers of the Yata river. It is possible that this association reflects the use of pi in unexpected contexts from the perspective of Caco and Miguel who speak the dialect of Alto Ivon (central) rather than higher use overall.

fish hooks, I hesitated saying that I had to think about it. However, this conversation took place the very day I was preparing to leave Palmeras (on the Yata river) for Riberalta, and so, she, noticeably annoyed at my answer, responded to me using the anxietive $p\vec{i}$ to mark the fact that she perceived the situation as urgent.

(13.136)
$$ka=tsi=pi=ki$$
 mi-a

go=IMM:ITR=ANX=DEC:NONP 2sG-EPEN

'But you are leaving right at this very moment!' OBSV

(13.137) is stated in the context of a discussion of harvesting practices on the Benicito river. The speaker explains that there is only a short window in which one can harvest corn when it is ripe and uses pi to emphasize the urgency of the situation; the corn dies quickly after the rainy season.

(13.137) a.
$$bana-2aka$$
 $ha = ki$ $hoko = tsi = pi = ki$ harvest-PASS 3 = PRIOR:D{A} blossom=IMM:ITR=ANX=DEC:NONP 'When it (corn) is harvested, it (the corn) is just ripening in that immediate moment.'

b.
$$bariy\acute{a}$$
 $ti\acute{a}$ $bana=no=ma$ $p\acute{i}$ so $sun=COM$ season harvest=CONCUR=NEG ANX DEC $na=p\acute{i}=ki$ $die=ANX=DEC:NONP$

'During the dry season (the season of the sun), one cannot harvest (the corn), it is dying.' TXT. 105:182-183

The morpheme p_i can also be used to express that a situation provokes or always tends to provoke anxiety. Examples of such situations are provided in (13.138) and (13.139).

(13.139)hakirikí no nama=tɨkɨn=(?)á tsi рį ŞO after that 1PL dream=AGAIN=NMLZ:P P5 DEC $riso=ka(n)=ni=\int=ka=bo$ namá=ki no-a ha=ní die=PL=NMLZ:REMP=S=REL=PL dream=DEC 1PL-EPEN 3=INTER 'After we dream again and we dream about those who have died, understand?' TXT 100: 229

The morpheme pi can also have a frustrative meaning referring to nonrealization of some expected outcome (Overall 2017). For instance in (13.140), the speaker uses pi to mark that his frustration in that he wasted his time looking for Cana's daughter after Cana told him to find her for him. Because of this he was unable to harvest almonds and uses pi throughout his narrative to express his frustration with the situation.

daughter) and then I went to Riberalta.' TXT 105:206

Another example of a meaning expressing frustration is found in (13.141), where Yolanda asks her father Shëcara why the Chácobo do not make leather shoes anymore. Shëcara's use of pi in this sentence seems to indicate general frustration with the situation, rather than express "frustrative" semantics in the sense of a nonrealization of an expected outcome.

(13.141) YOLANDA:

- a. $hini=?\acute{a}$ to \acute{a} $a(k)=y\acute{a}ma=ka(n)=?in\acute{i}$ why=S DEM2 do=NEG=PL=INTER:NONP
 - 'And why don't we do this anymore (make leather shoes)?'

SHËCARA:

$$bama=ka(n)=ni=ki$$
 $riki$ $hoso=ba=$ habi
forget=PL=REMP=DEC:P nose white=PL=GEN custom
 tsi no $bi=ni=ki$
P5 1PL take=REMP=DEC:P

'Well we forgot it from embarrassment (lit. while being embarrassed) (now we cannot do it) and we adopted (lit. took) the customs of the white people (lit. white noses).' TXT 115:161-163

13.16. REPORTATIVE kiá

The reportative *kiá* is used to report what another speaker said. It is the only dedicated evidential morpheme in Chácobo. As is typical cross-linguistically (Aikhenvald 2004; Bruil 2014), the reportative in Chácobo is used throughout all accounts of folklore. It is not used in personal narratives that a speaker directly witnessed. It is repeated redundantly throughout discourse as shown in (13.142).

'Then, he grabbed his machete and he went and he took a long time.'

b.
$$ka=y\acute{a}=k\acute{i}$$
 $ki\acute{a}$ $mako\ yin\acute{i}$ $pi=\acute{i}=na$ $go=PERF=DEC:P$ REP suri powder eat=CONCUR:S=SUB

'She's already left to eat suri powder.'

The morphosyntax of the reportative is discussed in Chapter 4 in the context of the description of clause-types (Section 4.2.5) and in Chapter 7 in the context of alignment (Section 7.1.1.3). As described in these sections, in verbal predicate constructions, the reportative can occur in position 6 of a structurally declarative sentence as in (13.142a) and (13.142b) or in position 14/15 in the clause-type/rank position as in (13.142c).

This morphosyntactic distinction begs the question as to whether there are semantic differences between the two reportatives. The semantic literature on reportatives makes a distinction between the reportative as a modal and illocutionary modifier, and presents a number of tests that can be used to diagnose reportatives according to this distinction (Faller 2002, 2003; Waldie et al. 2009; Bruil 2014). This section reports the results of application of semantic and pragmatic tests on reportatives in the literature concerning whether the reportative should be regarded as a modal or an evidential. I report the application of these tests across the three construction types described above in Sections 13.16.1-13.16.6. A summary of the results are provided in 13.16.7. I should emphasize that the semantic tests presented below were only performed with two speakers (Caco Moreno and Miguel Chavez). The results should are, therefore, highly tentative.

13.16.1 Known falsity test

According to the known-falsity test an evidential is not a modal if it can be used when the speaker knows that the proposition it modifies (its prejacent) is false. The results for the

known-falsity test across different reportative constructions suggests that the C-rigid clause-type/rank morpheme $=i(tsi)ki\acute{a}$ is not a modal, because the proposition can be felicitously denied by the speaker as is shown in (13.143).

(13.143)
$$\checkmark$$
 wistima parata $i=ki$ $a(k)=kan=(?)iki\acute{a}$ hama much money 1SG=DAT give=PL=REP but wisti peso $i=k\acute{a}$ $a(k)=y\acute{a}ma=k\acute{a}(n)=ki$ one peso 1SG=DAT give=NEG=PL=DEC:NONP $tsaya=p\acute{a}$ mirar=IMPER:MIR

'(It is said) that they are going to give me a lot of money, but they are not going to give me one peso.'

The same test applied to those reportatives that I have analyzed as not in the clause-type/rank position suggests that these reportatives are modals. The prejacent cannot be denied. Speakers cannot easily deny a sentence that is only marked with the reportative *kiá* as is shown in (13.144), (13.145) and (13.146).

(13.144) #wistima parata kiá
$$i=ki$$
 ha $a(k)=ka(n)=ki$ hama many money REP 1SG=DAT 3 give=3PL=DEC:P but wistí peso $i=ki$ ha $a(k)=yama=kan=ki$ one peso 1SG=DAT 3 give=NEG=3PL=DEC:P 1093

tsaya=pá

see=IMPER:MIR

'(It is said) that they gave me a lot of money, but as you can see they did not give me one peso.' ELIC

- (13.145)#wɨstima mia=kan=(?)ai=natsi kiá parata i-a much Р5 REP dinero 1SG-ACC give=PL=NMLZ:IPV=EPEN hama i-a wisti peso mia=yama=ka(n)=kibut 1sg-acc one peso give=NEG=PL=DEC:NONP '(It is said that) they give me a lot of money, but they do not give me one peso.' ELIC
- (13.146)#wistima parata i-a mia=kan=á kiá hama much money 1sg-acc give=3PL=NMLZ:P REP but mia=yama=ka(n)=kii∙a wisti ha peso 1sg-acc 3 give=NEG=PL=DEC:P one peso

'They gave me a lot of money, but they did not give me one peso.' ELIC

13.16.2 Test of assent/dissent

According to the test of assent/dissent, speakers cannot agree with or disagree with the illocutionary content (the communicative functions associated with clause-types) of a sentence. In Chácobo it is possible to disagree with the content expressed by the

reportative, regardless of the syntactic position of the reportative. This is illustrated in the constructed dialogues in (13.147) and (13.148).

- (13.147)A: Pai kiá Riberalta= ká=ki

 Paë REP Riberalta=SPAT go=DEC:P
 - 'Pae went to Riberalta.'
 - B: hama go, mi=ki ha toka=yama=kan=kiNEG DEC 2SG=DAT 3 say=NEG=PL=DEC:P

 'But no, no one told you that.'
 - A: hátsani, Pai ka=?ái=ka i tsáya=ki
 true Pae ir=NMLZ:IPV=REL 1SG mirar=DEC:P

 'Ah that's right, I saw that Pae was going to Riberalta.' ELIC
- (13.148) A: Riberalta=ki ka=?ikiá Pai

 Riberalta=DAT go=REP Paë

 '(It is said that) Pae is going to Riberalta.'
 - B: $hama \ go$, mi=ki ha toka=yama=ka(n)=kiNEG DEC 2SG=DAT 3 say=NEG=PL=DEC:P

 'But no, no one told you that.'
 - A: $h \acute{a} tsani$, Pai $ka=?\acute{a}i=ka$ i $ts\acute{a} ya=ki$ true Pae go=NMLZ:IPV=REL 1SG see=DEC:P
 - 'Ah that's right, I saw Pae was going to Riberalta.' ELIC

13.16.3 Cancellation test

I interpret the cancellation test as follows. If the evidential source can be cancelled then the morpheme encodes an illocutionary distinction related to shifting the epistemic authority to a third person rather than directly encoding evidential source, roughly in accordance with Bruil (2014). The evidence from the cancellation test applied to Chácobo suggests a subtle difference between the two types of reportatives. The evidential source for reportatives that modify a declarative sentence cannot be cancelled as in (13.149) and (13.150).

When the test is applied to the reportative in the clause-type/rank position the results are nearly the same as in (13.151) and (13.152).

However, if one affirms a stronger evidential source rather than cancelling the evidential source there is a difference. For the reportative that modifies the declarative sentence, one canont affirm a stronger evidence source, whereas for a reportative that occurs in the clause-type position one can. This is shown in (13.153) and (13.154).

'Pae went to the village, I saw him.' ELIC

'Pae went to the village, I saw him.' ELIC

13.16.4 Embeddability test

An illocutionary operator cannot modify the propositional content of a subordinate clause. In Chácobo all reportatives can modify embedded content. This is illustrated in (13.155) and (13.156).

(13.155)
$$bibo=kan=(?)ag=ka=bo$$
 $ki\acute{a}$ $toro=\acute{}$ $ka?\acute{t}=ki$ $win=3PL=S=REL=PL$ REP $Toro=ERG$ $know=DEC:P$

✓'It is said that Toro knew who the winners were.'

✓ Toro told me that he knew who the winners were.'

✓ Toro knew who were the ones people said were the winners.'

✓'It is said that Toro knew who the winners were.'

✓ Toro told me that he knew who the winners were.'

✓ Toro knew who were the ones people said were the winners.'

13.16.5 Interrogative scope test

An illocutionary operator cannot have scope over an interrogative. Neither reportative can have scope over an interrogative in Chácobo. The sentence in (13.157) for example is ungrammatical.

(13.157)
$$*bo=?\acute{a} = ki\acute{a}/=iki\acute{a}$$

llevar=INTER:P=REP/=REP

'Someone asks you to bring it.'

13.16.6 Interaction with Negation

Negation cannot have scope over an illocutionary operator. In Chácobo the negation of the clause can never negate the evidential. This is true in both reportative constructions as illustrated in (13.158) and (13.159).

kako=' (13.158)kiá hawi bakɨ tsaya=yáma=ki 3sg:gen child Caco=ERG REP see=NEG=DEC:P '(It is said that) Caco did not visit (lit. see) his child.' *'(It is not said that) Caco visited (lit. saw) his child.' (13.159)tsaya=yama=?ikiá hawi bakɨ káko 3sg child see=NEG=REP Caco '(It is said that) Caco did not visit (lit. see) his child.' *'(It is not said that) Caco visited (lit. saw) his child.'

13.16.7 Summary

The results of the application of semantic tests are provided in Table 13.2. A discussion is provided below.

The data gathered thus far do not provide a clear answer as to whether the reportatives in Chácobo should be analyzed as modal or illocutionary operators. For none of the reportatives do the results line up precisely around a modal or illocutionary analysis. For instance, according to the test of assent/dissent and the direct contradiction cancellation test, the reportatives are modal operators across the board. However, the results of the interrogative scope test and the interaction with negation suggest otherwise. Interestingly, there are some subtle differences across the reportative constructions. The known-falsity

test and the stronger evidence cancellation test suggest that the marker $=iki\acute{a}$, the marker that occurs in the clause-type/rank slot in verbal predicate constructions, is an illocutionary marker but the $ki\acute{a}$ which covaries with markers of modality syntactically is a modal operator.

Table 13.2. Results of the application of semantic tests on modal versus illocutionary analyses of reportative morphemes in three different constructions in Chácobo; M = modal result; I = Non-modal / Illocutionary result.

| | ikiá | kiá (verbal) | kiá (nonverbal) |
|------------------------------------|------|--------------|-----------------|
| Known-falsity test | I | M | M |
| Test of assent/dissent | M | M | M |
| Cancellation: direct contradiction | M | M | M |
| "No one said this" | | | |
| Cancellation: stronger evidence | I | M | ? |
| "I saw it" | | | |
| Embeddability test | M | M | ? |
| Interrogative scope test | Ι | Ι | Ι |
| Interraction with negation | I | I | Ι |

As stated in the introductory paragraphs, the semantic tests were only conducted with two Chácobo speakers and thus should be regarded as tentative. Future research on Chácobo might reveal that some of the results of the tests should be reconsidered. Future research on the semantics of reportatives might reveal that some of the tests are less reliable than others or should be tossed out completely.

These considerations aside, if we take the results at face value, they challenge a common assumption in the literature that reportatives are *either* modal or illocutionary operators. The results of the tests applied to Chácobo might suggest that the reportative in Chácobo is intermediary. In a sense the results lend support to Bruil's (2014), since they suggest a correlation between morphosyntactic position and semantics.

Another interesting question is whether the reportatives should in fact be regarded as *one* morpheme across all of the reportative constructions described above. It is possible that the meaning differences can be associated with different positions in constructions and that there is no need to posit distinct reportative morphemes (one a clause-type morpheme and the other a modal operator). This question requires future research.

Chapter 14. Noun complexes: compounding, attribution and possession

This chapter provides a description of modification and elaboration in the noun phrase. An overview of constituency in the noun complex is provided in Chapter 5 (Section 5.3). In Chapter 5, the noun complex was divided into four layers; the noun stem, the N̄-constituent, the NP-constituent and the Extended-NP. This chapter focuses exclusively on modification within the N̄-constituent (noun stratum 2) and the NP-constituent (noun stratum 3). As described in Chapter 5, in the N̄-constituent is the level where reduplication and noun compounding occurs. The NP-constituent is a level where all elements occur in a fixed order in relation to the N̄-constituent and cannot be interrupted by a free form that is not also a modifier of the N̄-constituent. Noun-noun combination and noun compounding apply at the N̄-constituent level. Attributive modification is achieved through noun compounding and combination with adjectives; the latter occurs at the NP-constituent level. Finally, possessive modification occurs primarily at the NP-constituent level.

14.1. NOUN MODIFICATION

Nouns can modify other nouns. Before discussing noun modification in the basic noun phrase, I briefly consider nouns in predicate function (Section 14.1.1). Attributive noun modification can be organized on a continuum from highly syntax-like (noun-noun

combination) to highly lexicalized (noun compounding). Section 14.1.2 describes noun modification along this continuum.

14.1.1 Predicative function

There are no productive processes for verbalizing nouns in Chácobo (in contrast to some other Pano languages like Kakataibo (Zariquiey 2011; Valle 2017)).⁵⁶ Noun phrase predicates occur to the left of their subject in a non-verbal predicate or copula construction. Examples are provided in (14.1) through (14.5).

(14.1) matfúria i=ká(n)=ki **oko matfúria** katamamáhi tfáma

Machuria say=PL=DEC:P **Hugo Machuria** siriono chief

'They say that he is Machuria. The Siriono chief was Hugo Machuria.'

TXT 058:308

⁵⁶ Nouns can be verbalized indirectly. In Chácobo noun complexes can be adjectivalized with the morphemes = 'naşini' 'having the property of having an affinity for N' or = 'waşini' 'having the property of having a large N' (see Section 14.2.2). All adjectives (derived or not) can be verbalized with the suffixes -na 'intransitive verbalizer' and -wa 'transitive verbalizer'. For instance hini 'chicha' can be adjectivalized to hininaşini 'chicha-drinking/making person' which can be verbalized to hinina=şini-na 'becoming accustomed to being someone who always makes or drinks chicha'.

| (14.2) | yoşa | tfa?itá=şɨni | kiá | toa | ba | wino i | n i bí | |
|--------|---|--------------|----------|--------|-------|----------|-------------------|--|
| | woman | large=ADJLZ | REP | DEM2 | ca | t_fish 1 | nere | |
| | i=bitá | nii i | tsi | kiá | ha | =ni=ki | | |
| | 1sg=com | stand say | Р5 | REP | 3 | =REMP=DE | C:P | |
| | yoşa kiá bawíno | | | | | | | |
| | woman REP cat_fish | | | | | | | |
| | 'That catfish here is a large woman and she is standing here with me he said, | | | | | | | |
| | the catfish was (in fact) a woman (it is said).' TXT 068:106-107 | | | | | | | |
| (14.3) | haw i | yonóko | tsi | şo | toa | | | |
| | 3sg:gen | work | Р5 | DEC | DEM2 | 2 | | |
| | 'That is his work (the work of almond gathering).' TXT 068:042 | | | | | | | |
| (14.4) | yobika | tfama ts | i kiá | yo | of i | tafi | | |
| | shaman | great P5 | 5 REP | Y | oshi | Tashi | | |
| | 'Yoshi Tashi was a great shaman (it is said).' TXT 072:078 | | | | | | | |
| (14.5) | naa no | 2ó riki | ími t | omi t | ʻsi ş | o kiatí | íbo | |
| | DEM1 1s | G:GEN old | er_sib T | Готе 1 | 25 [| DEC lie | owner | |
| | 'This one my older sister Tome is the owner of the lie.' TXT 101:185 | | | | | | | |

See Section 4.1.2 for a detailed description of non-verbal predicate constructions.

14.1.2 Noun modification and compounding

This section is concerned with noun-noun combinations that are in a head-dependent relation with one another. Within such constructs, a rough distinction can be made between **noun-noun constructs** and **noun compounds**. These two constructs are related in two important senses; (i) they are related diachronically in the sense that the latter emerges out of the former, (ii) they are related analytically, in the sense that, there are no set of jointly sufficient and necessary criteria for distinguishing between these constructs. Rather a range of criteria classify them on a scale from the more syntactic noun-noun phrasal constructs to the more lexical noun compounds. What unites noun-noun phrasal constructs and noun compounds is that they are formed from a combination of two noun stems at the N̄-constituent level. In this section, I describe noun-noun combination in terms of structural type (headedness, endocentricity/exocentricity), and the semantic contribution of the dependent noun, if it can be discerned (cf. Bauer 2001 for a typological overview of these concepts).

Compounding is often described a "morphological technique" (Sapir 1921; Bloomfield 1933). However, it is well known that compounds share aspects with both morphological *and* syntactic combination (Haspelmath and Sims 2010). There are three types of criteria that can be used to position a given noun-noun combinations on the morphotactic-syntactic continuum (see Chapter 3 for a general discussion).

(14.6) SYNTACTIC COMBINATIONS VS. COMPOUNDS

- a. **Semantic opacity**: If the referent of the combination is not clearly based on the semantic composition of its parts, then the combination is more morphological (more compound-like).
- b. **Syntactic exocentricity**: If the parts of the combination are not clearly nouns then the combination is more morphological.
- c. **Morphophonological opacity**: The combination is more morphological if it is treated as one unit with respect to some morphophonological domain.

My general impression is that these properties tend to correlate with one another across noun-noun combinations in Chácobo. However, proving that this is the case and providing a characterization of the extent to which these properties correlate requires more research. I have already discussed the morphophonological opacity of noun-noun combinations and mentioned that it seems to correlate with semantic opacity in Section 6.2.1. Apart from providing a description of the productive syntax-like patterns of noun-noun combination, this section will be concerned with deviations from these patterns in semantic and syntactic domains.

14.1.2.1. Endocentric combination

Chácobo noun-noun constructs can be divided into a number of different structural types (Bauer 2001). **Endocentric** noun-noun combinations in Chácobo are productive and right-

headed. The noun to the left is in a type-of relationship to the noun to the right in the sense that the whole compound refers to a subtype of the referent of the right-most noun. The distinction between noun-noun combinations and noun-adjective combinations is illustrated below. The formative t/iki means "black, dirty" as an adjective and "Brazilian" as a noun. In the construct yoga t/iki 'black woman', t/iki is interpreted as an adjective dependent of yoga 'woman', in the mirror image construct t/iki yoga 'Brazilian woman', t/iki is interpreted as a nominal dependent as in (14.7).

Endocentric noun-noun combinations can display self-similar syntactic embedding (or "recursion"); one endocentric noun-noun combination is embedded under another. Examples are provided in (14.8), (14.9) and (14.10). In (14.8) the noun complex hini yoſini haʔi(ni) 'water spirit girl' is a construct formed from the combination of haʔi(ni) 'girl' with hini yoſini 'water daemon'. The latter is in turn a noun compound formed out of the nouns hini 'water' and yoſini 'spirit'.

In (14.9), the noun-noun combination *kamá soa yoşa* 'fox woman' is formed from the highly lexicalized compound *kamá soa* 'fox' and the noun *yoşa* 'woman'.

The left-most dependent of a noun complex can be a nominalized verb complex with a P argument. This is illustrated in (14.10) with the nominalized verb complex anó mira=ti 'to look for pacas'.

(14.10) [
$$no?\acute{o}$$
 [$an\acute{o}$ $mira=t\acute{i}$] $_{\bar{N}}$ $b\acute{a}?\acute{i}$] $_{\bar{N}}$ $_{\bar{N}}$ i $a(k)=i$

1SG:GEN paca look=NMLZ:PURP path 1SG make=CONCUR:S

 $ka=n\acute{i}=ki$

go=REMP=DEC:P

'I went making my looking-for-paca pathway.' TXT099:169

Noun-noun combinations that contain three noun stems are fairly rare in naturalistic speech, and larger ones are unattested in the corpus. At this point it is unclear what the upper bound is on self-similar embedding for noun-noun constructs in Chácobo.

Across endocentric right-headed noun-noun constructs, the semantic contribution of the dependent noun varies. The four most common semantic properties denoted by the noun dependent are the location, habitat, consistency and material of the head noun. Examples of the dependent noun contributing a location meaning are listed in (14.11). (14.11a-d) list the associated location of *sota* 'bag'. The noun dependents that modify *kini* 'hole, cave' in (14.11e-f) specify where the hole is found on the body.

```
(14.11)
               LOCATION
                tá?<del>i</del> sóta
                                 'stocking, sock'
                                                       (ta?i'foot'; sóta 'bag')
         a.
                                 'glove'
                                                       (mɨkɨnɨ 'hand'; sóta 'bag')
         b.
                mɨkɨni sóta
               soma sóta
                                 'shirt pocket'
                                                       (soma 'breast, nipple'; sóta 'bag')
         c.
         d.
               pátoro sóta
                                 'pocket'
                                                       (pátoro 'pants'; sóta 'bag')
```

```
e.
       po?iki kini
                          'anus'
                                                   (po?ikí 'buttock'; kini 'hole, cave')
f.
                          'nostril'
       r<del>i</del>saki kini
                                                   (rɨsaki'nose'; kini 'hole, cave')
                                                   (yora 'body'; kɨrɨtí 'writing')
       yora k<del>i</del>rití
                          'tattoo'
g.
h.
       biro bitsi
                          'eye lids'
                                                   (biro 'seed, eye'; bit/i'skin')
```

The location meanings of the dependent nouns mostly refer to positions on bodyparts. For noun-noun combinations that denote fauna and mythological creatures, dependent nouns specify an associated location as well, but it is perhaps more accurate to refer to the semantic contribution as being one of habitat rather than location. I only have a few examples of the habitat cases that are synchronically transparent. In (14.12a-b), the noun dependents modify *yofini* 'spirit, daemon' specifying the location where the particular type of spirit dwells. In (14.12c), we find that *popo(ma)* 'duck' which seems to refer to any type of duck, is modified by *hini* 'water', which could be seen as specifying the habitat of *hini popoma* "ringed teal". However, *waro* and *baita* in (14.12d) and (14.12e) respectively are not synchronically available stems in Chácobo.⁵⁷ The same is true of *ripi* in (14.12f).

-

⁵⁷baita and waro are Chácobo names. It is unclear what their semantic contribution is in the examples in (14.12).

```
(14.12)
              LOCATION: HABITAT
                                 'water demon'
              hɨnɨ yoʃini
        a.
               (also paraiba (lin. Brachyplatystoma filamentosus))'
              (hɨnɨ
                                 'water'; yoſini 'spirit, wind')
        b.
              hiwi yofini
                                 'spirit of the forest' (hiwi 'tree'; yo/ini 'spirit')
              hɨnɨ popo(ma)
                                'ringed teal (Lin. Collonetta leucophyrs)'
         c.
              (hɨnɨ 'water'; popóma 'duck')
         d.
               hɨnɨ baita 'yellow-browed tyrant (lin. Satrapa icterophyrs)'
              (hɨnɨ 'water'; baita 'Female Chácobo name')
              hɨnɨ waro
                                 'yapok, water opossum'
         e.
              hɨnɨ 'water'; waro 'Male Chácobo name')
        f.
                                 'yuca worm' (Zingg 1998)
              atsa r<del>i</del>pi
```

(atsa 'yuca'; ripi?)

Another common semantic contribution of the dependent noun is to denote the material or consistency of the referent. The noun-noun combination is a specific type *made out of* the material of the noun denoted by its dependent in the noun compound. Examples are listed in (14.13). There are a few examples where the head noun appears to not be synchronically identifiable (14.13g-h).

```
(14.13)
               CONSISTENCY&MATERIAL
              ráití sóbo
                               'tent'
        a.
               (raití 'clothes'; şobo 'house')
        b.
               atsa wai
                               'yucal'
               (atsa 'yuca'; wai 'farming plot')
                               'yuca bread'
               atsa mapari
        c.
               (atsa 'yuca'; mapari 'bread')
         d.
               kara hapati
                                 'awning, hood'
               (kara
                                 'rubber'; hapati 'object for draping')
                                 'sling shot'
         e.
               kara ninití
                                 'rubber'; ninití 'object for pulling')
               (kara
        f.
                                 'head band'
              raití k<del>i</del>si
               (raití 'clothes'; kɨsi 'cut')
                                 'type of food base with yuca' (Zingg 1998)
               atsa biros
        g.
               (atsa 'yuca'; biros?)
```

Location, habitat, consistency and material are the main semantic categories that noun-dependents contribute in productive, right-headed and endocentric noun-noun combinations.

14.1.2.2. Exocentric, dvandva and opaque combinations

Chácobo has other types of noun compounds. In **exocentric** compounds, neither of the parts of the combination seem to be identifiable as the head. Specifically, the denotation of the noun-noun combination does not seem to be in a type-of relationship with either of the parts. Examples are provided in (14.14). For (14.14a) the form *tsipaspa* 'splash with tail(v.)' is a verb and *hini* 'water' seems to be its P argument dependent, but the compound is not a verb phrase, but rather a noun or noun phrase (depending on whether we regard (14.14a) as a lexical compound or a phrasal combination). There is only one attested example of a clearly left-headed compound in Chácobo, given in (14.14b), and the semantic contribution of the dependent is unclear.

- (14.14) a. hɨnɨ tsipaspa 'Neotropic Cormorant (lin. Phalacrocorax brasilianus)'

 (hɨnɨ water; tsi- 'hip, buttocks'; páspa 'splash (v.)'
 - b. saba fófo 'puna tinamou (lin. Tinamotis pentlandii)'
 (saba 'turkey'; fofo 'blister')

Dvandva compounds in Chácobo consist of noun-noun combinations where neither of the elements can be thought of as a dependent of the other; both nouns can be understood as being in a type-of relationship to the whole combination. Diachronically, these are plausibly derived from coordinated nouns (Bauer 2001). Dvandva compounds appear to be

more common than either left-headed or exocentric compounds. Some examples are listed in (14.15).

```
(14.15) a.
              kara h<del>i</del>ni
                                'rubber in liquid form'
              (hɨnɨ 'water, liquid, chicha'; kara 'rubber')
              kara ba?i
         b.
                                 'plantation, ranch'
              (kara 'rubber'; ba?i 'path')
              pao bostoro
                                 'waterfall'
         c.
               (pao 'stream'; bostoro 'spring')
              oi roşaya
         d.
                            'snow'
              (oi 'rain'; rosaya 'hail')
              yoşa iwá(ti) 'old woman (esp. of witches)'
         e.
               (yoşa 'woman'; iwa(ti) 'grandmother')
         f.
               tapo mapo 'coconut'
               (tapo 'almond'; mapo 'head')
               tſìtſa sabi
                            'straw wide-brimmed hat (lit. basket hat)'
         g.
              (t/it/ama 'basket'; sabi 'hat')
              hóni sokóbo 'boy'
         h.
               (honi 'man'; sokobo 'boy')
```

14.1.2.3. Fauna

Chácobo has a large number of semantically opaque noun-noun combinations that refer to fauna. Some of them can be described as endocentric because the construct bears a type-of relation to the right-most noun. However, the semantic contribution of the left-most ("non-head") noun is unclear in most of these cases. Examples are provided in (14.6)

(14.16) ENDOCENTRIC FAUNA

- a. yawa titipa 'black-collored hawk (lin. Busarellus nigricollis)'

 (yawa 'white lipped peccary'; titipa 'hawk')
- b. yoſi pásia 'chest-nut eared aracari lin. Pteroglossus castanotis)'
 (yoſi 'demon'; pásia 'aracari')
- c. kama(no) isa(ka) 'ocellated piculet (lin. Picumnus dorbignyanus)' (kamáno 'jaguar'; isaka 'bird'
- d. mɨfi boi(no) 'white wood pecker (lin. Melanerpes candidos)'(mɨfi 'burnt'; boino 'woodpecker')
- e. yawa boi(no)'yellow throated woodpecker' (lin. Piculus flavigula)

 (yawa 'white lipped peccary'; boino 'woodpecker')
- f. omáka ma?íno 'small type of shark (lin. Engraulidae)'
 (omaka 'tucunare'; ma?ino 'tilapia')
- g. boka maʔino 'tilapia (lin. Satanoperca sp.)'

 (boka 'Chácobo name'; maʔino 'tilapia')

- h. tfi?i máki 'black-finned pacu (lin. Piaractus brachypomun)'
 (tfi?i 'fire'; maki 'piranha')
- i. ami ísaka 'Andean Cock of the rock (lin. Rupicola peruvians)'
 (amino 'capibara'; ísaka 'bird')
- j. tfara maʔino 'type of tilapia' (tſara ?; maʔino 'tipapia')

Some fauna built from noun-noun combinations are highly opaque semantically and could be regarded as exocentric in the sense that no type-of relation can be established between the noun-noun construct and either of its parts. Some examples are listed in (14.17) below.

- (14.17) SEMANTICALLY OPAQUE / EXOCENTRIC COMBINATIONS
 - a. yotano ha?iwa 'capped heron (lin. Pilherodius pileatus)'
 (yotáno 'southern wind'; ha?iwa 'mother')
 - b. boka kamáno 'crab eating raccoon, greater grison'(bóka 'Chácobo name'; kamáno 'jaguar')
 - c. kana popóma 'green rat'

 (kána 'squirrel'; popóma 'owl')

14.2. ADJECTIVES

The formal criteria that distinguish adjectives from nouns and verbs in Chácobo are described in Section 3.3.2. This section provides a further discussion of adjectives as modifiers in the noun phrase or as heads of different construction types. Section 14.2.1 provides an overview of the semantic domains encoded by adjectives in Chácobo. Section 14.2.2 describes body-part prefixation on adjectives. Section 14.2.2 describes processes of adjectivization. Sections 14.2.4 and 14.2.5 provide brief discussions of the distributional facts of adjectives in their predicative and attributive functions respectively. Some highly lexicalized noun-adjective combinations are described in Section 14.2.6. Section 14.2.7 describes the adjective *pistia* 'small, a little, shortly' that has developed a grammatical partitive function, and Section 14.2.8 describes the adjective *yói* 'ugly, bad' that has been grammaticalized into a marker of speaker emotion expressing sympathy. Section 14.2.9 discusses the predicative adjective *háskara* 'similar to'.

14.2.1 Adjective roots

Adjectives were defended as a distinct word class in Chapter 4. Dixon (1982, 2004) divides adjectives into a number of semantic classes. All of Dixon's core semantic classes are attested in Chácobo. Examples of adjectives that express dimension, age and value are provided below.

(14.18)DIMENSION pístia 'small' a. b. tɨtɨkáa 'tall, long' c. tʃaʔíta 'big, great, esteemed' 'deep' d. bɨpó (14.19)AGE 'old' a. síri tʃitɨma 'adolescent' b. kóſi 'not young' (also physical property) c. 'young, child' (also a noun) d. bakí (14.20)VALUE 'good' a. hia b. yoi 'ugly' *bɨrono* 'easy, light (also physical property)' c. 'cheap (of person)' d. waſiko

Another core semantic class of Dixon (1982, 2004) is colour. Chácobo also has colour terms in its adjective class, but these are highly polysemous, overlapping with other semantic classes such as physical properties. The complete list of colour terms in Chácobo is provided in (14.21) below.

```
(14.21) COLOUR
```

- a. *hoso* 'white, yellow'
- b. *t/iki* 'black, dirty' (also physical property)
- c. *fini* 'red, ripe' (also age)
- d. *soo* 'green, unripe' (also age)
- e. niaba 'blue, green'

Physical properties, corporeal properties, human propensity and speed are four peripheral semantic classes of adjectives listed in (Dixon 1982, 2004). In Chácobo physical properties and corporeal properties are expressed with adjectives.

(14.22) PHYSICAL PROPERTY

- a. boso 'mushy, spongy'
- b. *tʃaṣa* 'wet, damp'
- c. tii 'sweet'
- d. moká 'bitter'

(14.23) CORPOREAL PROPERTY (SUBCLASS OF PHYSICAL PROPERTY)

- a. boho 'dizzy'
- b. biko 'blind'
- c. *bɨpata* 'buzzed'
- d. haro 'mute'

Many of these require body-part prefixes and thus fail the minimum free form test. In Chácobo physical property adjectives and colour adjectives are the only class that take prefixes (Section 14.2.2)

Human propensity is expressed by *some* adjectives in Chácobo. There is a strong tendency to express the semantics of human propensity with verbs. All documented adjectives of human propensity are (i) either lexically flexible with verbs, or (ii) display dialect variation with respect to whether they can even function as adjectives.

(14.24) HUMAN PROPENSITY

- a. rani 'happy (adj.), be happy (v)'
- b. tfama 'strong, rich (adj.), be strong (v)'
- c. biyo 'crazy (adj.), act crazy (v.)'

One peripheral class listed by Dixon (2004) that is never encoded with an adjective in Chácobo is speed. Only adverbials and verbal suffixes express speech in Chácobo; 'a slow man' is expressed as follows.

(14.25) *ifima*
$$ka=?\acute{a}i=ka$$
 hóni slow go=NMLZ:NONP=REL man 'A man who goes slowly.'

Difficulty and similarity are also expressed by adjectives in Chácobo.

(14.26) DIFFICULTY/SIMILARITY

a. biro(no) 'easy'

b. *haska* 'similar'

Another one of Dixon's (2004) peripheral classes is that of qualification. Categories of qualification in Chácobo are the similative, veritative, and admonitive. These are expressed by a closed class of grammatical affixes and in one case, in combination with reduplication.⁵⁸

Despite the fact that adjectives are spread out over a wide number of semantic classes, the members of the adjective class are much smaller than for nouns and verbs, a situation which is typologically typical, even when the adjective class is open (Creissels 2006: 201). Approximately 300 members have been documented compared to over 2000 members each for verb and noun roots. It should be pointed out that new members of the adjective class are still being added to the data base on a fairly regular basis. In other

⁵⁸ Position is not expressed through adjectives in Chácobo, but rather through locative adverbials. Some

discussion is provided in Section 15.5 in the context of a discussion of demonstratives.

Panoan languages, for example Kakataibo, the adjective class is comparatively smaller (Valle 2017), and it is perhaps debatable whether the class should be considered open or closed. The lower number of adjectives in Chácobo might suggest that the addition of new members is a relatively recent innovation in the language.

Besides the addition of new adjective roots in Chácobo, the most important reason adjectives should be considered an open class in Chácobo is that they can be productively derived from verbs and nouns (see Section 14.2.3).

14.2.2 Body-part prefixes

Body-part prefix combination with verbs is described in Section 5.2.1.1 and Section 8.2. Body-part combination with nouns is described in Section 5.3.1. Body-part prefixes can also combine with some adjectives. Like verbs adjectives divide into classes according to whether they cannot, can or must combine with body-part prefixes.

The vast majority of adjective roots that combine with body-part prefixes, do so paradigmatically; all prefix-root combinations are possible. I only have one example of a cranberry adjective roots; -ka in ri-ka 'congested (adj.)'(ri- 'nose'). There are a few reoccurring adjective roots, that display paradigmatic deficiency in the sense that they can only occur with a small subset of prefixes. In a few cases, where no consistent semantic meaning can be derived these roots could be considered cranberry adjective roots. An example is the adjective root -ski which only combines with mi- 'hand' in mi-ski 'open

handed' and *ti*- 'neck' in *ti-şki* 'twisted neck'. Paradigmatically deficient roots and cranberry roots appear to be much more common in nouns and verbs than with adjectives. Adjectives roots that combine with body-part prefixes paradigmatically are limited to those that express physical properties. They apply to humans and animals.⁵⁹ Bound adjective roots that require a body-part prefix are listed in (14.27).

(14.27) BOUND ADJECTIVE ROOTS

- a. -risto 'maimed, cut off BODY-PART'(e.g. ba-risto 'maimed arm')
- b. -siro 'narrow BODY-PART'(e.g. bi-siro 'narrow faced')
- c. -toho 'wide BODY-PART'

 (e.g. bi-toho 'wide faced')
- d. -şaki 'concaved BODY-PART'(e.g. bi-şaki 'deep-eyed')
- e. -pata 'hard BODY-PART'

 (e.g. báṣ-pata 'with hard shoulder blades')
- f. -tʃikişi 'dirtied'(e.g. bi-tʃikişi 'face dirtied')

⁵⁹ I do not know whether adjective stems with body-part prefixes can be used to modify flora.

Adjective roots that optionally combine with a body-part prefix are listed in (14.28).

(14.28) Free Prefix-combining adjective roots

- a. pifi 'colored'(e.g. bi-pifi'colored face')
- b. fini 'red, ripe'(e.g. bi-fini 'red faced')
- c. fofó 'blistered'

 (e.g. ba-fofo 'arm blistered')
- d. yabokó 'tied(adj.), be tied (v.)'(e.g. mɨ-yabokó 'hands tied')

The bound adjective -pata 'hard' is also a reoccurring noun root (see Section 5.3.1). An adjectival stem formed from -pata displays a prosodic shape distinct from a noun stem that uses this root as a base. In the noun stem baş-patá 'shoulder blade (n.)' a high tone occurs on the final syllable, whereas an adjectival stem occurs with the high tone on the first syllable; báş-pata 'with a hardened shoulder blade (adj.)'. The latter prosodic shape does not occur generally with all adjective stems with body-part prefixes. For instance, combinations with -şaki as in (14.27d) occur with their high tone on the last syllable.

Adjective stems that are formed from combination with body-part prefixes are not especially common in naturalistic texts. An example of a bound adjective with a body-part prefix is provided in (14.29) from the story of Nahuapaxahua.

14.2.3 Adjectivalization: *şini*-derivations

Chácobo productively forms adjectives through combination with one of four morphemes that all end in *şini* (see Section 3.3 for parts-of-speech classes in Chácobo). All of the adjectivalizers are completely productive to my knowledge in that they are not confined to subclasses of any of the part-of-speech categories. I will refer to them collectively as *şini*-derivations.

Table 14.1. *şɨni-*adjectivalizers

| | Gloss | Parts-of-speech class it | Meaning: |
|-----------|--------|--------------------------|--------------------------|
| | | derives from | |
| =įsini | ADJLZ1 | Adjectives, Verbs | "Extremely Adj" |
| | | | "Always and compulsively |
| | | | Vs" |
| =tímaşɨni | ADJLZ2 | Verbs | "Never Vs" "Cannot V" |
| = nasini | ADJLZ3 | Nouns | "Has an affinity for N" |
| = waṣɨni | ADJLZ4 | Nouns | "Has a large N" |

The adjectivalizer $= \dot{s}ini$ can combine with with adjectives and verbs. When it combines with adjectives it serves as an intensifier which is illustrated with the examples in (14.30). A text example of $= \dot{s}ini$ combining with an adjective is provided in (14.31).

(14.30) ADJECTIVE $= \sin i > \text{ADJECTIVE}$

- a. $no\acute{a}=sini$ 'delicious (of food)' (noa 'nice')
- b. yoi=sini 'very ugly' (yoi 'poor, ugly')
- c. tʃɨkɨ=ṣɨni 'dark black' (tʃɨkɨ 'black, dirty')
- d. tʃamá-sini 'strongest, always exterting strength' (tʃáma 'strong')
- e. biyó=şini 'insane' (biyo 'crazy')
- f. hiá=ṣini 'good person' (hia 'good, well')

(14.31) ma-pik=?a=ka siri=şini ... bini ... tipas=kan=ikiá head-open=NMLZ:P=REL old=ADJLZ1 husband ... mruder=PL=REP 'When they opened (the door), there was the old man, her husband, and they killed him.' TXT 054:620

When the = sini combines with verbs it derives an adjective referring to someone or something that is typically or compulsively performs the action denoted by the verb. This is illustrated in (14.32). An example from naturalistic speech is provided in (14.33).

(14.32) VERB=
$$\xi ini$$
 > ADJECTIVE

a. $ka \mathcal{H} = \xi ini$ 'wise' ($ka \mathcal{H}$ 'know, arrive')

b. $ar \dot{a} = \xi ini$ 'cryer' (ara 'cry')

c. $tfan \dot{i} = \xi ini$ 'gregarious' ($tfan \dot{i}$ 'speak')

d. $ka \xi \dot{a} = \xi ini$ 'playful' ($ka \xi a$ 'play')

e. $tfik \dot{i} f = \xi ini$ 'lazy, stupid' ($tfik \dot{i} f$ 'laze about, be stupid')

f. $tsip \dot{i} s = \xi ini$ 'farter' ($tsip \dot{i} s$ 'fart')

g. $tfik \dot{i} f = \xi ini$ 'lazy' ($tfik \dot{i} f$ 'slack off')

The morpheme =timaşini derives an adjective from a verb complex. A verb=timaşini construct denotes a property whereby someone or something never performs or is incapable of performing an action. Illustrative examples are provided in (14.34). An example from naturalistic speech is in (14.35).

The morpheme = nasini combines with nouns. The resulting construct denotes the property of having an affinity for or always consuming the referent of the base noun. Illustrative examples are provided in (14.36) and (14.37).

```
(14.36)
              Noun='nasini > Adjective
              yosa=nás<del>i</del>ni
                                 'woman-lover'
                                                               (yosa 'woman')
         a.
         b.
              kirikó=naș<del>i</del>ni
                                 'gringo associate'
                                                               (kiriko 'gringo, foreigner')
                                 'coffee drinker'
                                                               (kapi 'coffee')
         c.
              kapí=nasini
         d.
              tsakaká=nasini 'agouti chaser'
                                                               (tsakaka 'agouti')
(14.37)
              r<del>i</del>to=kato
                             sɨbi t/okí=naṣɨni=ka
                                                            tsi
                                                                   nia=kan=ikiá
              bad hunter
                             motacusillo=ADJLZ3=REL
                                                            Р5
                                                                   throw=PL=REP
               'They (the women) break up with (lit. throw away) the bad hunter, the one
               who really likes motacusillo.'
                                               TXT 050:1001
```

The adjectivalizer = waṣini combines with nouns and denotes the property 'having (a) large N(s)' where N refers to the referent of the base noun. Illustrative examples are provided in (14.38). A text example is provided in (14.39).

(14.38) NOUN='waṣini > ADJECTIVE

a.
$$rok\acute{o}=waṣini$$
 'having large sores' ($roko$ 'sore, mange')

b. $sin\acute{i}=waṣini$ 'having a lot of fat' ($sini$ 'fat (n.)')

c. $pa?ok\acute{i}=waṣini$ 'large-eared' ($pa?ok\acute{i}$ 'ear')

d. $kif\~{i}=waṣini$ 'large-thighed' ($kif\~{i}$ 'thigh')

(14.39) $wist\~{i}-wist\ii$ $ok\acute{o}=iki\acute{a}$ naa $i-bi$

each $cough=REP$ $DEM1$ $1SG-RFLX$
 $ok\acute{o}=waṣin\ii=ka=bo$
 $cough=ADJLZ4=REL=PL$

'Every one of them was coughing, just like me here they had large coughs.'

 $TXT007: 211$

Constructs formed from gini-derivations have all of the properties of adjective roots described in Chapter 3 (Section 3.3.2). Like adjectives they can have an attributive function on nouns. Examples of =gini-constructs in attributive function are provided in (14.40) and (14.41). The =gini-constructs are in bold and the head nouns are underlined.

'When she went behind him, she put an extremely large rotten log (on the path as a bridge).' TXT 053:106

Like adjective =sini-constructs cannot stand alone as full arguments (illustrated in (14.42a)) unless they are embedded under the relativizer =ka(to) as in (14.42b) and (14.43).

'They mixed some other leaf with the pepper (lit. the one which is spicey).' TXT 007:186

Like adjectives *şini*-constructs can be verbalized with the suffixes *-na* 'intransitive verbalizer' and *-wa* 'transitive verbalizer'.

(14.44) a. $kapi=nasini-n\acute{a}=ki$

coffee=ADJLZ3-V:ITR=DEC:NONP

'S/he is becoming accustomed to drinking coffee all the time.'

b. kapí=naṣɨní-wa=ki

coffee=ADJLZ3-V:TR=DEC:NONP

'S/he is making him/her/them accustomed to drinking coffee all the time.'

ELIC

There is one aspect of *şini*-derivations that require more research. Younger speakers (e.g. Paë Yaquë Roca and Miguel Chávez) accept *şini*-constructs as full noun phrases without an overt head noun. For the grammar of these speakers, one cannot simply claim that *şini*-constructs are adjectives; they are mixed categories between nouns and adjectives. Older speakers (e.g. Caco Moreno) rejects such constructions (as in (14.42a)). Cases where *şini*-constructs stand alone as full noun phrases are unattested in my corpus This could reflect the fact that my corpus is biased towards the speech of older speakers, however.

14.2.4 Predicative function

All adjectives can be used with a predicate function in Chácobo. Examples of adjectives functioning as predicates in non-verbal predicate constructions are provided in (14.45), (14.46), (14.47), and (14.48).

In predicate function some adjectives can take noun phrase dependents. Some value adjectives (in Dixon's 1982, 2004 sense) entail experiencers, or else they have salient construals that entail experiencers. When such adjectives are used in predicate function they characteristically combine with postpositional phrases headed by the dative marker =ki. Illustrations of this are provided in (14.49), (14.50) and (14.51).

'Do you not like it?' (lit. is it terrible to you?) OBSV

A complex adjective phrase with a dative marked complement can be embedded under a relative clause as in (14.52).

14.2.5 Attributive function

Adjectives in attributive function occur directly after the noun. Adjectives in attributive position can have restrictive and non-restrictive functions (Creissels 2006: 71). Examples where adjectives occur with restrictive functions are provided in (14.53), (14.54) and (14.55).

In the sentence in (14.53) different types of mosquitos are distinguished using adjectives with an attributive function. In (14.54) the speaker restricts the possible farm plots to the ones that are large. In (14.55) the speaker restricts the referent to the woman's red public hair.

(14.53)anoma-ria bii bii titika=bo bii tfa?ita=bo many-AUG mosquito mosquito **long**=PL mosquito **big=**PL bii tſiki=bo bii?os=bo mosquito **black**=PL roscorosco=PL 'There were so many mosquitos, long mosquitos, big mosquitos, black mosquitos and the roscorosco mosquitos.' TXT081:033 (14.54)hɨɨ wai tfa?ita rɨa-mɨ tsi kiá naa maníwa yes farm plot big fill-mid p5 rep DEM1 pataju 'Yes, the **big** farm plot full of pataju.' TXT 002:112 (14.55)sɨki tsayá~tsayá=bona=?ái tsi hama tsákaka= corn see~see=GOING:TR/PL=NMLZ:IPV Р5 but agouti=ERG mai sitia=?ái haskawa=ki=a trample=NMLZ:IPV think similar=DEC:NONP=1SG earth рį́ sani sini tsi SO pubic hair red Р5 ANX DEC 'I was on my way looking at the corn, but I thought it was an agouti trampling on the earth, when in fact it was the red pubic hair (of the woman

Adjectives in attributive function with non-restrictive meanings are given in (14.56), (14.57) and (14.58). The sentence in (14.56) is from a folk tale about the witch

TXT097:005

I was seeing).'

Ashina. When (14.56) is uttered, the fact that Ashina eats children is already a salient part of the discourse, and, thus, the modification of wiko 'lower leg' by pistia 'small, little' does not clearly restrict the reference of the lower legs that fall out of Ashina's basket. yoi is used in (14.57) to refer to the speakers attitude towards her spices, rather than serving to delimit the reference of yotfi 'spice(s)'.

- (14.56)niá tsi kiá hawi wasmini hawí wiko pistia here Р5 REP 3sg:gen basket/cotton 3sG:GEN lower leg little $ak=(?)\acute{a}$ kiá put=NMLZ:P REP
 - 'The basket was here which is where (Ashina) had put their little legs.'

 TXT063:015
- (14.57) no?ó yotfi yoi mɨra=bona=kí=a

 1sg:GEN spice precious look=going:tr/pl=dec:nonp=1sg

 'I'm looking for my precious peppers!' TXT061:744
- (14.58)hatiro?á=ka=bo haka mɨa=yó toto flamingo all=REL=PL heron give=CMPL raití sini $mia=y\acute{o}$ kanará raití clothes colored clothes give=CMPL stork tʃaʔita=' sini paniuela típo a(k)=ni=kired hankerchief uncle=GEN neck put=REMP=DEC:P

'He (Caco) gave all of the herons clothes, the flamingos were all given red clothes, and he (Caco) put red hankerchiefs on the neck of the stork.' TXT 026:467

Adjectives in attributive position can modify names and pronouns in Chácobo. The adjective *siri* 'old' modifies the proper noun *Jose* in (14.59).

(14.59)
$$ha=ro?\acute{a}$$
 toa hosi **siri** $i=it\acute{a}=ki$ 3=LIMIT DEM2 Jose **old** be=RECP=DEC:P

'There was only that old man Don Jose.' TXT021:011

The modification of proper names by attributive adjectives is ubiquitous in Chácobo discourse. This can partially be attributed to the fact that there are relatively small set of Chácobo names. It is typical that in a village of 50 people, that multiple people have the same first name. In addition to the use of recently acquired Spanish last names, the occasional addition of adjectives serves to disambiguate community members that have the same name (see Córdoba 2008 on the system of onomastics in Chácobo). For instance, in order to distinguish two people named *hiri* "Gërë", one might be coined *hiri hoşo* 'white Gërë' and another *hiri tfiki* 'black Gërë'.

Adjectives can be coordinated in attributive position. Examples are provided in (14.60), (14.61), (14.62), and (14.63).⁶⁰

$$(14.60) \hspace{3.1em} wiaki \hspace{3.1em} tsaya=kan=(?)\acute{a}=ka \hspace{3.1em} ti-\varsigma ik-i=?a$$

$$next_day \hspace{3.1em} see=PL=NMLZ:P=REL \hspace{3.1em} throat-saw-ITR=NMLZ:P$$

$$rak\acute{a} \hspace{3.1em} tsi \hspace{3.1em} ki\acute{a} \hspace{3.1em} honi \hspace{3.1em} siri \hspace{3.1em} yoi$$

$$lie \hspace{3.1em} P5 \hspace{3.1em} REP \hspace{3.1em} man \hspace{3.1em} old \hspace{3.1em} ugly$$

'And the next day when they saw him, the old man was lying with his throat cut, old and ugly.' TXT061:025

'The tiny black mosquitos, all of them.'TXT081:034

⁶⁰ Examples of coordinated adjectives are not common in enough in naturalistic speech to state generalizations concerning the relative ordering of adjectives. This issue requires future research.

(14.63) káṣa=ṣɨnɨ yoṣa siri pistia
be_angry=ADJLZ woman old small

'The old small woman has a temper.' OBSV

Coordinated adjectives are very rare in texts. Typically when more than one adjectives occurs in a noun phrase one is embedded in a relative clause. Furthermore, in elicitation speakers have rejected most coordinated adjectives in attributive position that I have tried elicit, which suggests that at the very least attributive adjective coordination is highly restricted.

14.2.6 Lexicalized attributive adjectives

Adjectives in attributive function can also become lexicalized in combination with the a noun. (14.64) lists a number of lexicalized noun-adjective combinations where the adjective clearly maintains an attributive function, even though the end product is not completely compositional. A common function of the lexicalization of attributively positioned adjectives is species differentiation; this is illustrated in (14.64e-k). All flora are from Boom (1994), and fauna are from my own field notes. (14.64l-m) contain cranberry morphemes. These do not follow the definition of the attributive adjective construction as defined in this section, because these cranberry morphemes cannot be considered nouns.

```
(14.64) a.
               oi soko
                           'fog'
               (oi 'rain'; soko 'small')
         b.
              sina kosi
                           'mature'
               (finama 'soul, thought'; kofi 'hard')
               mai koſi
                           'brick'
         c.
               (mai 'dirt'; koſi 'hard')
         d.
               mɨtʃi tʃaʔita 'thumb'
               (mɨt/i 'finger'; t/aʔita 'large')
               maki tʃaʔita'red bellied piranha' (lin. Pygocentrus nattereri)
         e.
               (makɨ 'piranha'; tʃaʔita 'large')
         f.
               tɨtɨ t/ɨkɨ
                           'crane hawk (lin. Geranospiza caerulescens)'
               (titi(pa) 'hook billed kite'; tʃiki 'black')
               ro?o t/iki 'chamek spider monkey (lin. Ateles chamek)'
         g.
               (ro?o 'manechi'; t/iki 'black, dark')
         h.
               kama t/iki 'eyra cat (lin. Puma yagouaroundi)'
               (kama(no) 'jaguar'; t/iki 'black, dark')
         i.
               maki soko 'marbled hatchet fish (lin. Carnegiella strigata)'
               (maki 'piranha'; soko 'little')
        j.
              pama soko 'lin. Pseudolmedia marophylla'
```

'(lit. Mascagnia bethamiana)'

(pama unknown; soko 'small')

k.

nisi kosi

(ni/î 'vine'; ko/î 'hard')

- 1. fofapo 'type of plant (lin. Byrsonima crispa)'

 (fo '?'; fapo 'strong')
- m. yoʻfapo 'type of plant (lit. Calycophyllum megistocaulum)'
 (yoʻ '?'; fapo 'strong')

In *pistia* 'small' is lexicalized in combination with *yata* 'evening' to mean approximately the "late evening" (around 5:00 PM). The adjective *kofi* 'hard' occurs in a lexicalized combination with *fina(ma)* 'soul' to refer to a mature man in (14.66).

(14.65) yáta pístia ho=páma taita boca no
evening small come=CONCUR great Boca 1PL

 $hiko = tiki(n) = it\dot{a} = ki$

enter=AGAIN=RECP=DEC:P

'In the evening we were coming and then entered great Boca's house.'

TXT 021:051

(14.66)kará=ka sokoba=' hiii рá fina **kofi**=bo tsi kiá **EXPL** EPIS2=REL child=voc soul hard=PL P5 REP MIR hawí noma=boyounger sib=PL 3sg:gen

'Oh! who could it be children! it is said his younger brothers were adolescents now.' TXT 062:070

In lexicalized noun-adjective combinations that have a truncated noun, the non-truncated allomorph is unavailable. For instance *fina* 'soul' cannot surface as *finama* in the compound *fina kofi* 'mature'.

14.2.7 Partitive pístia

The adjective *pistia* 'small' has developed a partitive function in combination with mass nouns. The use of *pistia* in (14.67) is unambiguously partitive. There are apparently two interpretations of (14.68), one based on an adjectival reading of *pistia* and another based on a partitive reading.

(14.67)
$$mooto$$
 $pistia$ $sib-a=biria$ tsi kia ha chive PART wrap_up-TR=DO&COME:TR:PL P5 REP 3 $ho=ni=ki$ come=REMP=DEC:P

'She wadded up some chive and then came back.' TxT061:247

(14.68)ho=?á tsi no?ó kɨbo pistia no arrive=NMLZ:P 1sg:gen turkey PART/small Р5 1_{PL} pi=ni=kieat=REMP=DEC:P 'When we arrived, we ate a little bit of wild turkey.'

'When we arrived we ate a small wild turkey.'

The partitive function of *pístia* is not clearly associated with phonological reduction or a change in syntactic distribution. The partitive *pistia* occurs in the attributive adjectival

TXT011:17

14.2.8 Sympathetic vói

slot.

The morpheme *yói* is an adjective that means 'ugly, poor'. It has all of the properties of adjectives as described in Section 3.3.2: (i) it occurs right-adjacent to a noun it modifies; (ii) it can be verbalized with the morphemes -*na* 'intransitive verbalizer' and -*wa* 'transitive verbalizer' transitivizer'. It has a few properties that adjectives do not typically have. First, it can occur internal to the verb complex without necessarily taking on a clear adverbial function (see Section 5.2.3.9). Secondly, very frequently the morpheme does not describe an attribute of a noun phrase referent *per se*. Rather it often expresses an emotional state of the speaker often indicating that the speaker sympathesizes with one of the participants of the discourse (see Ponsonnet 2018 for a broader typological perspective; see Guillaume

2018 for a description of similar grammaticalized emotion categories in neighbouring Takanan languages).

Very frequently the formative *yói* combines with proper names to express the speakers stance towards the person referred to. In such cases it indicates affection or sympathy on the part of the speaker towards the person that it modifies. Examples are provided in (14.69) through (14.71).

(14.71) GERE ORTIZ:

wáka a(k)=ní ronóa

cow kill=INTER:REMP anaconda

'Has the anaconda killed the cow?'

Paë Chávez:

waka $\dot{a}(k)=ki$ **hiri** yói

cow kill=dec:nonp Gere sypm

'He is killing the cow, my dear Gere.'

In Chácobo narratives it is common for the first person plural pronoun to be used to express sympathy with a protagonist (e.g. "our leg" used for "the protagonist's leg"). The sympathetic morpheme *yói* can combine with the first person plural perhaps augmenting or emphasizing this function.

(14.72) **no-ki yoi** kiá şo şo şo tsi kiá

1PL-EPEN SYMP REP IDEO IDEO IDEO P5 REP

nobá naa pɨtɨkɨ=ʔái=na

1PL:GEN DEM1 gut=NMLZ:IPV=EPEN

'After poor us heard the sound "xo xo xo" we (the Chácobo of the story)

here were gutted.' TXT 007:289

It can also express sympathy for a discourse participant by modifying a body-part of that discourse participant (e.g. "his poor penis"). An example of this is provided in (14.73) below.

(14.73)
$$n\acute{a}ama$$
 $ki\acute{a}$ $yoşa=k\acute{i}$ ha $fira=?\acute{a}=ka$ already REP woman=DAT 3 aroused=NMLZ:P=REL $hama$ $ha-tfo$ tsi $ki\acute{a}$ $noba$ $hina$ $y\acute{o}i$ but 3-behind P5 REP 1PL:GEN penis SYMP $i=y\acute{a}ma=pao=n\acute{i}=ki$

be=NEG=HAB=REMP=DEC:P

'He was already ready to have sex with the woman, but when he was behind her his (lit. our) poor penis would always go limp.' TXT049:305

The sympathetic morpheme can occur beside highly animate animals to express speaker sympathy as in (14.74) below.

'The old jaguar was the distance of the house of brother Joel: they pulled the poor jaguar to the curve of the stream (after they killed him).' TXT 026:156

The formative *yói* can express that the speaker is an enthusiast for the referent of the modified noun when this noun refers to food. Examples are provided in (14.75) and (14.76).

- (14.75)ha-ro?á **sani voi** pi~pi=?ás nami miſni pi~pi=?ás 3-LIMIT **fish SYPM** eat~eat=PRIOR:S meat little eat~eat=PRIOR:S raká ... siya=?á raka tsi no i=pao=ni=kifill up=NMLZ:P live Р5 live ... 1_{PL} be=HAB=REMP=DEC:P 'We just ate our precious fish and we ate a little meat, we lived there filling up (with food), we used to live there.' TXT 040:161
- (14.76)mɨra=boná=ʔikiá pi=bona=?ikiá bona look=GOING:PL/TR=REP eat=GOING:PL/TR=REP ant пого mira=bona=ki=a*yotfi* yoi 1sg:gen look for=GOING:PL/TR=DEC:NONP=1SG peppers **SYMP** '(The anteater was climbing up the tree) looking for ants while going, eating them on the way (lit. while going) (the ant eater said) "I'm looking for my precious peppers on the way (lit. while going)" he said TXT 061:743-744

As noted above the morpheme *yói* can also occur inside the verb complex, between the verb root and the clause-type/rank morpheme in a verbal predicate construction (see Guillaume (2018:125) for a similar case in Tacana). This seems to only occur when the head noun is not overtly expressed. More research on such constructions is still required. Some examples from naturalistic speech are provided in (14.77) and (14.78).

14.2.9 Equative háskara

haska(ra) 'similar to, the same as' is a two place predicate. The equative haska(ra) does not mark a noun phrase dependent with the dative enclitic =ki. Its object appears in the

absolutive (unmarked) or the accusative case for full nouns and pronouns respectively. Examples of sentences with *haskara* constructions are provided in (14.79) and (14.80).

maina (14.79)habi haskara mai șiriki Maina inside surely same earth 'Just like the Maina, (they lived) inside the earth.' TXT 037:074

The arguments of the equalitive háskara always occur juxtaposed to it (ABShaskara-ABS) if háskara is in a main clause, where the argument that expresses new information occurs on the right side as in (14.80a) and more topical information on the left side as in (14.80b).

(14.80) a. ka=kihabi harohá kiá ha tsi go=DEC:P surely only REP 3sg TOP boti=kiria=ní=ki háskara motoro descend=DO&COME:ITR:SG=REMP=DEC:P motorboat same 'He (the fish) took off, he went down and came; It was the same as the motor boat.'

kiá

tsi motorboat same Р5 REP 'It was the same as the motor boat.' TxT068:211-213

háskara

b.

motoro

The equative *háskara* is most often used in relative clauses. In such cases the head noun of the noun phrase is one of its arguments, and the other argument obligatorily precedes *háskara*. Examples are provided in (14.81) and (14.82).

sobo = = ka(14.81)ho=?ai=na ha?arí kia naa sokobo again come=NMLZ:IPV=EPEN DEM1 house=SPAT=REL child haska=ka tsi ho=ikiá ha-to=ki same=REL P5 come=REP 3-PL=DAT 'She comes to them, similar to this child in the house and this girl comes to them.' TXT063:212 (14.82)hatsi kiá naa ma-to haska=ka then DEM1 2PL-ACC REP same=REL hiko=yo=ní=ki enter=CMPL=REMP=DEC:P

As with all two-place predicate adjectives, verbal complements appear with the purposive enclitic =ti. For instance, naka is a verbal dependent of haskara in (14.83) and takes a purposive =ti enclitic.

'So, just like you here, all of them entered.' TXT 034:215

(14.83) toa tsi kiá naka=tí háskara

DEM2 P5 REP chew=NMLZ:PURP same

'It's the same as chewing.' TXT 052:127

14.3.Possession

This section is concerned with the grammatical marking of possession in Chácobo. Possessor noun phrases occur in the NP-constituent case marked with a genitive discussed in Section 14.3.1. Possessors include genitive noun phrases and possessive pronouns. Noun phrase possessors that occur outside of the NP-constituent are described in Section 14.3.2. Predicative possession is described in Section 14.3.3.

14.3.1 Genitive noun phrases and possessive pronouns

Genitive noun phrases are dependents in the NP-constituent that precede the head noun $(\bar{N}\text{-constituent})$. The possessing NP is marked with high tone clitic = ''genitive'. This morpheme is syncretic with the ergative and vocative case. The genitive noun phrase precedes noun phrase dependents in noun compounds. For instance, $awar\dot{a}$ 'tapir (genitive)' precedes the noun dependent po?i 'feces' in the noun compound po?i kini 'anus'.

'The man entered the anus (lit. feces hole) of the tapir.' TXT052:687

Possessive pronouns can occur in the same syntactic position in the basic noun phrase as genitive noun phrases. Possessive pronouns are listed in Table 7.1. In this position they are also marked as genitives; they also occur with an H tone docked to their final syllable.

In Chácobo, all nouns are in the same class with respect to alienability, except the two irregular patterns displayed in Table 7.1. Two morphemes that denote "father" -ipa and "mother" -ipa (listed in Table 7.1) are "bound inalienable" (Bickel & Nichols 2013) in the sense that they cannot occur without some formal marking of possession. The possessive marking on these nouns displays some deviations from biuniqueness. In these nouns, the prefix *mi*- denotes that the possessor is a second person singular, or possibly a second person in general for some speakers. When the prefix *ha*- 'first/third person possessor' occurs without a possessive pronoun, the possessor is a third person singular. The prefix *ha*- 'first/third person possessor' cannot be said to encode a third person in general, because it surfaces in *no?ó ha?ipa* 'my father' and *no?ó ha?iwa* 'my mother'.

Table 7.1 Possessive pronouns and bound inalienable noun paradigms

| GENERAL | -iwa~-iwa 'mother' | -ipa~-ipa 'father' | | | |
|----------|---|--|--|--|--|
| no?ό ~ i | no?ó ha?ɨwa | no?ó ha?ɨpa | | | |
| | no?ó ha-?-iwa 1SG:GEN 3/1?-EPEN-mother | no?ó ha-?-ipa 1PL:GEN 3/1?-EPEN-father | | | |
| mí | mi?íwa | ті?і́ра | | | |
| | <i>mi-2-íwa</i> 2-EPEN-mother | <i>mi-ʔ-ípa</i> 2-EPEN-father | | | |
| hawi | haʔɨwa | ha'lipa | | | |
| | <i>ha-?-íwa</i> 3-EPEN-mother | <i>ha-?-ipa</i> 3-EPEN-father | | | |
| nobá | nobá haʔɨwa | nobá haʔɨpa | | | |
| | nobá ha-?-iwa 1PL:GEN 3/1?-EPEN-mother | nobá ha-2-ípa 1PL:GEN 3/1?-father | | | |
| mató | mató haʔɨwa ~ miʔíwa | mató haʔɨpa~ miʔipa | | | |
| | <i>mató ha-?-iwa</i> 2PL:GEN 3/2?-EPEN-mother | <i>mató ha-ʔ-ɨpa</i> 2PL:GEN 3-EPEN-FATHER | | | |
| | mató mi-ʔ-íwa 2PL:GEN 2-EPEN-mother | mató mi-2-ípa 2PL:GEN 2-EPEN-father | | | |
| ható | ható haʔɨwa | ható haʔɨpa | | | |
| | ható ha-ʔ-ɨwa 3PL:GEN 3-EPEN-mother | ható ha-?-ípa 3PL:GEN 3-EPEN-father | | | |

Dixon (2009: 261-262) lists a number of semantic relationships that can be encoded in possessive constructions within an NP (ownership, whole-part, kinship, attribute,

orientation, location and association). There is a grammatical constraint in Chácobo such that certain nominalized verb phrases cannot be possessed by a genitive noun phrase. This prevents certain semantic categories from being coded as possessed. Otherwise speakers accept all of the aforementioned semantic relationships in a possessive construction (see Dixon 2009 for more details). However, there are some that are much more prevalent than others in naturalistic speech.

Possessive constructions can encode an ownership relationship in the sense that the genitive dependent has (socially accepted) ownership over the head noun. Socially accepted ownership extends over technology, food, and plots of land used for agriculture. Examples are provided in (14.85), (14.86) and (14.87).

| (14.85) | <i>mifo=yo=ní=ki</i> burn=CMPL=REMP=DEC:P | | | haw í | | | kanatí | | |
|---------|--|---------|------------------|------------------|----------|-----|--------|---------|--|
| | | | 3sg:gen | | | bow | | | |
| | 'They burned all his bow and arrows.' TXT 061:249 | | | | | | | | |
| (14.86) | hawi | romi | y i s | yɨs | yis | tsi | kiá | romi | |
| | 3sg:gen | tobacco | chew | chew | chew | Р5 | REP | tobacco | |
| | ha pi=?ái=na 3sG eat=NMLZ:IPV=EPEN | | | | | | | | |
| | | | | | | | | | |
| | 'This time he is chewing his tobacco.' TXT 061:046 | | | | | | | | |
| (14.87) | hawi | wai | | kɨso= '=ka | | | yono | | |
| | 3sg:gen | farm_p | olot | border= | SPAT=REI | _ | drun | n | |

'This is the drum that I knock on on the border of his chaco.' TXT 034:153

Possessive constructions are used for part-whole relationships, where the genitive denotes the whole and the head noun denotes the part. Elicitation data suggest that all bodyparts are alienable in the sense that they do not require a grammatical possessor. However, in the corpus there are no examples of unpossessed body-part nouns. Body-part nouns occur with a genitive possessor even when they are severed as illustrated from the consecutive sentences provided below. The severed body-parts of the children that the witch Ashina eats or keeps for potions occur with genitive pronouns as in *mapo* 'head(s)' in (14.88a), and *wiko* 'lower leg(s)' in (14.88b).

(14.88) a.
$$n\acute{a}ama$$
 $pi=y\acute{a}=ki$ $ki\acute{a}$

ALREADY eat=PERF=DEC:P REP

 $haw\acute{i}$ $mapo=ro?\acute{a}$ tsi $ki\acute{a}$

3SG:GEN head=LIMIT P5 REP

^{&#}x27;She (Ashina) ate them, only their (the babies') heads (it is said).'

Part-whole relations that involve plants can also be encoded in possessive constructions. For instance, *şiko* 'stock' is modified by a genitive third person pronoun in (14.89) which denotes a cob of corn as a whole.

Possessive constructions also express kinship relationships. The only inalienably possessed terms in Chácobo are the kinship terms listed Table 7.1. Kinship terms are

^{&#}x27;After using their whole body, she left (it fell out) their lower leg in her basket.'

TXT 063:014-015

generally possessed in naturalistic speech. Two examples of possessed kinship terms appear in (14.90).

(14.90)
$$no?\delta$$
 kai $his-is=ki=a$ $no?\delta$

1sG:GEN mother see~see=DEC:NONP=1sG 1sG:GEN

 $honi=ka=bo$ $his~is=ki=a$ $i=iki\acute{a}$

man=REL=PL see~see=DEC:NONP=1sG say=REP

"'I'm looking at my mother, I'm looking at my brothers" she said.'

TXT 063:302

Possessive constructions do not generally encode an attribute in the sense described in Dixon (2009) (e.g. *anger* in *his anger*). The reason for this is that attributes in this sense are encoded as adjectives and verbs, not as nouns. Attributes expressed by verbs can be nominalized, but these derived constructions cannot be possessed. The only attributes which are possessed are *tana* 'height' as in (14.91) and the deictic *topo* 'this tall' in (14.92).

Possessive constructions can also encode orientation. For instance, *hawi biro* 'his view' in (14.93) encodes the orientation of the Chácobo observers, as they watch one of their kin be picked up and carried off by a cannibal.

(14.93) hawf biro
$$tito=bay\acute{a}=tsa=iki\acute{a}$$
 ha-2- \acute{a}

3sG:GEN view fold=DO&GO:TR:PL=IMM:TR=REP 3-EPEN-SPAT

 $ka=2\acute{a}i=na$
go=NMLZ:IPV=EPEN

'In his view he folded them up and went off.' TXT063:217

A number of different types of associative relations are encoded in possessive constructions. Examples are provided in (14.94), (14.95), (14.96). For instance, in (14.94), *ia* 'lice' has a genitive dependent, referring to the person the lice are attached to. The possessive construction encodes the social relationship of friendship in (14.95). In (14.96) the people afflicted by a disease are genitive dependents of the head noun that denotes the disease *roko* 'pock'.

In naturalistic speech, pets sometimes occur in genitive relationships and sometimes not. Pets do not occur in the genitive relationship in texts, despite the fact that the Chácobo keep pets such as dogs and birds. The following example is from a personal

narrative where the author relates how her pet dogs were killed by a jaguar, but her dogs are never modified with a possessive pronoun.

Examples where pets occur as possessed elements in genitive constructions are provided in (14.98) and (14.99).

(14.99) no26 inaka=' $kam\acute{a}$ $bitf=\acute{i}=ka$ $pak\acute{a}$ \acute{i} $1sg:Gen \ dog=erg \ jaguar \ get=concur:s=rel \ arrow=spat \ 1sg$ $a(k)=pao=n\acute{i}=k\emph{i}$

TxT095:169

kill=HAB=REMP=DEC:P

(the one of Tohi).'

'When my dog hunted jaguar, I killed it with the arrow.' TXT 089:030

One more issue concerning the semantics of possessive constructions that should be addressed is whether the function of a genitive noun in a possessive construction is mutually exclusive with the function of a dependent noun in a noun compound. Prima facie it seems likely that genitive nouns that express association rather than any of the more specific (and perhaps more prototypical) semantic relationships in the other examples display functional overlap with some of the meanings of the noun dependents discussed in Section 14.1. In certain cases, speakers vary concerning whether a given expression should be built from a noun-noun combination or from a genitive construction. For instance, in the production of texts Chácobo speakers have disagreed on whether ancestral stories should be referred to as rikibá tſani 'ancestor's story', where rikibá 'ancestor (gen.)' appears in a genitive form or rikibo tsani 'ancestor story' which is formed out of juxtaposition like a noun compound. It's possible that the grammar allows these two options without much meaning difference, but it is also likely that the disagreement reflects different conceptualizations of the same referent. These more fine-grained differences are not yet discernible given my current state of knowledge of the language, and require future research.

14.3.2 Possessive = na

Genitive noun phrases and possessive pronouns all occur in the NP-constituent preceding the head noun. Possessor noun phrases can also be marked with the enclitic = na. Such

noun phrases occur in the extended-NP. They seem to display the same semantic function as genitives described in the previous section. In order to distinguish them from genitive noun phrases and possessive pronouns I refer to them as **possessive** = na phrases.

Despite the fact that their semantic function with respect to the head noun is the same, possessive =na phrases rarely occur with a full possessed noun phrase. An overt head noun can occur in a noun phrase with a possessive =na phrase dependent as in (14.100).

However, there are no examples where an overt noun phrase is possessed by a possessor construction marked with = na outside of a predicative function. Usually = na constructs appear without an overt expression of the element they are possessing. Examples are provided in (14.101), (14.102), (14.103), (14.104) and (14.105).

'There are arrows for (killing) people, for (killing) animals, for (killing) tapir.' TXT 049:341

(14.102)nobá háska t∫itima yoká=na tsi naa adolescente DEM1 1PL:GEN Yoca=Poss same Р5 kiá ta/i i=ni=ki*yoſi* demon Tashi be=REMP=DEC:P REP

'Yoshi Tashi was already large like our adolescente one (child) here of Yoca (this adolescent child of Yoca).' OBSV

 $i=kan=(?)\acute{a}=ka$ (14.103)híri háska tsi náa tsi be=PL=NMLZ:P=REL Р5 DEM1 Gere similar Р5 pai̇=na kiá naa háska tsi kiá Paë=poss similar P5 REP DEM1 REP

(14.104) tfifopá=na tsi go kakatao hini diarrhea=POSS P5 DEC cat's_claw water

'The liquid of the cat's claw plant (Lin. *Uncaria guianensis*) is helpful for diarrhea (lit. The liquid of the cat's claw plant is for diarrhea).' TXT 105:318

^{&#}x27;After then after that, he (the child) was similar to Gere, similar to (the son) of Paë.' TXT 070:052

the grandmother's of grandmother Iba (did this).' TXT 117:201

Possessive pronouns cannot occur without the head noun. However, if possessive pronouns combines with the enclitic = na then the head noun is usually omitted. The head noun can be recoverable from discourse context. Examples are provided in (14.106), (14.107) and (14.108)

In (14.106b) the possessed noun of *no?óna* 'mine' is *atsa* 'yuca' which is recoverable from the previous sentence in (14.106a).

In all of the other examples as in (14.107) and (14.108), the possessive pronouns + possessive morpheme marks some kin, which is the most common use of the construction.

(14.107)
$$hakiriki$$
 $no2o=na$ $riso=ki$ tsi i wai after_that $1PL:GEN=POSS$ $die=PRIOR:S\{A,S\}$ $P5$ $1SG$ $farm_plot$ $a(k)=yama=ni=ki$ $do=NEG=REMP=DEC:P$

'After that when my daughter (lit. mine) died I didn't make a farm plot.'

TXT 102:089

'And the older went running far telling them as the water was killing his (the older one's relatives).' TXT 098:080

Another primary function of possessive = na 'possessive' phrases is in predicative possession, which is described below.

14.3.3 Predicative Possession

There are four ways of encoding predicative possession in Chácobo; possessive =na phrases, proprietive $=y\dot{a}$ phrases, and with the ownership verb $hay\dot{a}$ 'have'. Predicative possessive phrases always occur to the right of the subject that they modify. Predicative possession with ='na phrases relationships of ownership where the possessive ='na phrases denotes the owner and its subject denotes the material owned. Possessive ='na phrases combine with a genitive noun or a possessive pronoun, illustrated in (14.109) and (14.110) respectively.

The most frequent use of encoding predicative possession is with the proprietive/comitative postposition $=y\dot{a}$. Another function of such phrases is for predicative possession. $=y\dot{a}$ phrases in predicative function express associative meanings. In contrast to predicative possession with =na phrases, =ya phrases always precede their

subject. Phrases modified by =ya denote the "possessed" referent in the possessive construction. Examples are provided in (14.111) through (14.113) below.

Another semantic relationship expressed by proprietive $=y\acute{a}$ phrases is one of magical powers, where the predicative =ya phrase expresses the magical power of the noun phrase denoted by its subject. Examples of predicative $=y\acute{a}$ constructions referring to the ability to use magical powers or the acquisition of magical powers are provided in (14.114) and (14.115).

(14.114) is from the story of Nahuapaxahua, *tʃiʔiwaya* 'with the great fire' refers to the ability of the tapir witch to control fire and use it to burn to villages in holocaustic blasts.

Txt 034:054

(14.115) is from a description of the acquisition of black magic by a young teenaged girl. The proprietive $=y\acute{a}$ construction is used to denote her acquired ability to use kibitfi black magic.

'But after she heard it, then she has heard it (she will die if she does not use it) ... the black magic (lit. lips), then (she says) "do I have it?" then after spitting on a little meat she throws it to the dogs (to see whether they die from eating it).' TXT 114:014-016

Predicative possession with =ya phrases expresses a wider variety of meanings than = na phrases. In texts =na phrases refer to ownership, whereas all other semantic relations normally expressed by possessive constructions appear to be expressed by $=y\dot{a}$ phrases. In elicitation speakers accept possessive constructions that express the same relationship with = na phrases and with $=y\dot{a}$ phrases, as demonstrated with the examples from elicitation in (14.116a) and (14.116b). The precise difference between = na phrase and $=y\dot{a}$ phrase predicative constructions requires future research. One salient difference, however, is that predicative possessive constructions with =na phrases cannot express a relationship such that the possessed item is indefinite as in (14.116c) below.

(14.116) a. hɨrɨ=na naa moto tsi SO motorcycle P5 DEM₁ DEC Gere=Poss 'The motorcycle is Gërë's.' **ELIC** b. moto=ya naa hɨrɨ tsi SO motorcycle=PROP P5 DEC Gërë DEM1 'This motorcycle is Gërë's.' **ELIC**

c. moto=yá tsi şo hɨrɨ

motorcycle=PROP P5 DEC Gërë

'Gërë has a motorcycle.' ELIC

Predicative possession in Chácobo can also be expressed with the possessive verb haya 'have, impregnate, get pregnant'. The verb is plausibly derived from a combination of the third person pronoun ha and the proprietive $=y\dot{a}$. The reanalysis pathway that led to the development of this verb is synchronically reconstructable. First stative verbs can occur in predicative function without tense morphemes just like proprietive =ya phrases. The combination of ha 'third person' with $=y\dot{a}$ is very common in naturalistic speech, meaning "with it/them". These two facts together mean that there is a construction in Chácobo which is analytically ambiguous between a predicative construction with the verb $hay\dot{a}$ 'have, pregnant' and non-verbal predication with a proprietive =ya phrase.

An example of an analytically ambiguous sentence in this sense is provided in (14.117). The verbal predication parse is provided in (14.117a), and the non-verbal predicative possessive parse is provided in (14.117b). In the non-verbal predicate analysis, the third person pronoun *ha* refers back to *wistima yonoko tʃaʔita* 'a lot of important work', where in the verbal predicate analysis the object (coreferential with the same phrase) of *haya* is a null pronoun.

(14.117) wistima yonóko t∫aʔita ha=yá migel tfavez şo Miguel Chavez much work big have DEC a. b. much work big 3=PROP DEC Miguel Chavez 'So much important work, Miguel Chavez has it.' OBSV

Chapter 15. Number, Quantification and Deixis

This chapter is concerned with the expression of number, quantification and deixis in Chácobo. These concepts are highly elaborated in the nominal domain being expressed by (semi-lexical) functional morphemes.⁶¹ These elements occur outside of the NP-constituent in the extended-NP and as such they can be interrupted from the N̄-constituent by a free form and in some cases can be variably ordered with the head noun (Section 5.3).

Concepts in the domains of number, quantification and deixis are also relevant to the verbal domain. For instance, adverbials in the verbal domain quantify over the number of events not just the number of referents. In Chácobo there are many functional morphemes of the nominal domain that have an adverbial function (e.g. wistima can mean 'many things' or 'many times'). Demonstratives that encode deictic categories can be dependent of nouns ("that") or modify the verb ("over there"). To capture the similarity in form and function across the nominal and verbal domains, this chapter considers number, quantification and deixis in the context of nominal and verbal modification. Since these concepts are typically more developed in the nominal domain, I take their nominal function as the starting point before moving on to their associated adverbial functions.

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⁶¹ In Chácobo deictic categories are also highly elaborated in the verbal domain with associated motion categories. Associated Motion is treated in Chapter 12 and not discussed in this chapter.

15.1.PLURAL/ASSOCIATIVE/COLLECTIVE =BO~=BÁ

The plural morpheme $=bo\sim=b\acute{a}$ encodes a wide variety of functions broadly associated with plurality. As described in Chapter 7, the morpheme displays allomorphy based on whether it is left adjacent to a functional high tone or not. When it modifies genitive NPs and NPs in A function it surfaces as $=b\acute{a}$ (see Section 6.3.1 for some discussion). The plural surfaces as =bo otherwise. The allomorphy is illustrated in (15.1) below.

The morpheme $=bo\sim=b\acute{a}$ has four related functions; plurality, associativity, collectivity, and quantification. The functions of $=bo\sim=b\acute{a}$ depend on the animacy of the noun phrase with which it combines. The most straightforward and salient grammatical distinction that emerges out of the grammar of $=bo\sim=b\acute{a}$ is that between humans and nonhumans. That said, the concept of "human" here does not necessarily correspond to a species distinction; certain non-Chácobo ethnicities are grouped in the non-human

category, and there is some variation with respect to whether magical beings and/or spirits are classified as human or not. The grammar of $=b\dot{a}\sim=bo$ across the human-non-human distinction also interacts with topicality.

First, I describe the function of $=bo\sim=b\acute{a}$ with humans, then I move onto non-humans, and then I present a summary. With definite humans, $=bo\sim=b\acute{a}$ has plural and associative functions. In combination with nouns that denote human referents, $=bo\sim=b\acute{a}$ is non-facultative in Corbett's (2004) sense; it obligatorily occurs with semantically plural noun phrases, even where the plurality of the referents is obvious from context. Examples where the plural is redundantly marked despite the fact that the semantic plurality of the noun phrase is clear from the context are provided in (15.2) and (15.3) and are discussed below.

In (15.2) = bo is combined with honi 'man' even though the plurality of noun phrase referent can be deduced from the fact that it combines with the quantifier wistima 'many'. Similarly, the semantic plurality of the referents of tisi 'the rest' is discernible from context; it is in reference to an entire village, but =bo combines with it anyway.

'There were many men, thirty men, entered the jungle, and us as well.'

TXT 033:014

(15.3) a. wistí tsi kiá
$$osa=yáma=?ái=na$$

many P5 REP sleep=NEG=NMLZ=EPEN

 $\underline{tisi}=bo$ $i=no=ma$ $osa=ká(n)=ki$ kiá

 $\underline{rest}=PL$ be=CONCUR=NEG sleep=PL=DEC:P REP

'There is one person that is not sleeping. This was not the case with the rest of them, they had already fallen asleep.'

TXT 075:130

With humans the morpheme $=bo\sim=b\acute{a}$ also has an associative function. In this function, $=bo\sim=b\acute{a}$ refers to one or more referents associated with the noun it combines with. Examples are provided and discussed below.

The woman referred to in the following sentece only has one husband, nevertheless, bini 'husband' combines with $=bo\sim=b\acute{a}$ in (15.4) to mean the woman's husband and those who he socializes with. That there is a plurality of referents can be discerned from the fact that the enclitic =ka(n), which encodes a third person plural subject appears in the verb complex bo=ka(n)=ki 'they went'.

(15.4)soa-ma yoşa atſa=tápi yáma kiá far-NEG grab=PNCT woman NEG REP bini=bohawi=kí kiá ha $bo=k\acute{a}(n)=ki$ husband=PL 3SG:GEN=DAT REP 3 go=PL=DEC:P 'Very close he immediately grabbed a woman, her husband and his <u>associates</u> weren't there, he went to do his (activities) (relieve himself)' TXT 063:215

In the following example awi=bo refers to 'woman and other people associated with the household'.

kokó=?i (15.5)yamabo pia=' ka=?á papa habí tsi father deceased arrow=SPAT hunt=CONCUR:S go=NMLZ:P surely P5 sani=kí ka=?ái naa no pia=yá no DEM1 1_{PL} fish=DAT go=NMLZ:IPV arrow=COM 1_{PL} ka=?ai nobá papa yamabo habi tsi naa deceased surely go=NMLZ:IPV father Р5 DEM1 1PL:GEN **awi=bo**=ya no ka=?aiwife=PL=COM go=NMLZ:IPV 1_{PL}

'My late father used to go hunting surelywe went fishing and he would go with an arrow, surely (as we do now) when we go hunting with <u>our wives</u> and family.'

TXT 049:323-325

A clear associative reading emerges when the first person singular combines with the morpheme $=bo\sim=b\acute{a}$ illustrated in (15.6).

(15.6)
$$h\acute{a}a$$
 i - a - $r\acute{i}$ = bo $bari$ = $k\acute{i}$ nia = $?\acute{a}$ = ka

yes 1-EPEN-AUG=ASSOC sun=DAT throw=NMLZ:P=REL

 bi = $yam\acute{i}(t)$ = ki

grab=DISTP=DEC:P

'I as well (with my daughters) grabbed the chive after throwing it in the

sun.' TXT 105:169

Despite the plural function of $=bo\sim=b\acute{a}$, the morpheme can also combine noun phrases that denote semantically singular referents. In such cases, the morpheme seems to have a reference tracking function. It can be described roughly as follows; for a given discourse context, when the speaker does not (or, perhaps, cannot due to a lack of information) differentiate two topical human referents in any other way except in terms of their relative topicality, $=bo\sim=b\acute{a}$ combines with the less topical referent to distinguish between these referents. Since the two referents additionally must be associated with each

other (either through kinship or another social relationship), I tentatively refer to this function as **associative singular**, to distinguish it from the associative plural and the plural functions described above.

For instance, =bo combines with a semantically singular noun phrase in (15.7c). (15.7c) is uttered in a context where two salient characters are involved in the discourse, both referred to simply as yoga 'the woman'. In (15.7a), a highly discourse salient woman comments on the pregnancy of another woman. (15.7b) contains an acted out exchange between the two women, where the more topical woman tries to convince the pregnant (and less topical) woman to come with her. (15.7c) explains the reason the pregnant woman does not want to come. The formative =bo is combined with yoga 'the woman' to distinguish her from the (topical) protagonist in the story.

(15.7) a.
$$honi$$
 $pi=no$ tsi ha $bini=y\acute{a}$ man $COND=CONCUR$ P5 3SG husband=COM $gi=k\acute{i}=a$ $yoga$ $pi=no$ tsi $no?\acute{o}$ REMF=DEC:NONP=1SG woman $COND=CONCUR$ P5 1SG:GEN $yonat\acute{i}$ $gi=k\acute{i}$ i tsi $ki\acute{a}$ $bini=k\acute{i}$ helper REMF=NONP say P5 REP husband=DAT ha $=n\acute{i}=k\acute{i}$ 3SG $=$ REMP=DEC:P

'If it's a man I'll make him my husband, if it's a woman she will be my helper." she (yoşa) said to her husband.'

(ha 'she' refers to more topical yosa 'the woman')

- b. $ka=y\acute{a}ma=tsi=2a\acute{i}$ $ka=y\acute{a}ma=tsi=k\acute{i}=a$ go=NEG=IMM:ITR=NONP:INTER:2SG go=NEG=IMM:ITR=DEC:NONP=1SG '"Are you not going now?"-"I am not going now!""
- c. $\acute{a}wa$ $no?\acute{i}= \red{sini}$ $\red{yosa}= \red{bo}$ $ki\acute{a}$ $n\acute{a}a$ tapir love=ADJLZ $\red{woman}= \red{ASSOC}$ REP DEM1

'This woman (yoşa) missed the tapir a lot.' TXT006:597-598

The combination of $=bo\sim=b\acute{a}$ with a proper name can produce a semantically singular referent. The Chácobo have a relatively small number of fixed and recyclable names, that are systematically applied to newborns, but there are so few names that it is very typical that more than one person in a family has the same name (cf. Córdoba 2008 for an analysis of Chácobo's system of onomastics). The morpheme $=bo\sim=ba$ can be used to denote a less topical referent with the same name. For instance, a speaker uttered (15.8) in a conversation in which another *boka yaki* and another *maro* (of a younger generation) were participating.

(15.8)tsóboko ha-to=rí ho=ni=na...arrive=NMLZ:REMP=EPEN ... naked 3-PL:ACC=too boka yaki=bohawi noma maro=boBoca Yaquë=ASSOC 3sg:gen brother Maro=ASSOC 'They arrived naked as well... (the other) Boca Yaquë and his brother (the other) Maro.' TxT117:259

The associative singular appears in possessive constructions. Recall from Section 14.3.2 that the possessive =na can be used to indicate a specific type of kin relation. A noun that combines with =na will mean the "child of N" where N is the referent of the noun (e.g. $Yok\acute{a}=na$ 'child of Yoca'). The formative =bo is frequently found in such constructions when they involve simultaneous expression of the same kin relation for different participants. This is illustrated in (15.9). The expression $no?\acute{o}$ baki=na 'the child of my boy' is augmented with the associative =bo. This can be explained by noting that there are two "son of" relations expressed in the constructions $no?\acute{o}$ baki=na (the speaker's son and the son of the speaker's son). The associative =bo appears in these constructions because the final referent of the full noun phrase is in a more distant kin relation with the speaker out of the two kin relations evoked by the construct. In this construction $=bo\sim=ba$ appears to be an associative singular.

(15.9) hatsi so naa no?\(\delta\) bak\(\delta\)=na=\(\beta\)\(\delta\)
then DEC DEM1 1SG:GEN boy=POSS=ASSOC

'This is what the son of my son is like.' TXT 105:306

The associative singular apparently occurs with inanimates. A possible example of this is found in (15.10). The speaker uses =bo to denote a temporary house used for gathering almonds rather than the primary house where he lives. Its clear from context that there is only one extra house.

- (15.10) a. hakiriki wisti semana ka=şó i tsaya=?á=ka ...

 after_that one week go=PRIOR:A 1sG see=NMLZ:P=REL ...

 'After one week passed I went to see it...'
 - b. nobá sobo ha-?-á tapa=?ai=raka=tí

 1PL:GEN house 3-EPEN-SPAT gather_almonds=NMLZ:IPV=EPIS2=too

 '... our house where we will probably take out almonds.'
 - nobá sobo=**bo** ni=ma=yo=yami(t)=kic. no 1PL:GEN house=ASSOC 1_{PL} stand=CAUS=DISTP=DEC:P toa**=bo**=parí $a(k)=y\acute{o}=yami(t)=ki$ no DEM2=ASSOC=FIRST 1_{PL} make=CMPL=DISTP=DEC:P 'First we planted the house (put up its infrastructure) then we made it.'

TxT095:013-015

In contrast to $=bo\sim=b\acute{a}$ with humans, the plural enclitic is facultative with non-humans. With non-humans $=bo\sim=b\acute{a}$ encodes plurality, collectivity and quantification, but does not encode associativity. The facultative function of $=bo\sim=b\acute{a}$ can be discerned from its presence and absence in the examples in (15.11).

In (15.11), the speaker describes a large group of birds that appear and fly downwards towards the protagonist in the narrative. The speaker uses the quantifier anomaria 'many' to refer to the quantity of birds, and also lists some of the types of birds that appear. The semantic contribution of $=bo\sim=b\acute{a}$ in combination with the noun phrases isko mifni 'little grose' and nono mifni 'little duck' specify that there were not just many types, but that each group was semantically plural. In (15.11b), =bo is not used in the semantically plural noun phrase naa nono 'these ducks', because the plurality of this referent can be discerned from context. On non-humans, therefore, we see that the use of $=bo\sim=ba$ is facultative, only used optionally where the semantic plurality of the referent is not easily discernible from context.

(15.11) a.
$$isko$$
 $mifni=bo$ $nono$ $mifni=bo$ tsi $ki\acute{a}$ grouse little=PL duck small=PL P5 REP $boti=?ai=na$ $\acute{a}noma=ria$ descend=NMLZ:IPV=EPEN many=AUG

'There were little grouses and little ducks that flew downward, there were many.'

'These ducks flew flew downward' TXT 063:051-052

On non-humans $=bo\sim=b\acute{a}$ can also have a collective or quantifier reading, meaning roughly "many" or "much". An example of this is given in (15.12).

(15.12) bo
$$i$$
 $tfa?ita$ no $pii=ka'(n)=no$ $mooto=bo$ yatorana large 1PL eat=PL=HORT chive=PL $a(k)=pao=ni=ki$ make=HAB=REM=DEC:P

'Let's eat yatorana!" And she would make a mass of chive.' TXT045:140

With the quantifier function, $=bo\sim=ba$ can be morphologically modified by the augmentative -ria as in (15.13), where it refers to an especially large quantity.

'He was this far away, and his friend was bringing his huge amount of stuff.'

TXT 063:069

The functions of $=bo\sim=b\acute{a}$ across humans and non-humans in the corpus are summarized in Table 7.2.

Table 7.2 The functions and facultativity of $=bo\sim=ba$ across humans and non-humans

| I | IUMANS | | NON-HUMANS | | |
|----------------------|--------------------|------------------------|--------------|--|--|
| OBLIGATORY FOR | R PLURAL REFERENTS | FACULTATIVE FOR PLURAL | | | |
| | | | REFERENTS | | |
| ASSOCIATIVE | Plural | PLURA | L QUANTIFIER | | |
| PLURAL | | | "MANY, MUCH" | | |
| ASSOCIATIVE SINGULAR | | | | | |

The plural morpheme cannot modify a completely null noun phrase. But it does not require an overt noun head in order to modify a noun phrase. It very commonly modifies headless relative clauses. Examples of such cases are provided in (15.14), (15.15) and (15.16).

(15.14)
$$saso$$
 $soih$ soi $soih$ soi $soih$ $sasoh$ $soih$ $soih$

'Those that they are moving towards are going to hit the sleigh with the sound "koih koih", "yes" say those (spider monkeys) that are on top.' TXT 054:131

TXT 061:033

(15.15)
$$siri=ka=bo$$
 tsi $ak=(?)ini$ old=rel=pl p5 kill=inter:nonp

'He (the firefly) kills the oldest?'

(15.16) naa riso=kan=(?)ái**=bo** ka=?ai kia=?ái=ka**=bo**DEM1 die=PL=NMLZ:IPV=PL go=NMLZ:IPV lie=NMLZ:IPV=REL=PL

'These ones who are dying are the ones who are going and lying (to the devil)' TXT 072:031

The plural also very frequenly modifies verb complexes formed from the imperfective nominalizer = $2\dot{a}i$ (see Section 4.1.2.3 and Section 9.1.4 on the morphosyntax and semantics of this morpheme). An example is with $riso=kan=\dot{a}i=bo$ 'those who are dying' in (15.16) above and (15.17) below. Another examples is provided with bo2okanaibo 'Uncontacted people (lit. the ones who wander/oscilate)' shown in (15.18).

Combination with $=2\dot{a}i$ is unsurprising because verb complexes nominalized with $=2\dot{a}i$ can stand on their own as noun phrases anyways. It should be noted that noun phrases that are headed by verb complexes nominalized by $=2\dot{a}i$ 'imperfective, nominalizer' are rare in naturalistic speech (I only have a handful of examples) unless the plural marker $=bo\sim=b\dot{a}$ also occurs as in the examples above.

There are also a number of lexicalized constructs that contain $=bo\sim=ba$. These are listed in (15.19). I refer to these constructs as "lexicalized" because they are not completely compositional and the bases with which the formative =bo appears cannot stand alone as their own noun phrases.

All of these nouns are ambiguous between singular and plural interpretation regardless of whether they are modified by an additional $=bo\sim=b\acute{a}$. Note that all of the nouns listed in (15.19) exhibit the allomorphy of $=bo\sim=ba$ even though they are lexicalized. This is demonstrated with the sentences in (15.20), (15.21) and (15.22).

(15.20)
$$nob\acute{a}$$
 $naabo$ $rikiba='$ $hawi$ $mapo=k\acute{i}$

1PL:GEN relatives $ancestors=ERG$ 3SG:GEN head=DAT

 $kir\acute{i}$ $tik-a=2\acute{a}$ $ki\acute{a}$
 $arrow$ $brea-TR=NMLZ:P$ REP

^{&#}x27;Our ancestor put the point of the arrow in her head.' TXT 068:039

honi sokoba=' (15.21)náa papi=kí habi=ti=ka study=CONCUR:A learn=PURP=REL man child=ERG DEM1 sao=ni=kiput on clothes=REMP=DEC:P 'These boys that studied to learn put (shoes and sandals) on.' TXT117:185 hawi naaba= (15.22)sao parí kipi kipi kipi 3sg:gen relative(s)=GEN bone first put put put 'First the bone of his relative was being placed on the borders.' TXT 061:240

15.2. PLURAL PRONOMINAL ELEMENT = KA(N)

The plural pronominal element is already introduced in the context of alignment in Chapter 7 (Section 7.2.2). It is a piece of the plural subject pronoun $ha \dots = kan$ where ha occurs in the position of $\{A,S\}$ arguments. The pronominal element = kan has a special distribution with respect to the other pronouns in that it occurs in position 12 of the sentence in a verbal predicate construction (see Section 5.2.3.11).⁶² In non-verbal predicate construction = ka(n)

⁶² As described in Chapter 7 pronouns have the same syntagmatic distribution as full NPs except that they can occur clause-finally in subordinate clauses. Pronouns have an accusative alignment when they occur before the clause-type/rank morpheme (position 14 of the sentence). After the clause-type/rank morpheme

also has a special distribution. It must occur directly before the clause-type/rank morpheme. Examples are illustrated in (15.23).

(15.23) a.
$$titika=bo$$
 $=ka(n)$ so $long=PL$ $=PL$ DEC

'They are long/tall.'

b.
$$titika=bo$$
 $=ka(n)$ $ki\acute{a}$

'They are long/tall (it is said).'

c.
$$titika=bo$$
 $=ka(n)$ ni

'Are they long/tall?' ELIC

In zero-marked non-verbal predicate constructions an epenthetic formative -a appears beside =kan as in =kan-a in (15.24).⁶³

the form of pronominal elements does not seem to be governed by grammatical relations (see Section 7.2.2.2 for discussion).

Another analysis would be to consider $=k \dot{a} n a$ the underlying morpheme that truncates to =k a n in most contexts, following a similar patter in full nouns (see Section 6.3.1). It is not clear to me whether the epenthesis analysis of =k a n(a) presented here is better than the apocope analysis. One problem with the analysis presented here is that there are no other cases where juxtaposition with a vowel only results in the

(15.24)
$$titika=bo = kán-a$$
 $long=PL = PL-EPEN$ 'They are long/tall.'

The insertion of the formative -a is obligatorily in this context and banned everywhere else. It can be related to a minimality constraint that bans monomoraic morphemes in certain circumstances (see Section 6.3). Note that other pronouns similarly occur with epenthetic formatives (or "epenthetic case formatives") after the clause-type/rank morpheme in verbal and non-verbal predicate constructions (see Section 7.2.2.2). In fact, the epenthetic case formative is identical for three of the pronouns; *i-a* 'first person singular', *mi-a*; 'second person singular'; *no-a* 'first person plural'.⁶⁴

Examples from naturalistic speech of =ka(n) occurring in non-verbal predicate constructions are provided in (15.25) through (15.30).

surfacing of a latent coda consonant such as /n/. In all other cases the morpheme must start with a glottal stop (see Section 6.1.2).

⁶⁴ The insertion of this epenthetic formative cannot be elevated to the status of a general morphophonological rule, however. The reason is that the second person plural surfaces with a distinct epenthetic case formative *-to*.

=kán-a (15.25)pia=yá $=k\acute{a}(n)=na$ kanati=yá bow=PROP arrow=PROP =PL=EPEN =PL-EPEN íso $a(k)=k\dot{a}(n)=ki$ spider monkey kill=PL=DEC:NONP 'They have arrows, they have bows, they kill spider monkeys.' TXT 012:61 (15.26)dos oras i tres oras nika tsi nika tsi two hours or three hours like so Р5 like so P5 =ka(n)kiá =PL REP 'Two or three hours they were like this (quiet) (it is said).' TXT 054:606 rabi (15.27)honi ſatſiní tsi =ka(n)kiá on thigh Р5 =PL man two REP 'They (her legs) had two men on them (she had a two men sitting on her lap one on each thigh).' TXT 001:035 wistíma kiá (15.28)pί tsi =ka(n)Р5 many ANX =PL REP his=(y)áma=?ikiá по-а see=NEG=REP 1PL-EPEN 'There were many of them (the Maina), and we couldn't see them (the Maina).' TXT 007:070

(15.29)
$$hin\dot{a}wa=g\dot{o}$$
 $p\dot{i}=\dot{l}i$ ha $i=ka(n)=n\dot{i}$ $do_how=PRIOR:A$ $eat=CONCUR:S$ 3 $be=PL=INTER:REMP$ $paga$ $=ka(n)$ $n\dot{i}$ raw $=PL$ $INTER$ 'How did they used to eat? Were they (the meats) raw ?' TXT 113:011 (15.30) a. $ka\dot{l}i=gini$ $=k\dot{a}n-a$ $tsaya=\dot{l}a\dot{i}$ $know=ADJLZ$ $=PL-EPEN$ $see=INTER:2SG$ 'They know him (Nahuapaxahua), you see.' b. $nawapag\dot{a}wa$ $ka\dot{l}i=gini$ $=ka(n)$ $n\dot{i}$ $Nahuapaxahua$ $know=ADJLZ$ $=PL$ $inter$ 'How do they know Nahuapaxahua?' $inter$ $inter$ 'How do they know Nahuapaxahua?' $inter$ $inter$ 'How do they know Nahuapaxahua?' $inter$ $inter$ $inter$ 'How do they know Nahuapaxahua?' $inter$ $inter$

In non-verbal predicate constructions, =ka(n) always indexes a *third person* plural regardless of the clause-type. In verbal predicate constructions =ka(n) can index different persons depending on the clause-type. First, in declaratives, =ka(n) indexes a third person plural. If there is no overt noun phrase, =ka(n) must appear, and will repeat redundantly throughout discourse in main and nominalized clauses as is shown in (15.31) below.

(15.31)
$$tana=i$$
 $bo=kan=(?)\acute{a}=ka$ $hawi$ $kar\acute{a}=ka$ fish=CONCUR:S $go=PL=NMLZ:P=REL$ what $EPIS1=REL$ ha $a(k)=ka(n)=yam\acute{a}(t)=ki$ $a(k)=kan=(?)\acute{a}=ka$ 3 $do=PL=DISTP=DEC:P$ $do=PL=NMLZ:P=REL$ i $firi-ha(k)=yam\acute{a}(t)=ki$ ha $pi=ka(n)=yam\acute{a}(t)=ki$ 1SG $boil-TR=DISTP=DEC:P$ 3 $eat=PL=DISTP=DEC:P$ 'They went fishing, what could it be that they caught, they caught some (fish) (what could it be?). When they had caught (the fish), I boiled it. They ate it.' $TXT094:024-026$

Despite its obligatoriness in the context such as that in (15.31) above, like $=bo\sim=b\acute{a}$ the morpheme, $=k\acute{a}n$ is facultative when the third person is low on the animacy scale (see Section 15.1). For instance, when the third person is a fish =ka(n) does not (necessarily) surface. This is illustrated in (15.32) which contains consecutive sentences from naturalistic speech. There are three sentences where =ka(n) would surface if the {A,S} argument was a human. The clause-type/rank morphemes of these sentences are underlined.

(15.32) a. hia i=yama=tsi<u>=?ikiá</u> <u>şɨ</u>yápi hawi yora=kí pike characin good be=NEG=IMM:ITR=REP 3sg:gen woman=dat yora=kí kiá ha biisi<u>=ní=ki</u> tsi body=DAT P5 REP 3 jump on=REMP=DEC:P 'The pike characins didn't notice that they were on his body. They jumped on his body.'

b. i-a hinawa=?iní naa riki titikáa=şini

1SG-ACC do_how=INTER:NONP DEM1 nose long=ADJLZ

'How are these long nosed ones treating (bothering) me?' TXT 068:070
071

The morpheme =ka(n) can modify the second person in imperative contexts. This is illustrated in (15.33) and (15.35b).

(15.33)
$$pi=i$$
 $bi=ka(n)=wi$ i $ki\acute{a}$ ha $=ka(n)=n\acute{i}=ki$ eat=CONCUR:S come=PL=IMPER say REP 3 =PL=REMP=DEC:P "Come and eat" they said (to them).' TXT 075:121

The morpheme =ka(n) can also index a second person plural in the context of interrogatives. This is illustrated in (15.34) and (15.35). Additional context is provided to show that the relevant referents really are plural.

(15.34) a.
$$bo=y\acute{a}ma=tsi=kan=(?)a\acute{t}$$
 go=NEG=IMM:ITR=PL=INTER:2

'Are you not going?'

b. haa $ka=y\acute{a}ma=tsi=ki$ $no-a$

yes go=NEG=IMM:ITR=DEC:NONP 1PL-EPEN

'We are not going now.' TXT061:834

(15.35) a. $kia=yama=kan=(?)a\acute{t}$

lie=NEG=PL=INTER:2

'You aren't lying?'

b. haa $kia=y\acute{a}ma=ki$ $no-a$ $his=i$

yes lie=NEG=DEC:NONP 1PL-EPEN see=CONCUR:S

 $bo=fari=ka(n)=p\acute{a}$

go=CRAS=PL=IMPER:MIR

As stated above =kan is a pronominal element. It cannot straightforwardly be regarded as a marker of agreement or argument cross-reference. But the facts are complex and depend somewhat on the construction. When the $\{A,S\}$ argument precedes the clause-type/rank morpheme, =kan cannot occur if there is an overt NP $\{A,S\}$ argument. This is illustrated in (15.36), (15.37) and (15.38).

'We are not lying! Let's go see tomorrow.' TXT 067:151

(15.36)
$$(ha)$$
 $tsa?o=bona=k\acute{a}(n)=ki$

'They sat down while going.' ELIC

(15.37)
$$*h\acute{o}ni=bo$$
 $tsa?o=bona=k\acute{a}(n)=ki$

'The men sat down while going.' ELIC

(15.38)
$$honi=bo$$
 $tsa?o=kan\acute{a}=ki$

'They men sat down while going.' ELIC

When the $\{A,S\}$ argument follows the clause-type/rank morpheme the reverse situation holds; =kan must occur and as illustrated in (15.39) and (15.40).

(15.39)
$$*tsa?o=kan\acute{a}=ki$$
 $h\acute{o}ni=bo$

INTENDED: 'The men have sat down while going.' ELIC

(15.40)
$$tsa?o=bona=k\acute{a}(n)=ki$$
 $h\acute{o}ni=bo$

'The men sat down while going.' ELIC

Text examples where an overt plural NP combines with a verb complex that contains $=k \acute{a}n$ are provided in (15.41) through (15.44). An example where the {A,S} subject is a pronoun is provided in (15.45).

- (15.41)tana=honá kamáno gapo tsi kiá warehouse distance=COMING:ITR:SG jaguar Р5 REP naama ima=ka(n)=kikiá yosa=bo already be scared=PL=DEC:P REP woman=PL 'About a kiloemeter from the warehouse the jaguar is coming, and the women are already scared.' TXT 050:201 (15.42)ſìnó $mani=ka(n)=?=ita=?\acute{a}$ <u>honi=bo=rí</u> transform=PL=EPEN=RECP=INTER:P monkey man=PL=too 'And had transformed into monkeys?' TXT 067:150 (15.43) $saw_i = k\acute{a}(n) = ki$ moro <u>yosa=bo=rí</u> tunic put on=PL=DEC:NONP woman=PL=too 'The women too had put on tunics.' (15.44)hátsi $osa=tsa=k\acute{a}(n)=ki$ <u>karáina=bo</u> then laugh at=IMM:TR=PL=DEC:NONP carayana=PL
 - then laugh_at=IMM:TR=PL=DEC:NONP carayan $ho = 2\dot{a} = s = kato$ arrive=NMLZ:P=S=REL

'So at that moment the Carayanas who arrived laughed (at us for being naked).' TXT 117:131

(15.45) ha?iki tsi dos sientos dos sientos hato=ki i for_this_reason P5 two hundred two hundred 3-PL=DAT 1SG $a(k)=yamit=(?)\acute{a}=ka$ tsi a(k)=i $bo=k\acute{a}(n)=ki$ ha-to-ri give=DISTP=NMLZ:P=REL P5 do=CONCUR:S go=PL=DEC:P 3-PL-too 'And for this reason after I gave them two hundred bolivianos each they left.' TXT 099:131

The morpheme =kan is also relevant for the interpretation of some quantifiers (see Section 15.4).

15.3. CARDINAL NUMERALS

In Chácobo there are two morphemes that could be designated as cardinal numerals; wis(t)i(ta) 'one, unique, only'; and rabi(ta) 'two, in a pair, many'. The latter numeral refers to "many" in certain circumstances which are described below. As dependents of the noun phrase they can occur on either side of the head noun, but cannot occur in between the head noun and dependents of the NP-constituent such as genitive noun phrases, adjectives or modifying nouns (See Section 5.3.3 and Chapter 14 on the NP-constituent). Cardinal

numerals display variable ordering with respect to every other dependent in the Extended-NP (see Section 5.3.4).

Examples of the numeral wis(t)i(ta) 'one' occurring before and after the head noun are provided in (15.46) and (15.47) respectively. As dependents in the noun phrase, the prehead position is more common than the posthead position; 84% for prehead and 16% for posthead position out of 31 examples in the corpus.

The apocope of both *wisti(ta)* and *rabi(ta)* follow the conditions on allomorphy described in Chapter 6 (Section 6.3.1) that apply to all forms with apocopable forms. Text examples of the longer (non-apocoped) forms are provided in (15.48) and (15.49).

(15.48)naa mɨkɨ wistíta kiyo=?ái=kato tsi hand finish=NMLZ:IPV=REL DEM1 P5 one ká=ki no-a go=DEC:NONP 1PL-EPEN 'Finishing one hand (counting to five) we go.' Txt 009:034 wai='(15.49)no?ó nipása SO siki wisíta 1sg:gen farm plot=SPAT middle DEC corn one 'In the middle of my farm plot there is one corn stock.' TXT 074:030

The numeral rabi(ta) 'two' occurs before and after the head noun in (15.50) and (15.51) respectively. It is used less frequently as a dependent of the noun phrase than wisti 'one'. In my corpus, 9 examples of rabi(ta) occur in posthead position, and 6 examples in prehead position.

(15.50)rabi bari=no basi tsi kiá patiari sobo tana day=SPAT far Р5 chicken two REP house distance 'After two days, it was far away, about the length of the chicken house.' TxT032:207 (15.51)**rabi**=yá t/a?íta yakísini yamábo awí tóa uncle Yaquëxëni deceased two=PROP DEM1 woman

$$i=pao=ni=ki$$

be=HAB=REMP=DEC:P

'The deceased uncle Yaquëxëni had two women.' TXT 117:294

Noun phrases can occur with only a numeral. Put another way, numerals can have a referential function in the sense that they can be sole element of a referential expression (a noun phrase). This is illustrated in (15.52). The understood head noun of the P argument of ak 'kill' is yawa 'tapir', but it does not surface overtly. To my knowledge, numerals can only stand in for entire noun complexes when these are in P function.

Numerals can be separated from its head noun by other noun phrases. This is illustrated in (15.53). This discontinuous distirbution is only attested with P arguments and only in cases where *wisti* 'one' precedes the noun it modifies.

(15.53) wistí
$$tsi$$
 $ki\acute{a}$ $kamano='$ ina $\acute{a}k=ki$

one P5 REP jaguar=ERG dog kill=DEC:P

'The jaguar killed one dog.' ELIC

The numerals wisti(ta) and rabi(ta) have adverbial clitic counterparts =wisti 'once' and =rabi 'twice, many times'.65 Examples are provided in (15.54), (15.55) and (15.56).

'And from there, there was one person, and Caco spoke once to him.' TXT 026:281

(15.55)
$$i \quad nika=ni=ki \quad =wisti=ro?\acute{a} \quad ha \quad kibi=ni=ki$$

1SG listen=REMP=DEC:P =once=LIMIT 3 bark=REMP=DEC:P

'I listened to them, they (dogs) barked once.' TXT 099:212

⁶⁵ In this function these morphemes are "clitics" in the sense that they can incorporate into morphophonological domains (see Chapter 6). They do not obviously display such morphophonological properties when they modify nouns, but this question requires future research.

The truncated version of *rabi* 'two' can also be verbalized with the suffixes *na* 'intransitive verbalizer' or *-wa* 'transitive verbalizer'. When *rabi* 'two' combines with *-na* it means "accompany" as illustrated in (15.57).

When the numeral *rabi* 'two' combines with the transitivizer *-wa* it means "make two of' illustrated in (15.58).

(15.58) hiaria ha
$$a(k)=ki$$
 ha= ki

nice 3 make=PRIOR:A 3=DAT

 $baa=tiki(n)=kas=ki=a=ri$
 $ask=AGAIN=VOL=DEC:NONP=1SG=REGRET$

'He made it nice, and I wanted to ask him for one (of the axes) again, I wanted to make two of the axes (I regret not having asked him).' TXT 026:327

Some speakers refer to a third cardinal numeral *tfitimiti* 'three', but it is unattested in naturalistic speech, and not all speakers appear to know it.

15.4.QUANTIFIERS

The plural morpheme $=bo\sim=b\acute{a}$ has a quantifier function on non-humans (Section 15.1). This section is concerned with other morphemes and constructs that have quantifying functions in nominal or verbal domains. Some nominal quantifiers can also function as adverbials of that quantify over the event in the sense that they modify the number of times an action was performed, or a situation occurred (e.g. "always", "again"). There is only one quantifying adverbial morpheme that does not also function as a quantifier of nouns.

Table 15.1 provides a list of the quantifiers in Chácobo with translations of their meanings in nominal and verbal domains. They are discussed in the subsections below.

Table 15.1. Quantifiers in Chácobo (Pano) in nominal and verbal domains

| Form | Nominal | Verbal |
|---------------------|-----------------|----------------------|
| hati~hatiro?a | "all" | None |
| anomaria | "too much" | None |
| tiʔi | "some, many" | None |
| rab i ta | "two, a few" | "twice, a few times" |
| wɨstíma | "many" | "many times" |
| wɨstí~wɨstí | "each, some" | "one by one" |
| =ro?á | "only, no more" | "only, always" |
| =tiki~=tikin~=tii | None | "again" |

15.4.1 Universal quantifier hatiro?a 'all, each one'

The universal quantifier *hatiro?á* 'all' modifies nouns. It occurs on either side of the noun phrase, but occurs to the left of the head noun much more frequently. This is illustrated in (15.59) and (15.60). The post-head position for *hatiro?a* 'all' is infrequent.

The quantifier hatiro?a can be discontinuous with the noun complex it combines with in the sense that it is separated from the head noun by a \bar{V} -constituent. An example is provided in (15.61). There are no text examples of hatiro?a 'all' occurring in a post-head position where it is separated from the head noun by the \bar{V} -constituent.

| (15.61) | hatíro?a | tsi | bari~ | bari=?iki | iá | haw i | yora | |
|---------|---|---------|--------------------|-----------|-----|------------------|------|--|
| | all | Р5 | move | ~move=F | REP | 3sg:Gen | body | |
| | 'All of his body was moving.' TXT 068:240 | | | | | | | |
| (15.62) | toa=' | tsi | hatíro?á | tsi | kiá | tſákobo | raka | |
| | DEM2=SPAT | Р5 | all | Р5 | REP | Chacobo | live | |
| | i=tiki(n)=ka(n)=ki | | | | | | | |
| | be=AGAIN=PL=DEC:P | | | | | | | |
| | 'All the Chác | obo liv | ived there again.' | | | Тхт040:039 | | |

Frequently hatiro2a 'all' occurs embedded under a relative clause with the relativizer =kato. This relative clause can have an overt head as in (15.63) or be headless as in (15.64).

The difference (pragmatic or semantic) between the universal quantifier embedded in a relative clause, or the universal quantifier as a head-noun dependent requires future research.

hatiro?á 'all, each' can serve as the only overt member of the noun phrase, but only if the third person plural enclitic =kan or the clitic $=y\delta$ 'completive' appears in the verb complex as in (15.65) and (15.66) respectively.

If these two clitics are not present hatiro?a 'all' requires a head noun. Since =kan 'plural' and $=y\delta$ 'completive' do not require hatiro?a 'all' or any overt noun in order to surface, the quantifier can be seen as a dependent of the clitics =ka(n) 'plural' and $=y\delta$ 'completive' in the examples above.

The morpheme *hati* has a similar meaning to *hatiro?a* 'all' but it is much less frequent. The main semantic difference is that *hati* 'together' always means together. In

some cases it is also translated as a universal quantifier (Spanish "todo"). Examples are provided in (15.67), (15.68) and (15.69).

(15.67)
$$nika=ka(n)=p\acute{a}$$
 $hama$ $hat\acute{o}$ $awi=bo$ $tobi\acute{a}$ $listen=PL=IMPER:MIR$ but $3PL:GEN$ $woman=PL$ $there$ $hat\acute{i}$ $yoga=bo$ $nib\acute{i}$ $p\acute{i}$ $all/together$ $woman=PL$ $there$ ANX $mani=kan=(?)\acute{a}$ $therefore be an extension be an extension be $therefore and extension be $therefore an extension be $there$$

rani=kona=pá=?ikiá

kiss=cntrdir=mir=rep

'Then they started doing it (having sex), they started kissing each other back and forth.'032: 204-205

The quantifier hatiro2a 'all' appears to be a lexicalized combination of an older quantifier hati with the limitative clitic =ro2a 'no more, always'.

15.4.2 Existential depreciative quantifier anomaria "too much"

The word *ánoma* is a predicate that expresses a wide variety of meanings having to do with prohibition and negative evaluation. The combination of *ánoma* with the augmentative suffix *-ria* yields a quantifier, similar in meaning to *wistima* 'many', except that it always expresses the speaker's negative evaluation of the fact that there is a high quantity of whatever the modified noun phrase denotes. Examples are provided in (15.70) and (15.71).

'There were so many mosquitos, long mosquitos, big mosquitos, black mosquitos and the roscorosco mosquitos.' TXT 081:033

15.4.3 Coordinating quantifier ti?i 'many'

The morpheme ti ? i is a coordinator in Chácobo, which occurs after the nouns that it coordinates. Examples of ti ? i in its coordinating function are presented in (15.72), (15.73) and (15.74). It always occurs before the plural morpheme as in (15.73).

head-bit his penis.' TXT 032:055

(15.74)
$$ar\acute{a}$$
 tsi $ki\acute{a}$ [$ha-?-iwa$ $ha-?-ipa$] cry P5 REP [3-EPEN-mother 3-EPEN-father] $ti?i=ka=bo$ $=n\acute{i}=ki$ COOR=REL=PL =REMP=DEC:P

The morpheme ti2i can also exhibits a discourse function where it can refer to coordinated elements. This can be seen from (15.75c) below where ti2i is coreferential with the coordinated noun phrase in (15.75b).

^{&#}x27;Then his mother and his father started to cry.' TXT 037:080

'The ones that went were Pepe Salina, and then Romelio Salina.'

In predicative function ti i i has a quantifier meaning as in (15.76).

In predicative function ti2i can also be elaborated by combination with the augmentative suffix -ria as in (15.77).

(15.77)
$$ti2i-ria=ka$$
 $niá=ka$ $mani=rákana$ i $kiá$

QUANT-AUG=REL here=REL knive=CERT say REP

 $ha = ni=ki$

3 =REMP=DEC:P

"There are many knives here." he said.' TXT026:316

15.4.4 Existential quantifier wistima 'many'

The quantifier *wistima* 'many' can function as a dependent in the extended noun phrase. It occurs before or after the head noun and the basic noun phrase. An example of it occurring before the head noun is given in (15.78), and an example of it occurring after is provided in (15.79). The quantifier can also appear discontinuous with the head noun as in (15.80).

| (15.78) | habi | toa | tsi) | w i stíma | tfakobo=ba=' | | |
|---------|---|-------|---------------------|----------------------|----------------------|-----|--|
| | surely | DEM2 | P5 1 | many | chacobo=PL=GI | EN | |
| | komunide | ád | i=ni=ki | | | | |
| | community | | be=REMP=DEC:P | | | | |
| | 'There were many Chácobo communities.' TXT 036:018 | | | | | | |
| (15.79) | tobí | yofi | w i stim | na ho | ho=?ái=na | | |
| | there | demon | many | COI | me=NMLZ=EPEN | 2sg | |
| | bɨtʃa=yáma=no | | | | | | |
| | meet=NEG=DES | | | | | | |
| | 'There are many deamons coming, I don't want you to meet them.' TXT | | | | | | |
| | 054:419 | | | | | | |
| (15.80) | w i stima | sa | i=ikiá | şokobo | w i stíma | pί | |
| | many | gr | ow_up=rep | child(re | en) many | ANX | |

go gatáno

DEC coconut_shell

'Many children grew up, because there were many coconut shells.' TXT

052:494

The morpheme *wistima* 'many' can also be modified by the augmentative suffix – *ria* as in (15.81). This example also shows *wistima* 'many' in predicative function. The semantic contribution of *-ria* seems to be emphatic.

The morpheme wistima 'many' cannot be used in referential function. It must occur as a phrasal dependent, or in predicative function. Diachronically it likely comes from a combintion of wisti 'one' and the negative morpheme =ma.

15.4.5 Distributed quantifier wisti~wisti 'each, some, one by one'

The quantifier *wisti~wisti* 'each, some' modifies the noun complex in the extended-NP. It has a referential function in the sense that it can be the only member of a noun phrase.

wisti~wisti functions as an existential or a universal distributive quantifier depending on syntagmatic context. When wisti~wisti occurs with the enclitic =kan in the verb complex, it functions as an existential quantifier meaning "some" as in (15.82)

(15.82)
$$i=ki$$
 wiano tsi wisti_wisti=ro?á tsi oko=kan=ikiá
be=DEC:P evening P5 some=LIMIT P5 cough=PL=REP

'Done! In the evening there were only a few coughing.' TXT

When *wisti~wisti* occurs without the plural clitic =*kan* it means "each" as in (15.83) below.

When wisti~wisti 'some, each' occurs before the head noun, it is semantically ambiguous between a universal and an existential quantifying function with the different interpretations discernible from context. How these differences might be discernible from

context requires future research. Examples of a universal and an existential reading are provided in (15.84) and (15.85) respectively.

When *wisti~wisti* occurs after the head noun, data from the corpus and elicitation suggest that it always has a function as a universal quantifier as in (15.86) and (15.87).

a(k)=ki no-a

do=DEC:NONP 1PL-EPEN

'As the women come, and we caught each tapir (one by one).' TXT

15.4.6 Limitative =*ro?á*

007:063

The limitative morpheme $=ro2\acute{a}$ is a bound moprheme that can combine with a large number of categories in Chácobo. An overview of the categories it combines with and its semantic contribution in each case is provided in Table 15.2.

When a noun combines with one of the cardinal numerals in Chácobo the numerals serves as a lower bound on the number of entities referred to in the noun phrase. In other words the morphemes wisti(ta) 'one' and rabi(ta) 'two' mean 'at least one' and 'at least two' repsectively. When these morphemes combine with the limitative they force the numeral to to mean 'precisely one' and 'precisely two' respectively. An example of $=ro2\acute{a}$ 'limitative' combining with a numeral to condition this meaning is found in (15.88). An example where the limitative combines with a quantifier is provided in (15.89).

Table 15.2. Combination with the limitative =ro?á

| Morpheme or Category | Meaning | | |
|--------------------------|---|--|--|
| wistí 'one' | wisti=ro?á 'no more than one' | | |
| rabi 'two' | rabi=ro?á 'no more than two' | | |
| hati 'together' | hati=ro?á 'all' | | |
| ti?i 'a quantity' | ti?i=ro?a 'less' | | |
| wisti~wisti 'some, each' | wisti~wistiro?á 'a few' | | |
| Noun | 'N and no other categories on some salient level' | | |
| | (e.g. <i>yoşa=ro?a</i> 'only women, no men' | | |
| Verbs | 'V and nothing else' (sino=ro?a 'enter somewhere but do | | |
| | not do anything') | | |
| Reduplicated Verb | 'V continuously / constantly' (| | |
| | yonoko=ro?a~yonoko=ro?a 'work constantly' | | |
| Locative adverbial | 'Precisely Adv' (nɨá=roʔá 'just up to here') | | |
| Clause | 'Only-if' | | |
| | 'Exactly when' | | |

(15.88) <u>MILTON ORTIZ:</u>

a. hawiti?i ni profesora nia yonoko=?ái=na
how_many INTER teacher herework=NMLZ:IPV=EPEN
'How many teachers work here?'

RAQUI CHÁVEZ:

cough=PL=REP

oko=kan=(?)ikiá

'Ready (they were mostly dead) there were just a few of them coughing.'

TXT 007:230

The limitative can combine with nouns. In such cases it expresses that the class of entities specified by a noun is the only class present in a salient semantic domain. An example is provided in (15.90). The semantic domain is hunting weapons. The speaker uses $=ro2\acute{a}$ on the noun pia 'arrow' to indicate that this was the only type of weapon used at the time period relevant to the discourse context (before the arrival of the Spanish).

(15.90) toa tiá yáma saro ta?otí .. <u>pia=ro?á</u>

DEM2 time NEG rifle shot_gun ... <u>arrow=LIMIT</u>

'During this time, there were no rifles or shot guns, only arrows.'

TXT 033:009

Another example where the limitative $=ro2\acute{a}$ combines with a noun is provided in (15.91) from the story of Maina.

'Only this, they (the Maina) were only able to shoot the ridged arrows into our testicles (not into our bodies or anywhere else).' TXT 007:015

The limitative can combine with verb complexes. In combination with verb complexes $=ro2\acute{a}$ 'limitative' can contribute a continuative meaning (see Section 11.2 for the meaning of "continuative"). This is illustrated in (15.92).

'They didn't move; they just continued to stand still.' TXT 007:116

The limitative can also be used to cancel certain implicatures associated with a verb phrase. For instance, (15.93) is from a narrative where a speaker is discussing how he regets not having finished school. He points out that he entered school and uses $=ro2\dot{a}$ to express that he didn't continue with his studies (cancelling an implicature associated with entering school).

| (15.93) | <u>sɨno=roʔá</u> | tsi | \dot{t} | wa=ni=ki |
|---------|-------------------------|-----|-----------|------------------------|
| | enter=LIMIT | Р5 | 1sg | TR=REMP=DEC:P |
| | yonoko=kí | tsi | \dot{t} | habi=ní=k i |
| | work=CONCUR:A | Р5 | 1sg | teach=REMP=DEC:P |

'I only entered (school) (I didn't finish it); I learnt to work.'

Txt 049:196-197

The limitative $=ro2\dot{a}$ can double with the verb root in reduplicative constructions. In such cases the semantic contirbution of $=ro2\dot{a}$ is continuitive. Examples are provided in (15.94) and (15.95) below.

The limitative $=ro2\acute{a}$ also combines with temporal adverbials where it seems to indicate that the speaker is tryeing to be more precise about the time than usual.

'Surely where we always go.' TXT 093:055

Finally, the limitative $=ro2\acute{a}$ combines with clauses. It is used to mark the protasis in a counterfactual conditional construction (see Section 13.3).

15.4.7 Repetitive =tiki(n)

The morpheme =tikin 'again' modifies the verb complex. It is extremely frequent in text and displays a highly promiscuous distribution in the sentence.

(15.97)
$$ho=tiki(n)$$
 $ki\acute{a}$ ha $=n\acute{i}=ki$
 $come=AGAIN$ REP 3 $=REMP=DEC:P$

'He came again.' $TXT \ 034: \ 014$

(15.98) $k\acute{a}=ki$ $k\acute{a}ko=tiki(n)$
 $go=DEC:P$ $Caco=AGAIN$

'Caco went again.' $TXT \ 026:409$

(15.99) $hana=(?)\acute{a}=ka$ tsi $ki\acute{a}$ ha
 $leave=NMLZ:P=REL$ $P5$ REP 3

 $his=biria=tii=ka(n)=n\acute{i}=ki$
 $see=DO\&COME:TR:PL=AGAIN=PL=REMP=DEC:P$

'After they left them they came again.' $TXT \ 002:107$

15.5.DEMONSTRATIVES

Chácobo has three demonstrative categories; proximal to speaker; proximal to addressee and distal from speaker and addressee. Chácobo contains demonstrative categories in nominal and verbal domains. I refer to demonstratives that can modify or stand-in for a noun phrase as **nominal demonstratives** (see Section 5.3.4 for their position in the noun complex). Nominal demonstratives are described in Section 15.5.1. **Adverbial**

demonstratives modify a verb. A brief overview of adverbial demonstratives are provided in Section 15.5.2.

15.5.1 Nominal demonstratives

There are three nominal demonstratives in Chácobo; *naa* 'proximal to speaker'; *toa* 'proximal to addressee' and *oa* 'distal from speaker and addressee'. The analysis presented here is based on the Demonstrative questionnaire of Wilkins (1999) supplemented by data from the corpus. Demonstratives can modify noun complexes and they can stand-in for whole noun complexes. Examples where demonstrative modify an overt head noun are provided in (15.100) through (15.103). The demonstratives are in bold and the noun phrase they are in is underlined.

The consecutive sentences from discourse in (15.100) illustrative how the demonstratives naa 'this' and toa 'that' are used to track referents in discourse. The naa 'this' in (15.100b) refers back to the women (yoga=ba) mentioned in the previous sentence in (15.100a). In my text examples naa is usually used for new referents that were mentioned in a preceding sentence. The demonstrative tóa is used for referents that are relatively more distant (in the preceding discourse context) compared to those modified by náa. This is illustrated in (15.100b) where toa modifies maina a participant which is the A argument of the embedded clause of (15.100a).

(15.100) a.
$$a(k)=2\acute{a}i$$
 $a(k)=t\acute{a}pi$ $ki\acute{a}$ $yo_sa=ba='$ $wa=n\acute{i}=ki$ do=NMLZ:IPV do=PNCT REP woman=PL=ERG TR=REMP=DEC:P 'The women learnt quickly what they (the Maina women) did.'

The difference between using naa 'this' and toa 'that' in narrative contexts requires future research.⁶⁶

Demonstrative-noun combinations can be repeated throughout narratives. This is illustrated in the consecutive sentences from a narrative in (15.101) below with the noun phrase *toa yoşa* 'that woman'.

⁶⁶ Other factors apart from cataphoric distance are likely relevant such as animacy and overall topicality.

(15.101)
$$baki paki=paima=no$$
 $tsi kiá toa yoṣa$ child be_born=Almost=concur p5 rep dem2 woman $ka=ni=ki$ $papa$ $ka=yamit=(?)á$ go=remp=dec:p father go=distp=nmlz:p $fina=tsa=ki=a$ $kai='$ i tsi $kiá$ miss=imm:tr=dec:nonp=1sg mother=voc say p5 rep toa $yoṣa$ $sotako$ $=ni=ki$
dem2 woman young =remp=dec:p

'When her child was about to be born, that woman left; "I miss my father that left some time ago mother" that young woman said.' TXT 026:049 - 050

The distal demonstrative δa can also modify overt head nouns. Typically the referents of the modified nouns are outside the view of the speaker and the addressee. Illustrative text examples are provided in (15.102) and (15.103).

(15.102)
$$hap\acute{a}$$
 \underline{oa} \underline{pao} $fita=?\acute{a}i=ka$ $ha-t\acute{o}$ look $\underline{DEM3}$ stream cross=NMLZ:IPV=REL 3-PL $w\acute{a}tsa$ $a(k)=ka(n)=pao=n\acute{a}=na$ other $kill=PL=HAB=NMLZ:REMP=EPEN$

'Look when they crosses that stream (over there, out of view), they killed the other ones (those from another clan).' TXT058:540

invite-APPL/CAUS=DISTP=DEC:P

'Firstly in that town (in Riberalta outside of view) is where I started my work when Toro invited me.' TXT099:024

As noted above, demonstratives do not require an overt head noun to surface as arguments in verbal and non-verbal predicate constructions. Demonstratives can stand alone as entire noun complexes. In such cases they refer to a salient discourse referent. Examples where demonstratives occur without overt head nouns are provided in (15.104) and (15.105).

(15.104) **naa**
$$tsi$$
 $tfoko-2a(k)=yo=wi$
DEM1 P5 wash-CAUS/APPL=CMPL=IMPER

'Wash all of this (the dishes in front of the addressee)!' TXT 037:109

'When she moved away she moved like this and he jumped on the moon woman (he missed her) but then quickly grabbed that one (the moon woman).' TXT 046:039 -041

In order to achieve a more precise understanding of the semantics of nominal demonstratives in Chácobo Wilkins (1999) demonstrative questionnaire was applied with two speakers in the field. Below I present some of the results of the application of the demonstrative questionnaire with brief descriptions of the relevant scenes from the questionnaires above each example question.

As stated above the demonstrative *náa* is a speaker-oriented. When the referent is close to the speaker *naa* is used. Evidence for this is provided in (15.106) where *naa* is used to refer to the speaker's own body-part.

(15.106) Scene 1: Speaker points to his own tooth (touches or not)

naa sɨta so páʔɨ

DEM1 tooth DEC in pain

'This tooth hurts.'

The demonstative *naa* is still used when the referent is the addressee's body-part as long as the speaker is pointing to the referent.

(15.107) Scene 2: Speaker points to addressee's tooth (touches or not)

naa șita ní pá?i

DEM1 tooth INTER in_pain

'Is this tooth in pain.' ELIC

The demonstrative *naa* can be used when the referent is touching the addressee.

(15.108) *Scene 4: Speaker points to fire ant on addressee's shoulder*

yosaria so naa hi?íma

annoying DEC DEM1 fire ant

'This fire ant is annoying.' ELIC

Note that in all the cases above the speaker must be pointing at the referent. In naturalistic speech as well, *naa* 'this' usually co-occurs with a pointing gesture. This is

typically not true of *toa* 'that'. The distinction between *naa* and *toa* with respect to pointing gestures can be discerned from the example in (15.109) and (15.110) below. Where an object is equally distant from the speaker and the addressee the speaker can use *naa* as long as she points. Otherwise *toa* must be used.

- (15.109) *Scene 12: The book is equally distant from the speaker and the addressee*
 - a. Scene 12: Speaker points

mi papi ni náa

2sg:gen paper inter dem1

'Is this your book?'

b. Scene 12: Speaker does not point

mi papi ni tóa

2sg:gen paper inter dem2

'Is that your book?'

- (15.110) *Scene 8: The book is between the speaker and the addressee*
 - a. Scene 8: without pointing

tóa pápi tsaya=yó=kɨ í-a

DEM2 book look at=CMPL=DEC:P 1SG-EPEN

'I have read that entire book.'

b. Scene 8: Speaker points at book

náa papi tsaya=yó=kɨ í-a

DEM1 paper look_at=CMPL=DEC:P 1SG-EPEN
'I have read this entire book.' ELIC

The reason I consider *tóa* to be addressee oriented is because when the referent is outside of the speaker's view but in the addressee's view *toa* must be used. The use of *naa* 'this' and *oa* 'that, out of view' in (15.111) is infelicitous.

(15.111) Scene 18: The book is in the addressee's view but not in the speaker's view (the addressee's body is blocking the speaker's view of the object)

hiária so tóa papi nice DEC DEM2 book

'That book is nice.'

As stated above, the distal demonstrative *oa* is typically used when the referent is outside the field of vision of both the speaker and the addressee. This is illustrated in (15.112).

(15.112) Scene 15: The book is outside of the vision of both the speaker and the addressee.

hiaria ni oa papi nice INTER DEM3 book

Noun complexes modified by *oa* can apparently be in the field of vision of the speaker and the addressee in certain circumstances. For instance, if the speaker and addressee are inside a house and the referent is outside *oa* is used.

(15.113) Scene 20: The speaker and addressee are in a house and the book is outside of the house.

hiaria go oa libro nice DEC DEM3 book

Demonstratives can combine with noun complexes that are modified by genitives as illustrated in (15.114). Demonstratives can also modify pronouns as in (15.115) below. Demonstratives also very frequently modify proper names as in (15.116) below.

^{&#}x27;Is that book nice?'

^{&#}x27;That book is nice.'

(15.114)habi náa no?ó vono i tima=?ái **DEM1** 1SG:GEN knock=NMLZ:IPV surely drum 1sG kinia=tsi=ka(n)=so=wifollow=IMM:ITR=PL=FUT=IMPER 'Follow my drum sound here that I am knocking.' TXT 026:024 (15.115)hatsi kiá haska=ka naa ma-to then REP DEM₁ 2PL-EPEN similar=REL hiko=yo=ní=ki enter=CMPL=REMP=DEC:P

'Then just like all of you here they entered.' TXT 032:215

kopa=rí=' (15.116)ha?i yoşa=bo naa nanɨ woman=PL DEM1 Copa=too=GEN girl Nane mɨkɨnɨ= háska=kato atſ-i-na ſina adolescent similar=REL hand=SPAT grab-ITR-INTRC1 ik=i=na

do=concur:s=epen

'The women were the adolescents similar to Copa here's daughter Nane, they grabbed each other by the hand and danced.' TXT054:039

15.5.2 Adverbial and verbal demonstratives

Thus far I have documented 15 adverbial demonstratives in Chácobo. These morphemes come in five groups of three. The three demonstratives in each group seem to encode similar distinctions as the nominal demonstratives described above (proximal speaker-oriented; proximal addressee-oriented; distal from speaker and addressee) with an additional semantic specification specific to their class. They are also phonologically similar to nominal demonstrative and to each other and contain the following reoccurring formatives; *ni*- 'proximal speaker'; *to*- 'proximal addressee'; *o*- 'distal'. The first syllable of the nominal demonstratives *toa* 'that' and *oa* 'that (out of view)' are repeated throughout all of the sets of adverbial demonstratives. The first syllable of the speaker oriented *náa* 'this' is replaced with *ni*. The adverbial demonstratives are listed Table 15.3 organized in sets of three according to the distinction between proximal speaker-oriented, proximal addressee-oriented and distal. The manner adverbials *nika* 'do like this', *toka* 'do like that (like someone else)' and *oka* 'do secretly' can also function as verb roots. Brief illustrations of the adverbial demonstratives is provided below.

Table 15.3. Adverbial and verbal demonstratives

| Class | Deixis | Rough free Translation |
|---------------|--|--|
| locative | Proximal speaker | 'here' |
| (adverb) | Proximal addressee | 'there' |
| | Distal speaker and | 'over there' |
| | addressee | |
| locative | Proximal speaker | 'here (with pointing)' |
| deictic | Proximal addressee | 'there (with pointing)' |
| (adverb) | Distal speaker and | over there (with pointing)' |
| | addressee | |
| 'to the side' | Proximal speaker | 'to the side of speaker' |
| (adverb) | Proximal addressee | 'to the side of addressee' |
| | Distal | 'deep, profound, far' |
| 'behind, | Proximal speaker | 'behind speaker, in the path of |
| path' | | the speaker' |
| (adverb) | Proximal addressee | 'behind addressee, in the path |
| | | of the addressee' |
| | Distal speaker and | 'in that general direction |
| | addressee | beyond where the speaker can |
| | | see' |
| | locative (adverb) locative deictic (adverb) 'to the side' (adverb) 'behind, path' | locative Proximal speaker (adverb) Proximal addressee Distal speaker and addressee locative Proximal speaker deictic Proximal addressee (adverb) Distal speaker and addressee 'to the side' Proximal speaker (adverb) Proximal addressee Distal 'behind, Proximal speaker path' (adverb) Proximal addressee Distal Distal speaker |

Table 15.3, cont.

| nɨ-ka | verb/ | Speaker oriented | 'do like this (speaker acts out |
|-------|--------|-----------------------|---------------------------------|
| | adverb | | action)' |
| | | | 'like so, in this way' |
| to-ka | | Third person oriented | 'do so' (action of second or |
| | | | third person)' 'say so' |
| | | | 'in that way' |
| o-ka | | Third person oriented | 'say in secret, speak behind |
| | | | someone's back, say omen' |

The adverbial demonstratives $ni\dot{a}$ 'here', $to\dot{a}$ 'there' and $o\dot{a}$ 'over there, out of view' are locative adverbials. Illustrative examples are provided in (15.117) for speaker-oriented $ni\dot{a}$ 'here', in (15.118) for addressee oriented $to\dot{a}$ 'there' and in (15.119) for distal $o\dot{a}$ 'over there, out of view'.

'Over there some distance away (one could hear monkey's cyring) "ho ho ho" (then Nahuapaxahua thought) "over there (out of my view) is my mother('s village).' TXT 067: 158

The demonstratives nia 'here', $to\acute{a}$ 'there' and $o\acute{a}$ 'there, out of view' do not require a pointing gesture. The demonstratives $nib\acute{i}$ 'over here' $tob\acute{i}$ 'over there' and $ob\acute{i}$ 'over there, out of view' express similar deictic semantics but require a pointing gesture from the speaker. Illustrative examples are provided in (15.120), (15.121) and (15.122).

(15.121) tobí kamió ho=?ái=na

over_there car come=NMLZ:IPV=EPEN

'Over there (speaker points closer to addressee or someone else) the car is

Over there (speaker points closer to addressee or someone else) the car is coming.' TXT 091:006

obí no?ó pia=rí i kiá ha =ní=ki

over_there 1sg:gen arrow=regret say rep 3 =remp=dec:p

'(After shooting and missing), he said "Alas! My arrow is over there (out of my view)." 034:262

The demonstratives *niho* 'beside here', *tohó* 'beside there' denote a location in the periphery of the line of vision of the speaker or the participant (roughly "on the side of"). Some illustrative examples are provided in (15.123) and (15.124). The morpheme *niho* 'beside here' is speaker oriented, where *tohó* 'over there' seems to be addressee oriented. The distal *ohó* is typically translated as 'far away' (Spanish *lejos*) or 'deep' (Spanish *profundo*). How it relates to the location of the speaker and addressee is unclear to me. An example of the distal morpheme *ohó* is provided in (15.125)

(15.123) háa mi bɨro ní karáma nɨhó=kato

yes 2sg in_view INTER rubber beside_here=REL

'Yes "What the rubber in your view on this side (beside me)?" TXT

105:011

(15.124)tohó ŞO mi-ʔ-iwa beside there DEC 2-EPEN-mother 'Your mother is there beside you (to your side)' TXT052:212 riso='(15.125)ohó tsi kiá nawapasáwa hawi far/deep P5 Nahuapaxahua end=SPAT REP 3sg:gen tsa?o=ni=kisit=REMP=DEC:P 'Nahuapaxahua sat far on the very end (of the caiman).' TXT071:111

The demonstratives *niri* 'this way', *tori* 'that way' and *ori* 'beyond' express path semantics. They usually combine with verbs of motion as in (15.126), (15.127) and (15.128). The morpheme *niri* 'this way' encodes a path towards the speaker. The morpheme *tori* encodes a path away from the speaker as in (15.127) or encodes a path in line with the addressee's line of vision as in (15.128). The morpheme *ori* 'that way, beyond' expresses a path that is outside of the vision of the speaker and the addressee as in (15.128).

(15.126) *nirí* rabi nia=wí

this_way Rabi throw=IMPER

'Throw Rabi this way (to me).' TXT115:103

- that_way go=IMPER there run~run=DEC:NONP=1SG

 'Go over there a little more (in the direction you were going away from me), because I am going to run there.' TXT 049:337
- (15.128) bawi ha bi=no tsi tori ka=wi
 sorubim 3 bring=CONCUR P5 that_way go=IMPER po?i=pari=ki=a defecate=FIRST=DEC:NONP=1SG

'As (his wife) was bringing the sorubim (Lin. *Pseudolpatystoma corruscans*) (the man said) "Keep going that way (in the direction you are going), I am going to defecate first." TXT 050:1079

(15.129) kariama náa tanánɨ orí tana=roʔa tsi kiá
approximately DEM1 bridge beyond distance=LIMIT P5 REP

'(He wandered) approximately to this bridge and then a bit beyond (out of my vision)' TXT 061:766

Finally the paradigm of demonstratives contains three manner adverbials that can also function as verb roots; *nika* 'in this way, do in this way', *tóka* 'in that way, do in that way, do so', *óka* 'somehow, do out of view, happen without explanation'. The morphemes *nika* and *toka* seem to be follow the general pattern in being speaker and addressee oriented respectively. The morpheme *oka* has a wide variety of meanings that relate to deception,

bad luck and lack of knowledge on the part of the speaker or the addressee. To the extent that lack of knowledge concerning some situation relates to being outside of the view of the speaker and addressee, *oka* also follows the general pattern of the demonstratives listed in Table 15.3. However, in many of my text examples I do not understand the semantic contribution of *oka* and thus the status of *oka* in the demonstrative system of Chácobo requires future research.

Use of morpheme *nika* is always accompanied by a gesture on the speaker's part. The speaker uttered (15.130) simultaneously with pointing gesture representing her change in direction from her path west (towards Alto Ivon and the Geneshuaya river) northward (towards Riberalta).

(15.130)
$$to\acute{a}$$
 tsi pi $o\acute{a}$ pi i $nika=yam\acute{i}(t)=ki$

DEM2 P5 ANX DEM3 ANX 1SG $do_so=$ DISTP=DEC:P

 $y\acute{a}ka=k\acute{i}$ tsi pi i $ka=yam\acute{i}(t)=ki$ $iw\acute{i}$
 $town=$ DAT P5 ANX 1SG $go=$ DISTP=DEC:P EXPL

'When I went there (to the almond camp near Alto Ivon), I went like this (turned around) and I went to town (Riberalta).' TXT:105:205-206

The morpheme *toka* is oriented towards a second or third person. An illustrative example is provided in (15.131). The sentence is uttered in the context of a narrative about how the speaker's parents used to make chicha. The speaker uses *toka* 'do in that way' to

refer bac to these activities. Unlike the morpheme *nika* 'do in this way', the morpheme *toka* is typically not systmetically associated with gestures.

(15.131)
$$toa$$
 tsi $i-a=ri$ $toka=kas=ki=a$

DEM2 P5 1SG-EPEN=too $do_so=VOL=DEC:NONP=1SG$
 $atsa=y\acute{a}$ $i-a=t\acute{t}$

yuca=COM 1SG-EPEN=too

'I want to be like that (other person) when I have yuca too (e.g. inviting lots of guests).' TXT 049:469

The morphemes nika 'in this way' toka 'in that way' and oka 'somehow' can be used as manner adverbials. Illustrative examples are provided in (15.132), (15.133), (15.134) and (15.135).

'The agouti escaped (quickly) like this (speaker gestures with quick hand motion).' TXT 034:148

- after in_that_way man boy=GEN penis put=DEC:NONP

 'After (all the men are drunk and asleep) this is how (by waiting until they are drunk) she (the moon woman) puts it (dirt) in the young man's penis.'

 006:095
- (15.134) tóka tsi kiá maina i=pao=ní=ki
 in_that_way P5 REP Maina be=HAB=REMP=DEC:P

 'The Maina were like this.' TXT 007:072
- (15.135) hatsi oka kiá kamano= bakiwa=ní=ki
 then somehow REP jaguar=ERG impregnate=REMP=DEC:P

 'Then the jaguar impregnated the woman somehow.' TXT 032:102

Texts

TEXT 083. THE MOTHER OF THE SOUTHERN WIND

Gere Chavez Arteaga

(1) hariáparí yotáno

first southern wind

'First there was the southern wind.'

(2) yóta yóşa

southern wind woman

'The southern wind woman.'

(3) anoma-riá kiá yotá ho=?á=na

too much-AUG REP southern wind come=NMLZ:P

ho=fina=?á=na

come=ATNIGHT=NMLZ:P=EPEN

'There was way too much southern wind that came and it came in the night.'

(4) mátsi tsi kiá mai

cold P5 REP earth

'The earth was cold.'

(5) hatsi hifo pɨ hɨni=(ʔ)iní no-a

then EXPL ANX how=INTER:NONP 1PL-EPEN

'Then (someone said) "Dammit how are we going to live like this (lit. how are we going to be)!."

(6) $nob\acute{a}$ atsa $bi=y\acute{a}ma=ki$ no-a $i=?iki\acute{a}$ 1PL:GEN yuca get=NEG=DEC:NONP 1PL-EPEN say=REP yos=bo

woman=PL

"We will not gather (lit. get) our yuca" said the woman'

- ni?it/a='(7) haska nokirí ka=yáma=ki no-a similar 1PL-EPEN-AUG forest=SPAT go=NEG=DEC:P 1PL-EPEN ánoma ŞO matsi i=?ikiá honi=bo too much DEC cold say=REP man=PL
 - "Us as well, we are not going to go to the jungle, it's too cold!" said the men.'
- (8) moro sawi~sawi-?a=kan=(?)ikiá dies moro sawi=kan=(?)ikiá tunic wear=PL=REP tunic wear-wear-TR=PL=REP ten sawi=kan=(?)ikiá sokóbo moro kiá mɨmɨ tsi tunic wear=PL=REP children REP tremble Р5 i=ki=na

AUX=CONCUR:A=EPEN

'They put on (their) tunics, they kept putting them on, they put on ten tunics while the children shivered.'

(9) hifo_pi ... káro ánoma so mátsi i=?ikiá yósa=bo

EXPL ... lumber too much DEC cold say=REP woman=PL

- "Shit, (we need) lumber, it's too cold." said the women."
- (10) $h\acute{a}ska$ $nokir\acute{i}$ $matsi-\acute{r}ia$ patoro $y\acute{a}ma$ siri similar 1PL-EPEN-AUG cold-AUG pants NEG for_long_time $i=pao=n\acute{i}=ki$

be=HAB=REMP=DEC:P

'Just like us (before white people came), there were no pants long ago.'

- yáma ... nɨa=' toʔo=' tsi moro i=pao=ní=kɨ

 NEG ... here=SPAT up_to=SPAT P5 tunic aux=HAB=REMP=DEC:P

 'There wasn't anything, the tunic only used to cover (be) up to here, the knee.'
- (12)hama riso=ka no-kí tsi kiá patoro=yá=kato naa but end=REL 1PL-EPEN Р5 REP DEM1 pants=COM=REL hama rɨkɨbo i=pao=ni=kibut be=HAB=REMP=DEC:P ancestors

'But the most recent of us (lit. we who are at the end) are these (Chácobo) who are with pants, but the ancestors on the other hand (were different).'

- (13) nia=' to?o=' $r\acute{a}tiki$ $nob\acute{a}$ moro $i=pao=n\acute{i}=ki$ here=SPAT up_to=SPAT knee 1PL:GEN tunic be=HAB=REMP=DEC:P

 'And our tunics used to cover (lit. be) up to here, the knee.'
- (14) haska yáma nɨa naa kamisa so no-ki similar NEG here DEM1 shirt DEC 1PL-EPEN

wa?á-wa=?ái=na háma nia=´=ro?á so moro
warm-V:TR=NMLZ:IPV=EPEN but here=SPAT=LIMIT DEC tunic
'In the same way, there was no shirt to warm us up, but here (points to himself) there was nothing but the tunic.'

- (15) $nia='=ro?\dot{a}$ so moro here=SPAT=LIMIT DEC tunic 'There was nothing but the tunic.'
- (16) hatsi $matsi-na=k\acute{a}(n)=ki$ then cold-v:ITR=PL=DEC:P 'Then they got cold.'
- (17) hatsi hifo_pi
 then EXPL
 "So, shit." (they would say).'
- (18)hátsi sínko días kiá tsa?íta=șini tsi yota days then five Р5 REP southern wind large=N/ADJ mátsi kiá hɨnɨ afi=yáma=kan=(?)ikiá tsi cold bathe=NEG=PL=REP Р5 REP water 'The southern wind lasted five days, the water was cold, and they didn't bathe.'
- (19) hatsi kiá honi kari bitf=(?)i ka=ki=a

 then REP man sweet_potato grab=CONCUR:S go=DEC:P=1SG

i $ki\acute{a}$ ha $=n\acute{i}=ki$ say REP 3 =REMP=DEC:P

'And so the man (said) ... "I am going to grab some sweet potato." he (the man) said.'

- (20) $m\acute{a}tsi \quad na=s\acute{t}=na \quad i \quad tsi \quad ki\acute{a} \quad awi \quad =n\acute{t}=ki$ cold die=REMF=EPEN say P5 REP mother =REMP=DEC:P "He will die from the cold." his wife said.
- (21) hatsi kiá moro ha sawi=kán=(?)ikiá ánoma-ria kiá then REP tunic 3 put on=PL=REP too much-AUG REP soko mísni=ka ói soko ánoma koro oi small rain small=REL rain small too much mist ik=(?)itsi kiá ói i=ni=kibe=CONCUR:S P5 REP rain be=REMP=DEC:P

'They put the tunic on and it (the cold) was too much, there was just little bit of fog, there was a little bit of rain, there was too much mist, there was rain.'

- (22) moro sáwi sáwi sáwi dies moro sawi=ka(n)=ní=ki
 tunic put_on put_on ten tunic put_on=REMP=DEC:P
 'They kept putting on tunics, they put on ten tunics.'
- (23) hatsi $ki\acute{a}$ honi $ka=n\acute{i}=ki$ then REP man go=REMP=DEC:P

'Then the man went.'

káa matsi-na=pá=?i (24) honi tsi kiá cold-V:ITR=MIR=CONCUR:S P5 man go REP hiko=ni=kihawí ha

wai=kí

3 3sg:gen farm plot=DAT enter=REMP=DEC:P

'The man went and he was getting increasingly colder (to his surprise) as he entered his farm plot.'

hiko=?á=ka (25)náa wai=kí ha náa

> DEM1 farm plot=DAT 3 enter=NMLZ:P=REL DEM1

iki=?ikiá t/i?i

be=REP fire

'When he entered this farm plot, the fire was going.'

(26)obí kiá tſomí kiá yoşa siri tsi yosa

> DEIC2 old wrinkled Р5 REP woman REP woman

yotano=' ha-ʔ-ɨwa

south=GEN 3-EPEN-mother

'Over there (away from the man), there was an old woman, she was wrinkled, she was the mother of the southern wind.'

(27)óа i kiá honi =ni=kiyoşa пí

> woman REP DEM3 say REP =REMP=DEC:P man

"Is that a woman?" the man said."

(28)anoma-ria kiá ha tá?i=ka mátsi lapás 3 beside=REL cold many-AUG REP la Paz háska kiá mátsi tsi mai similar P5 REP ground cold

'There was a lot of coldness beside her, the cold ground was like la Paz.'

- (29) ánoma so pá hawí naa yoşa i=ní
 many DEC MIR what DEM1 woman be=INTER:REMP
 'It's too much! What type of woman is this?!'
- (30) $h\acute{a}tsi$ $ki\acute{a}$ honi $ka=n\acute{i}=k\acute{i}$ then REP man go=REMP=DEC:P 'Then the man left.'
- shadow be_far

 'She moved from the shadows.'
- (32)ma?á tsi kiá kari ha bit = (?)i = nasweet potato 3 grab=CONCUR:A pile up Р5 REP kari ha ima=?ái=na sweet potato 3 roast=NMLZ:IPV=EPEN

'The sweet potatoes that she took were piled up as she was roasting them.'

(33) habi pi~pi=?ikiá
surely eat~eat=REP

'Surely she was eating them.'

(34) hatsi tsóboko kiá naa yoşa

then naked REP DEM1 woman

'So this woman was naked.'

(35) tsóboko tsá?o matsi-na=yáma=?ikiá hábi

naked sit cold-V:ITR=NEG=REP surely

hawi matsi=rákana

3SG:GEN cold=CERT

'She was sitting naked and she did not feel the cold, certainly, because it was her cold(ness).'

(36) tsóboko tsa?o hatsi ói soko tsi kiá

naked sit then rain little P5 REP

 $i\sim ?\sim i=ta=(?)\acute{a}i=na$

be~EPEN~be=GO=NMLZ:IPV=EPEN

- "She was sitting naked, so it was drizzling (lit. the little rain was moving along)."
- (37) hatsi kiá nika=páma honi ha tsaya=ní=ki iii
 then REP do_like=CONCUR man 3 see=REMP=DEC:P EXPL

 'Then she did this (turned around) saw the man (and said) "ëëë"
- (38) mi-a ní no?ó ibabá haa

 2sg-epen inter 1sg:gen nephew yes

"Are you my nephew? yes!" (the mother of the southern wind said to him)." kai='(39)пí mi-a 2sg-epen mother=VOC **INTER** 'And you? mother!' (40)mi kári \dot{t} pi=2iho=?itá=kɨ sweet potato come=RECP=DEC:P 2sg 1sg eat=CONCUR:S i kiá ha =ni=ki3 say REP =REMP=DEC:P "I came here (earlier) to eat your sweet potato." she said." (41) ti?í-ria kári pi=2iho = so = wiquantity-AUG sweet potato eat=CONCUR:S come=REMF=IMPER kári ŞО tsi kamóte sweet potato Р5 sweet potato(Spanish) DEC "Come here and eat some sweet potato." (the mother of the southern wind said), camote is sweet potato.' (42) $ho=so=w\acute{t}$ kai=' kari pi=?i tsi eat=CONCUR:S come=REMF=IMPER mother=SPAT sweet potato Р5 tsi ti?i-ria=ka kari =rákana P5 quantity-AUG=REL sweet potato =CERT "Come and eat some sweet potato", certainly there was a lot of sweet potato by the mother.'

- (43) hatsi kiá naa no?iria kari rabi=ro?á then REP DEM1 people sweet potato some=LIMIT bi=ni=kikiá mátsi anoma-ria grab=REMP=DEC:P too much-AUG REP cold 'Then the man recieved a little bit (at least two) of sweet potato – it was extremely cold.'
- (44) mif mif mif kari pistia sib-a ha wa=ni=ki
 grab grab grab sweet_potato PART roll_up-TR 3 TR=REMP=DEC:P

 'He grabbed it and grabbed it and put (lit. rolled up) some sweet potato (in his bag).'
- (45) ánoma mátsi kai=´
 too_much cold mother=VOC
 'It's too cold, mother.'
- (46) ka=tsi=ki=a $h\acute{o}o$ i $ki\acute{a}$ ha =ni=ki go=IMMM:ITR=DEC:NONP=1SG yes say REP 3 =REMP=DEC:P "I am going now" "Okay!" she said."
- (47) niá no?ó sani i kiá ha =ni=kiSO here DEC 1SG:GEN pubic hair say REP 3 =REMP=DEC:P "Here is my pubic hair" She (the southern wind woman) said."
- (48) hawi şáni tsi ha=kí tis-a=?ikiá

 3SG:GEN pubic_hair P5 3=DAT take_out-TR=REP

awa a(k)=ti

tapir kill=NMLZ:PURP

'She pulled out her pubic hair to kill the tapir.'

(49) i=ki a(k)=wi kai=

1SG=DAT give=IMPER mother=VOC

'Give it to me mother.'

(50) nɨá=bo tsi kiá hawɨ sáni

here=PL P5 REP 3SG:GEN pubic hair

"Here is my pubic hair" (the southern wind woman said)."

(51) náa hawí piași= ekato ha tsi kiá

DEM1 3SG:GEN vagina=SPAT=REL 3 P5 REP

nika tis-a=ni=ki

like_this take_out-TR=REMP=DEC:P

'She pulled this out of her vagina like this.'

(52) nika tis-a tis-a tis-a

like so pull out-TR pull out-TR pull out-TR

'Like this she kept pulling it out.'

(53) béinte sáni sáni tſaʔíta=bo

twenty pubic_hair pubic_hair big=PL

'There are twenty pubic hairs, a lot of big pubic hairs.'

(54) nɨbiá pa

like so=COM MIR

"Here it is!" (the mother of the southern wind said)."

(55) $mi=b\acute{a}$ i $nis-\acute{a}=no$ matsi mi riso=mitsa

2SG=BENEF 1SG tie-TR=CONCUR cold 2SG end=POSS

i $ki\acute{a}$ ha $=n\acute{i}=ki$

say REP 3 =REMP=DEC:P

"I am going to tie it (the pubic hair) for you so that you do not die from the cold." she (the southern wind) woman said.'

(56) hátsi kiá ha nɨg-a=ní=kɨ

then REP 3 tie-TR=REMP=DEC:P

'Then she tied it (the pubic hair) up.'

(57) $n\acute{a}a$ $nif\acute{i}=\acute{r}ero?\acute{a}$ tsi $atf-\acute{a}=so=w\acute{t}$

DEM1 rope=SPAT=LIMIT P5 grab-TR=REMF=IMPER

i $ki\acute{a}$ ha $=n\acute{i}=ki$

say REP 3 =REMP=DEC:P

"With this you are going to catch (lit. grab) it (the tapir)." she said."

(58) $tsaya=p\acute{a}$ $no?\acute{o}$ $ibaba=\acute{}$

look at=IMPER:MIR 1SG:GEN nephew=VOC

(59) awara= báγi armadilla háskara

tapir=GEN path armadillo similar

'The tapir path is similar to the armadillo's.

(60) awara=' ba?i tsaya=?ái tapir=GEN path $look_at=IMPER$

'Do you see the tapir's path?'

(61) ha-ʔ-á tsi noʔó şáni hana=şo=wí

3-EPEN-SPAT P5 1SG:GEN pubic_hair leave=REMF=IMPER

no?ó sáni mi hana=?á=ka

1SG:GEN pubic hair 2SG leave=NMLZ:P=REL

ho=páma tsi awara= fita=kɨ tsi

come=CONCUR P5 tapir=ERG cross=D{A,S} P5

awara= ho?ití tsi şo bíkiri=?ái=na

tapir=GEN heart P5 DEC wrap up=NMLZ:IPV=EPEN

'You are going to leave my pubic_hair over there, and when the tapir crosses, it (my pubic hair) will wrap itself around the tapir's heart.'

(62) ha-ʔ-á-ria tsi rɨsó=ki áwara

3-EPEN-SPAT-AUG P5 die=DEC:NONP tapir

'From there the tapir will die.'

(63) $kia=y\dot{a}ma=ki=a$ $no?\dot{o}$ $ibaba=\dot{a}$

lie=NEG=DEC:NONP=1SG 1SG:GEN grand_son=VOC

i $ki\acute{a}$ ha $=n\acute{i}=ki$

say REP 3 = REMP = DEC:P

"I am not lying my son in law." she said."

- (64) ráni tsi kiá honi ho=ní=ki
 happy P5 REP man come=REMP=DEC:P
 'The man returned happy.'
- (65) hinino ka=?ai iwati= when go=INTER:NONP:2SG gra_mo=VOC

'When are you leaving grandmother?'

- bari=' (66)tres raa=kí=a kári three day/sun=SPAT stay=DEC:NONP=1SG sweet potato pi=ki=ahɨníma i haa kiá ha = ni = kieat=DEC:P=1SG yes good say REP 3 = REMP = DEC:P"I am going to stay for three days. I am going to eat camote." (the mother of the southern wind said) "yes, good!" he (the man) said.'
- (67) hatsi ha ho=?á tsi kiá sobó ta?i kiá tsi come=NLMZ:P P5 then 3 REP house beside P5 REP sani ha rota=ni=ki3 hang up=REMP=DEC:P pubic hair

'Then when he arrived he hung the pubic hair beside the house.'

(68) rotá=biriá ha-pá anomá-riá so mátsi
hang_out=DO&COME:TR/PL 3-MIR too_much-AUG DEC cold

yoa=yáma=(?)ikiá honi

tell=NEG=REP man

'When he hung it up (he came) and look, it was extremely cold, and the man didn't say anything.'

(69)tóka hapá anomá-ria mátsi ŞO no too much-AUG DEC 3-MIR cold like so 1_{PL} ko=?ái=ria=tí i ka(n)=ni=kiha wander=NMLZ=IRR=TOO say 3 PL=REMP=DEC:P "And so! It's extremely cold and it's too cold to wander," they said."

(70) $h \acute{a}tsi$ $ki\acute{a}$ kari ha $pi=n\acute{i}=k\emph{i}$ then REP sweet_potato 3 eat=REMP=DEC:P 'Then he ate sweet potato.'

(71) bári=ra bári=ra
day=ADMON day=ADMON
'One whole day and one whole day!'

(72) $ka = \int ari = tsi = ki$ $iw \acute{a}ti$ i $awi = k\acute{i}$ go=CRAS=IMM:ITR=DEC:NONP gra_mo say woman=DAT $ha = n\acute{i} = ki$ mi his-i = ta3 =REMP=DEC:P 2SG see-EPEN=IMPER:GO&DO

""The grandmether is going to marrow" he goid to his wife "You'll of the said to his wife."

"The grandmother is going tomorrow." he said to his wife. "You'll see (lit. you go and see)".'

yotano= ' ha-2-iwa his=(?)itá=ki
southern wind=GEN 3-EPEN-mother see=RECP=DEC:P

'He had seen the mother of the southern wind.'

- (74) ánoma mátsi
 too_much cold
 'It was very cold.'
- (75) tfomí-ria hawí bɨmaná hawí yora=rí
 wrinkled-AUG 3SG:GEN face 3SG:GEN body=TOO
 'Her face was extremely wrinkled, and her body too.'
- (76) $k\acute{o}hro$ tsi go i $ki\acute{a}$ ha $=n\acute{i}=ki$ very_foggy P5 DEC say REP 3 =REMP=DEC:P

 'It was very foggy.'
- (77) raki-ria i $ki\acute{a}$ ha $=n\acute{i}=ki$ dangerous-AUG say REP 3 =REMP=DEC:P "It (the cold) was really dangerous." she said.
- (78) hia i $ki\acute{a}$ ha $=n\acute{i}=ki$ good say REP 3 = REMP=DEC:P"It's good (now)." he said.'
- (79) hátsi wiakí tsi his=(?)i $ka=w_i$ then day after Р5 see=CONCUR go=IMPER =ni=kii awi woman =REMP=DEC:P say

[&]quot;Then the day after you're going to go look!" the woman said."

(80) wiaki i=ria=ma tsi kia mátsi day_after be=IRR=NEG P5 REP cold 'The next day, there was practically no cold.' (81) $ka=?it\acute{a}=ki$ $ki\acute{a}$ ka=ki $ki\acute{a}$ habo

(81) $ka=2it\acute{a}=ki$ $ki\acute{a}$ ka=ki $ki\acute{a}$ $habok\acute{i}$ go=RECP=DEC:P REP go=DEC:P REP now

'He said he was going to go yesterday, and just recently he said he went.'

(82) hatsi $awi=y\acute{a}$ ha $ka=?\acute{a}=ka$ then woman=COM 3 go=NMLZ:P=REL $y\acute{a}ma$ tsi $ki\acute{a}$ NEG P5 REP

'Then he went with his wife, and no one was there.'

(83)kiá hawí míſni tsi tsísti karo small P5 3sg:gen embers lumber REP i(t)=(?)arimíſni kiá hawi tsísti tsi be=CONCESS small Р5 REP 3sg:gen embers

'The embers were small, even though it was wood, the embers were small.'

(84) habiha tsi ha i=?itá=ki i=?ikiá
true P5 3 be=RECP=DEC:P be=REP
"Surely, what she said was true." she said.'

(85)

hawí sáni ɨ=kí ha a(k)=itá=kɨ

3SG:GEN pubic hair 1SG=DAT 3 give=RECP=DEC:P

'She gave me her pubic hair.'

'The woman didn't believe what was certainly true that there was a tapir path.'

$$i$$
 $ki\acute{a}$ ha $=n\acute{t}=ki$

say
$$REP$$
 3 $=REMP=DEC:P$

ba?i mɨra=?ái=na

'So the next day, the man went looking for the path.'

(89)
$$ba?i \quad honi=' \quad mira=?i=ka \quad kanápa$$

ko=?ái=na

wander=NMLZ:IPV=EPEN

[&]quot;How is it (pubic hair) going to kill the tapir?' She (his wife) said."

'When the man was looking for the path, the pataimichi fruit were falling (lit. wandering).'

(90) kanápa ko=?ai=ka bimi anoma-riá kiá

pataimichi wander=NMLZ:IPV=REL fruit too_much-AUG REP

awara= ' ba?i

tapir=GEN path

'When the pataimichi fruit was falling (lit. wandering) there was so much fruit on the path of the tapir.'

(91) bíriri tsi kiá awara a(k)=fina=?á=na
clean P5 REP tapir eat=ATNIGHT=NMLZ:P=EPEN
'It was clean where the tapir ate at night.'

(92) ha a(k)=mítsa kiá

3 kill=POSS1 REP

'It is said he could kill them.'

(93) hatsi kiá ka=só áwa sáni ha bi=ní=ki
then REP go=PRIOR:A tapir pubic_hair 3 get=REMP=DEC:P

'Then when he went, he picked up the tapir and the pubic hair.'

(94) sani bi=só tsi kiá kanápa

pubic_hair get=PRIOR:A P5 REP pataimichi

'When he picked up the pubic hair, there was the pataimichi fruit.'

(95) kanápa hiwi tsayaşó tsi kiá ha hana

pataimichi tree see=PRIOR:A P5 REP 3 leave

tsi ha wa=ni=ki

P5 3 TR=REMP=DEC:P

'When he saw the pataimichi fruit, he left it.'

(96) hana ha wa=?á=ka hawɨkí mi ka=?á=ka

leave 3 TR=NMLZ:P=REL to_where 2SG go=NMLZ:P=REL

i $ki\acute{a}$ tisi=bo $=n\acute{t}=ki$

say REP other=PL =REMP=DEC:P

'When he left him "where did you go?" said his brothers.'

- (97) $kan \acute{a}pa$ $tsay \acute{a} \sim tsay \acute{a} = ki = a$ i $ki \acute{a}$ ha = ni = ki pataimichi see \sim see=DEC:NONP=1SG say REP 3 =REMP=DEC:P
- (98) şani yoa=yáma=?ikiá
 pubic_hair tell=NEG=REP

'He didn't tell anyone about the pubic hair.'

"I am looking at the pataimichi." he said.'

(99) i- \acute{a} tsi $yoa=y\acute{a}ma=so=w\acute{t}$

1SG-ACC P5 tell=NEG=REMF=IMPER

i $ki\acute{a}$ yotano= $ha-2-\acute{t}wa$ $=n\acute{t}=k\acute{t}$

say REP south wind=GEN 3-EPEN-mother =REMP=DEC:P

'The mother of the southern wind said "Don't tell anyone about me!".'

(100) hatsi ha tsaya= $2\dot{a}=ka$ hana ha wa= $2\dot{a}=ka$

then 3 see=NMLZ:P=REL leave 3 TR=NMLZ:P=REL bári=ra
sun=ADMON
'Then when he visited her, he left her and, oh there was sun!'

Then when he visited her, he left her and, on there was s

(101) $ka = s\acute{o}$ $tsaya = ?iki\acute{a}$ $y\acute{a}ma$ $i = iki\acute{a}$ go=PRIOR:A see=REP NEG say=REP

'After he went, he saw her, but said that there was nothing.'

(102) bári=ra ka=só ha tsaya=?á=ka yama kiá
sun=ADMON go=PRIOR:A 3 look_at=NMLZ:P=REL NEG REP
'Oh! there was sun when he went, and when he looked, there was nobody.'

(103)ka=só ha tsaya=?á=ka tres bari tsi hweves thursday go=PRIOR:A 3 see=NMLZ:P=REL three sun P5 ka=só tsaya=?á=ka habá=kaná pa go=PRIOR:A look at=NMLZ:P=REL run=GOING:ITR:SG ha = $2\acute{a}=ka$ raká kiá áwara 3 =NMLZ:P=REL lying REP tapir

'After he left, he looked (at the tapir path) after three days on thursday, and father going and looking he went running and the tapir was lying there.'

(104) ráni tsi kiá honi happy P5 REP man

^{&#}x27;The man was happy.'

- (105) $i=\int in\acute{a}=ki$ $\acute{a}wara$ $i=2iki\acute{a}$
 - die=ATNIGHT=DEC:P tapir be=REP
 - "The tapir died at night." he said."
- (106) hatsi kiá hawí şani ha
 - then REP 3SG:GEN pubic_hair 3
 - bi=baya=ni=ki
 - grab=DO&GO:TR/PL=REMP=DEC:P
 - 'So he grabbed the pubic hair and then left.'
- (107) şani bi=bɨriá ho=só tsi kiá
 - pubic_hair get=DO&COME:TR/PL come=PRIOR:A P5 REP
 - nɨka=ka wɨnɨ taʔɨ kɨtoma= há rota=ní=kɨ
 - like_this=REL patio beside bush=SPAT 3 hang_up=REMP=DEC:P
 - 'After getting the pubic hair he came and like this, he hung it up beside the
 - patio where the bush is.'
- (108) rota=şó tsi hama yotano=yá şani i
 - hang up=PRIOR:A P5 but southern wind=COM pubic hair 1SG
 - $bitf=(?)ita=?\acute{a}=kato$ i $a(k)=fin\acute{a}=ki$
 - grab=RECP=NMLZ:P=REL 1SG kil=ATNIGHT=DEC:P
 - $h\acute{a}a$ i ha $=(?)it\acute{a}=ki$
 - yes say 3 =RECP=DEC:P

'After hanging it up, the man said "I have gotten the pubic hair with the southern wind, I killed the tapir in the night." "Yes, she (his wife) said".'

(109)oká=riá a(k)=?itá=ráka hama rono ŞO happen=IRR snake kill=recp=epis4 but DEC yotano=' i ha =ni=kisani kiá southern wind=GEN pubic hair say 3 REP =REMP=DEC:P "It seemed as though a snake killed it (the tapir), but on the contrary, it was the the pubic hair of the southern wind" he said.'

(110) his=i ka=wi hatsi $ki\acute{a}$ ha bo=ka(n)=ni=ki see=CONCUR:S go=IMPER then REP 3 go=PL=REMP=DEC:P "Go and a see!" and then they went."

(111) $ho=s\acute{o}$ $pitia=biri\acute{a}$...

come=PRIOR:A gut=COME:TR/PL

'When they arrived they gutted it (the tapir).'

(112) awara= ho?ití tsi kiá bíkiri
tapir=GEN heart P5 REP tied_up

'The heart of the tapir was tied up (strangled).'

(113) bíkiri tsi kiá náa
tied_up P5 REP DEM1
'It was tied up.'

(114) toro= hani= nitsi=2ái háska

Toro=GEN name=SPAT wring=NMLZ:IPV same

yáma kiá awara=´ hími

NEG REP tapir=GEN blood

'In Toro's name, it was the same when they bled (wringed) it, there was no tapir blood.'

(115) nɨtsi=yó tsaya=ʔikiá hawɨ mátsi

wring=CMPL see=REP 3SG:GEN cold

'When they bled it, they saw his (the tapir's) coldness.'

(116) nɨtsi=yó tsaya=ʔikiá

wring=CMPL look=REP

'They bled it completely and then looked at the tapir.'

(117) hatsi $pi=k\acute{a}n=(?)iki\acute{a}$

then eat=PL=REP

'Then they ate it.'

(118) $pi=kan=(?)\acute{a}=ka$ yoánomano $\acute{a}wa$ $a(k)=(?)iki\acute{a}$

eat=PL=NMLZ:P=REL after time tapir kill=REP

'When they ate, after some time, he killed a tapir.'

(119) $yo\acute{a}noma$ awa $a(k)=(?)iki\acute{a}$

after time tapir kill=REP

'After some time, he killed a tapir.'

(120) hama yomá=sɨni tsi kiá mɨra=ʔái=na

but steal=n/adj p5 rep look_for=nmlz:ipv=epen

 $ha=b\acute{a}$ $nia=t\acute{t}$

3=BENEF throw=NMLZ:PURP

'But then a thief was looking for it so that he could use it (lit. throw it) for his own benefit.'

(121) awa pi=ria=ki hawinia ni

tapir eat=AUG=DEC:NONP where INTER

'He keeps eating tapir, "where is it?""

(122) yama ibo wai=ki ka=ki kitoma

NEG owner farm plot go=D{A,S} bush

bo?o=kán=(?)ikiá

go looking=PL=REP

'The owner was not there, he had already gone to the chaco, when others were looking (for the magic pubic hair).'

(123) kitoma=' mira=kan=(?)ikiá

lawn=spat look for=pl=rep

'S/he was looking in the area just outside of the patio (lawn or bush).'

(124) kitoma=' mira=kán=(?)ikiá

lawn=SPAT look for=PL=REP

'S/he was looking in the area just outside of the patio (lawn or bush).'

(125) hátsi níka ka=kí kitoma= rotamí tsi kiá sani

then like_so go=D{A,S} lawn=SPAT hang P5 REP pubic_hair 'Then in this way, when he went, the pubic hair hung over the lawn.'

naa=sobá (126)nɨbí ho sani tsi awa DIEC1 here pubic hair DEM1=COM Р5 tapir $i=k\acute{a}n=(?)iki\acute{a}$ pí=ki say=PL=REP eat=DEC:NONP

'Here is the pubic hair, with this he eats tapir meat.'

- (127) hatsi $ki\acute{a}$ $ha=b\acute{a}$ s ha $hini=k\acute{i}$ $nia=ka(n)=n\acute{i}=k\acute{i}$ then REP 3=BENEF 3 water=DAT throw=PL=REMP=DEC:P 'Then they threw it into the water for him (the tapir).'
- (128)hɨnɨ=kí $nia=kan=(?)\acute{a}=ka$ tsi kiá awara= water=DAT throw=PL=NMLZ:P=REL Р5 REP tapir=GEN ba?í kiá ibo=ba= yópa=ní=ki tsi yama P5 owner=PL=ERG not find=REMP=DEC:P path REP NEG tsi kiá sani hɨnɨ=kí nia-?aka=?ái=na Р5 pubic hair water=DAT throw-PASS=NMLZ:IPV=EPEN REP 'When they threw it in the water, the owners couldn't find the tapir's path, there was no pubic hair which had been thrown in the water.'
- yotano=' (129)tóa mi hɨnɨ=kí sani ha 3 DEM2 2sGsouthern wind=GEN pubic hair water=DAT nia-?aka=?itá=ki i kiá =ni=kiyoşa

throw-PASS=RECP=DEC:P say REP woman =REMP=DEC:P "The pubic hair of the southern wind was thrown in the water" said the woman."

- (130) $no2\acute{o}$ awa a(k)=ti=ri i $ki\acute{a}$ $h\acute{o}ni$ $=n\acute{i}=ki$ 1SG:GEN tapir kill=NMLZ:PUPR=REG say REP man =REMP=DEC:P

 "That's a shame because I used it to kill my tapir" the man said.'
- (131) hatsi kiá awa ha pi=yáma=ní=ki
 then REP tapir 3 eat=NEG=REMP=DEC:P
 'Then they never ate tapir (again).'
- (132) hátsi náa tʃáni
 then DEM1 story
 'So this is the story.'

TEST 105. INTERVIEW WITH YOCA (BENICITO)

YOCA DURÁN

(1) hariaparí no?ó waí ba?i kamano=´ first 1sg:gen farm_plot=gen path jaguar=erg

 $ot\acute{o}=yamit=(?)\acute{a}=ka$ $yoa=k\acute{t}=a$

spy=DISTP=NMLZ:P=REL tell=DEC:NONP=1SG

'First I will tell about the path of my farm plot where the jaguar spied (on us).'

(2) haa no?ó wai=' ba?i=' naa no?ó

yes 1SG:GEN farm_plot=GEN path=SPAT DEM1 1SG:GEN

ha?i=bo=yá=só atsa i bitʃ-i=ka kamano='

daughter=PL=COM=A yuca 1SG grab=CONCUR:S=REL jaguar=ERG

 $ot\acute{o}=yam\acute{t}(t)=ki$

spy=DISTP=DEC:P

'Yes, in the path of my farm plot where I went to grab yuca with my daughters, the jaguar was spying.'

- (3) kamano=' oto=ki tsi hatfo i no?o nabo=ya $jaguar=ERG spy=PRIOR:D\{A,S\} P5 behind 1SG 1SG:GEN relatives=COM$ i ka=?a ka=so kama tsi ka=yami(t)=ki
 - 1SG go=NMLZ:P go=PRIOR:A jaguar P5 go=DISTP=DEC:P

- 'When the jaguar spied (on us), I went with my daughters (lit. relatives) behind him (the jaguar) and after the it left the jaguar left (went away).'
- (4) \dot{t} $ka=?\dot{a}=ka$ hini ſina-na-katá kamá tsi 1s_G go=NMLZ:P=REL P5 how think-ITRC-GO&DO jaguar ka=?iní i =yami(t)=kihana put? go-INTER:NONP =DISTP=DEC:P say 1s_G
 - 'When I went "how is is the jaguar thinking when he goes and put's himself (there in my chaco)?" I said.'
- (5) kamanó nobá ba?i otó=rabi=yami(t)=ki
 jaguar=ERG 1PL:GEN path spy=TWICE=DISTP=DEC:P

 'The jaguar spied our farm plot twice.'
- (6) $ka=?\acute{a}=ka$ ho=pama awi ha-mɨ hawi wai come=CONCUR wife 3-RFLX go=NMLZ:P=REL 3sg:gen farm plot tsi $p_i a = nika = yam_i(t) = k_i$ tsaya=biriá ho=kí see=DO&COME:TR:PL come=CONCUR:A P5 Pëa= listen=DISTP=DEC:P 'When his (Päe's) wife went by herself and saw her farmplot (and came) while coming Pëa heard him (the jaguar).'
- **(7)** pia='nika=?á=ka ara=?i i=tsi=ki? \acute{a} kamá Pëa=ERG listen=NMLZ:P=REL cry=CONCUR:S say=NOW:ITR=REP jaguar i=yami(t)=kino?ó ha?i t/ó naa AUX=DISTP=DEC:P 1sg:gen girl behind DEM1

'When Pëa listened the jaguar was crying, and (the jaguar) was behind my daughter.'

yes 1sg:gen girl come=nmlz:p=rel cry=concur:s

i tsi $ki\acute{a}$ $kam\acute{a}$ $=yam\overrightarrow{\imath}(t)=k\overrightarrow{\imath}$

AUX P5 REP jaguar =DISTP=DEC:P

MIGUEL CHAVEZ

(9) mató wai tsi oto=?iní

2PL:GEN farm_plot P5 spy=INTER:NONP

'He was spying / waiting in our farm plot?'

YOCA DURÁN

- (10) haa haw\(\pm\) naa nob\(\pm\) ba?i

 yes 3SG:GEN DEM1 1PL:GEN path
 - 'Yes, this is our path.'
- (11) haa mi bɨro ní karáma nɨhó=kato

yes 2:GEN view INTER rubber PROX=REL

'Yes, is the rubber in your view by your side?'

(12) $to\acute{a}$ tsi $rak\acute{a}=?i$ $kam\acute{a}$ i=yami(t)=ki

DEM2 P5 lie down=concur:s jaguar AUX=distp=dec:p

'Over there the jaguar was lying down.'

^{&#}x27;Yes, the jaguar was crying behind my daughter.'

MIGUEL CHAVEZ

when 3 do like=distp=inter:p

'When did it happen like this?'

YOCA DURÁN

(14)
$$naa$$
 osi $ka=yamit=(?)\acute{a}=na$

DEM1 month/moon=SPAT go=DISTP=NMLZ:P=EPEN

toka=no tsi ha otó=yami(t)=ki naa oṣi='

do so=concur P5 3 spy=distp=dec:p dem1 month=spat

tsi yáma tsi so kamáno

P5 NEG P5 DEC jaguar

'Last month (lit. this month that went) while this was happening he (the jaguar) was spying, now during this month, there is no jaguar.'

(15) hatsi no ka=yami(t)=ki

then 1PL go=DISTP=DEC:P

'Then we went.'

(16) nibi kamá ka=?á=na kai= i no?ó iba

DEM1 jaguar go=NMLZ:P=EPEN mother=VOC say 1SG:GEN gra_dau

 $sok \acute{o}bo = yam \acute{\iota}(t) = k \acute{\iota}$

child =DISTP=DEC:P

"The jaguar passed through here mother!" my grand daughter said."

- (17) ha?i ni i =yami(t)=ki tioria ha ka=?a=rákana
 what INTER 1SG =DISTP=DEC:P large 3 go=NMLZ:P=REL=CERT
 "Ok let's see" I said certaintly the jaguar that went must be large.'
- (18) $h\acute{a}a$ $ka=?\acute{a}=ka$ $tf\acute{o}$ tsi no ka=yami(t)=ki yes go=NMLZ:P=REL behind P5 1PL go=DISTP=DEC:P 'Yes, we followed behind where the jaguar went.'
- sabatfa=' (19)ka=?á tsi ha hiko=yami(t)=kigo=NMLZ:P P5 savannah=SPAT 3 enter=DISTP=DEC:P orí kamá ka=yami(t)=kiover there jaguar go=DISTP=DEC:P 'The jaguar entered into the savannah and went over there.'
- (20) tio-ria=ka kama =rakana kamá tʃaʔitá=ṣɨni
 big-AUG=REL jaguar =CERT jaguar big=ADJVLZ
 'Certainly the jaguar was large; a huge jaguar.'
- (21) tóa į $ho=2\acute{a}=ka$ $i=t/\acute{o}$ ka=páma tsi come=NMLZ:P=REL 1SG=behind DEM2 1sg go=CONCUR Р5 ara=?=ita=?á pɨa=rí tsi $nik\acute{a}=yam\acute{t}(t)=k\acute{t}$ Pëa=too cry=EPEN=RECP=NMLZ:P P5 listen=DISTP=DEC:P 'There I came with Pëa going behind me when he heard the jaguar crying.'
- (22) wistima toa nobá wai ba?i kamano=´
 many DEM2 1PL:GEN farm plot path jaguar=ERG

 $ot\acute{o}=yam\acute{\iota}(t)=ki$

spy=DISTP=DEC:P

'The jaguar waited and spied many times over there in the path of our farm

plot.'

(23) hátsi ni tóa

then INTER DEM2

'That's it then?'

MIGUEL CHÁVEZ

(24) hatsi ní toa ha oto=yamit=(?)á tsi ni tóa

then INTER DEM2 3 spy=DISTP=NMLZ:P P5 INTER DEM2

'Then that is it? that is what was spying?'

(25) haa

yes

'yes'

YOCA DURÁN

(26) $n\acute{a}a$ ha $ot\acute{o}=yam\acute{t}(t)=k\acute{t}$

DEM1 3 spy=distp=dec:p

'He was spying it (lit this) (our farmplot).'

(27) $t \acute{o} a \qquad i \qquad ka = tikin = (?)\acute{a} \qquad k\acute{a} = no$

DEM2 1SG go=AGAIN=NMLZ:P go=INTENT

'I went there as well and I will go (there).'

(28) $no?\acute{o}$ $iba_sokobo=y\acute{a}$ i $ka=?\acute{a}=ka$ $ha=tf\acute{o}$ tsi1SG:GEN gra_dau=COM 1SG go=NMLZ:P=REL 3=behind P5 i $ka=tik\acute{i}(n)=yam\acute{i}(t)=ki$ 1SG go=AGAIN=DISTP=DEC:P

'In this way, I went with my nephew behind him (the jaguar), and I went again.'

(29)haa ha=tſó no ka=?á=ka nɨbí kamá ka=?á=na 1PL go=NMLZ:P=REL here yes 3=behind jaguar go=NMLZ:P=REL ka?i='no?ó iba sokóbo i =yami(t)=kimother=VOC 1sg:gen gra dau say =DISTP=DEC:P 'When we went behind him (the jaguar) "The jaguar went here mother!" my daughter said.'

(30) bo=ka(n)=wi i =yami(t)=ki go=PL=IMPER 1SG =DISTP=DEC:P 'Let's go I (said).'

ha-mɨ káma no-ki=rí racá=ka (31)nɨka=yáma 3-RFLX jaguar do like=NEG 1PL-EPEN=TOO EPIS=REL i=yami(t)=kiháma SO náa be=DISTP=DEC:P but DEC DEM1

'The jaguar wasn't just there by himself where we were, but this is it.'

(32) ha-mɨ kama=maní nɨka=yáma no-ki=rí

3-RFLX jaguar=CONJEC be_like=NEG 1PL-EPEN=TOO tsaya=?i =yami(t)=ki

see=CONCUR:S =DISTP=DEC:P

'Perhaps the jaguar wasn't like this, but we didn't see anything.'

- (33) habi no ka=?á=ka sabatfa= ha ka=?ái=na
 surely 1PL go=NMLZ:P=REL savannah=SPAT 3 go=NMLZ:IPV=EPEN
 'Surely when we went, he (the jaguar) left for the savannah.'
- (34) toka katfo' tsi no ka=2i i=yami(t)=ki like_so behind P5 1PL go=CONCUR:S be=DISTP=DEC:P 'Like this, we were going behind him (the jaguar).'
- (35) habokí naa oşi tsi şo naa kama =yáma=kato
 now DEM1 month P5 DEC DEM1 jaguar =NEG=REL
 'Now in this month, this jaguar is not there.'
- (36)haa oka ha =?á=ka ara=ita=?á=ka ha yes happen 3 =NMLZ:P=REL cry=REC:P=NMLZ:P=REL 3 nika=?á=ka niá tsi ha ara=yami(t)=kihere P5 3 cry=DISTP=DEC:P listen=NMLZ:P=REL

'And when this was happening and he (the jaguar) was crying, he heard him and by here he was crying.'

MIGUEL CHÁVEZ

(37) *haa*

yes 'yes' (38) $ta?_{i}=no$ şobó house beside=SPAT 'Beside the house.' (39) tisibiri haa naa island yes DEM1'Yes this island.' (40)ho=?á toá tsi aaa DEM2 P5 come=NMLZ:P IDEO 'There he arrived (and heard) "aaa".' (41) =yami(t)=kiha aaa IDEO 3 =DISTP=DEC:P "Aaaa!" he said. MIGUEL CHÁVEZ (42) kamáno jaguar 'Jaguar'

YOCA DURÁN

(43) haa

yes

'yes'

(44)
$$t \acute{o}ka$$
 tsi ha $=yam\acute{t}(t)=ki$

like so P5 3 =DISTP=DEC:P

'He did it like so.'

MIGUEL CHAVEZ

(45) $t\acute{o}a$ ha $ar\acute{a}=no$ his=i $ka=?\acute{a}=ma$ ha DEM2 3 cry=CONCUR see=CONCUR:S go=NMLZ:P=NEG 3 $i=yamit=(?)\acute{a}$

be=DISTP=INTER:P

'When he was crying there, did you not go and spy on him?'

YOCA DURÁN

(46) pɨa= haʔarí haná tʃarupa tʃaʔitá haʔarí pɨa

Pea=ERG again leave hull large again Pëa

ka=no tsi ha pasi=yami(t)=ki

go=CONCUR P5 3 be quiet=DISTP=DEC:P

'Pea was untying the big hull (of the boat) and he was going, and he (the jaguar) fell quiet.'

(47) $p\dot{\imath}a$ $ka=yam\dot{\imath}(t)=k\dot{\imath}$ $ha=k\dot{\imath}$

Pea go=DISTP=DEC:P 3=DAT

'Pea went to them (the jaguar).'

(48) haʔarí tio-ria=ka tʃalupa=rákana haʔarí

again big-AUG=REL hull=CERT again

ha wasa=no tsi ha pasi=yami(t)=ki

3 row=CONCUR P5 3 be quiet=DISTP=DEC:P

'The hull was certaintly large like this and as he was rowing the jaguar fell quiet.'

- (49) pasi=ki i pia =yami(t)=ki
 be_quiet=DEC:P say Pëa =DISTP=DEC:P
 ' "He (the jaguar) became quiet" Pëa said.'
- (50) $t\acute{o}ka$ tsi ha $\acute{i}=ki$ $i=yam\acute{\iota}(t)=k\emph{i}$ like_this P5 3 be=DEC:NONP be=DISTP=DEC:P "The jaguar was like this" he said.
- (51)no?ó naa iba sokobo=yá i atsa=kí DEM1 1sg:gen nephew=COM 1s_G yuca=DAT ka=?ái=ka í=ki yáma tsi SO go=NMLZ:IPV=REL be=DEC:NONP NEG Р5 DEC

'Now when I go with my nephew to my yuca, there is no (jaguar).'

MIGUEL CHAVEZ

yáma tsi so habokí

NEG P5 DEC now

'There is nothing now.'

YOCA DURÁN

(53) háa yáma tsi so habokí yes NEG P5 DEC now

'Yes there is nothing now.'

MIGUEL CHAVEZ

(54) náa ogi tsi yáma tsi ní

DEM1 month P5 NEG P5 INTER

'And this month, there is nothing?'

(55) háa náa oṣɨ tsi yáma tsi so

yes DEM1 month P5 NEG P5 DEC

'Yes, this month, (the jaguar) is not (here).'

YOCA DURÁN

(56) $h\acute{a}ma$ ha $\acute{i}=ki$ $i=yam\acute{\iota}(t)=ki$

but 3 be=dec:nonp be=distp=dec:p

'But before it wasn't like this.'

MIGUEL CHAVEZ

(57) naa ξ inipa ka=ni=f=kato siri $ka\sim ka=pao=ni=f=kato$

DEM1 year go=remp=s=rel old go~go=hab=remp=s=rel

yáma toka=ká(n)=?iní

NEG do_so=pl=inter

'Last year (lit. this year that went) or before that, one (of the years) that past, did this not happen?'

(58) siri <u>şi</u>nipa $ka \sim ka = pao = ni = f = kato$ yáma old go~go=HAB=REMP=S=REL year NEG i=nitoka=ka nika=?ái=ka mi yáma like so=REL 2sg listen=NMLZ:IPV=REL be=INTER:REM ... NEG 'The older years that passed by, did you ever hear anything like this?'

YOCA DURÁN

(59) *yáma*

yama

'no'

MIGUEL CHÁVEZ

(60) *yáma*

yama

'no'

MIGUEL CHÁVEZ

- (61) naa=ro?á şɨní
 - DEM1=LIMIT year

'And last year ...'

(62) habokí náa=ro?á náa oṣɨ ka=yamɨt=(?)á=na

now DEM1=LIMIT DEM1 month go=DISTP=NMLZ:P=EPEN

toka=no=ro?ó nobá wai= ba?i kamano=

do so=CONCUR=LIMIT 1PL:GEN farm plot=GEN path jaguar=ERG

oto=yami(t)=ki

spy=DISTP=DEC:P

'And now this month that went by, during that month, the jaguar spied on the path of your farm plot.'

(63) naa şɨni ka=yamɨt=(ʔ)á=kato toka=yáma ha i=ní

DEM1 year go=DISTP=NMLZ:P=REL go=NEG 3 be=INTER:REMP

'Last year, it wasn't like this?'

YOCA DURÁN

(64) yáma pasí

NEG quiet

'Nothing, it was quiet.'

MIGUEL CHÁVEZ

(65) *pasi*

quiet

'quiet'

YOCA DURÁN

(66) ha=ro?á tsi toa

3=LIMIT P5 DEM2

'That's it.'

(67) hawi wai kisó=ka=ro?á tsi noba Tami=´

3SG:GEN farm plot edge=REL=LIMIT P5 1PL:GEN Tamë=ERG

a(k)=yami(t)ki kamáno

kill=DISTP=DEC:P jaguar

'My son Tamë killed him on the edge of the farm plot, the jaguar.'

MIGUEL CHÁVEZ

(68) kamáno ...

jaguar

'The jaguar.'

YOCA DURÁN

- (69) $hat\acute{o}$ inaka=' $bitf=\acute{i}=na$
 - 3PL:GEN dog=ERG find=CONCUR:S=EPEN

'Their dog found him.'

- (70) náa na=yo=tí=ka inaka=´ bitſ=í tsi
 - DEM1 die=CMPL=PURP=REL dog=ERG grab=CONCUR:S P5

'When the dog that died found him.'

(71) $wits\acute{a}=na=ya=s\acute{o}$ ha $a(k)=n\acute{i}=ki$ naa

other=POSS=PERF=PRIOR:A 3 kill=remp=dec:p DEM1

ka=ni=ki osi

go=REMP=DEC:P month

'He killed him (the jaguar) with his sister... this was the year that went.'

(72) tóka=no tsi kamá tſaʔitá=sɨni ha a(k)=ní=kɨ

do so=concur p5 jaguar large=ADJLZ 3 kill=REMP=DEC:P

'And this time, he killed the large jaguar.'

(73) of
$$o$$
 $ki\acute{a}$ ha $i=yam\acute{t}(t)=k\acute{t}$

thin REP 3 be=DISTP=DEC:P

'It is said that she was thin.'

MIGUEL CHÁVEZ

(74) naa şinipa ka=yamit=(?)a=kato =no

DEM1 year go=DISTP=NMLZ:P=REL=SPAT

'This happened the year that left.'

YOCA DURÁN

(75) $naa \quad osi \quad ka=ita=?\acute{a}=na$

DEM1 month go=RECP=NMLZ:P=EPEN

'Last month (lit. this month that went).'

MIGUEL CHÁVEZ

(76) naa osi $ka=?=ita=?\acute{a}=kat\acute{o}=no$

DEM1 month go=EPEN=RECP=NMLZ:P=REL=SPAT

'This month that left.'

YOCA DURÁN

(77) toka=no tsi tami= kamá tʃaʔitá=şini a(k)=yami(t)=ki like so=SPAT P5 Tamë=ERG jaguar large=ADJLZ kill=DISTP=DEC:P

'This time, Tame killed a large jaguar.'

(78) oá wai kiso= racá=kato topami=no

DEM3 farm_plot edge=SPAT lie_down=REL dense_vegetation=SPAT 'Look at him (the jaguar) on the edge of the farm plot in dense vegetation.'

MIGUEL CHÁVEZ

(79) hatsi şo toa i=kiá

then DEC DEM2 be=REP

'Then it is said it is that.'

YOCA DURÁN

(80) oka=mani

somehow=CONJEC

'Something like that perhaps.'

MIGUEL CHÁVEZ

(81) $ara=yamit=(?)\acute{a}=\varsigma$ tsi ςo toa

cry=distp=nmlz:p=s P5 Dec Dem2

'And that is the one who was crying.'

YOCA DURÁN

(82) hama wɨtsa so toa

but other DEC DEM2

'But no, this is another one.'

MIGUEL CHÁVEZ

(83) witsa

other

'other'

YOCA DURÁN

- (84) ha i = yamit = a = ki tsi ha ara = yami(t) = ki 3 kill=DISTP=EPEN=PRIOR:D{A,S} P5 3 cry=DISTP=DEC:P 'When he killed him (jaguar), he (the jaguar) was crying.'
- (85) oka ka=2i tsi gabatfa=' $k\acute{a}=ki$ somehow go=CONCUR:S P5 savannah=SPAT go=DEC:NONP 'One way or another he goes and goes to the savannah.'
- (86)ka=?ái=ka hama naa atsa=kí no?ó iba sokobo=yá go=NMLZ:IPV=REL 1SG:GEN nephew=COM DEM1 yuca=DAT pero į ka=?ai tsi pasí tsi habokí SO 1s_G go=NMLZ:IPV Р5 quiet P5 DEC now 'But when I go with my nephews to get yuca, and now its quiet.'

MIGUEL CHÁVEZ

- (87) pasí tsi go habokí
 quiet P5 DEC now
 'Now it is quiet.'
- (88) iwati Yoca=' naa ... gini $ka=yamit=(?)\acute{a}=kato='$ hawi gra_mo Yoca=VOC DEM1 ... year go=DISTP=NMLZ:P=REL=SPAT what mi $a(k)=yamit=(?)\acute{a}$ 2 do=DISTP=INTER:P

'And Yoca this last month, what did you do?'

YOCA DURÁN

(89) $a(k)=y\acute{a}ma=k\acute{i}=a$ $ha=ro?\acute{a}$ $\acute{i}-a=r\acute{i}$

do=NEG=DEC:NONP=1SG 3=LIMIT 1SG-EPEN=TOO

atsa=kí ka=?ai=ro?á tsi şo

yuca=DAT go=NMLZ:IPV=LIMIT P5 DEC

'I haven't done anything, I only go to my yuca.'

MIGUEL CHÁVEZ

(90) $atsa=ro?\acute{a}$ tsi $bitf=\acute{i}$

yuca=LIMIT P5 get=CONCUR:S

'Only bringing yuca...'

YOCA DURÁN

(91) $haa \quad atsa=ki \quad ka=ki=a$

yes yuca=DAT go=DEC:NONP=1SG

'Yes, I am going to my yuca.'

(92) nɨá-ma náa

here-NEG DEM1

'Far from here.'

(93) habí nobá bina= atsa=kí no ka=?ái=na

surely 1PL:GEN Binashi=GEN yuca=DAT 1PL go=NMLZ:IPV=EPEN

'Surely we are going to (bring) the yuca of Binashi.'

(94) mi-a=ri=pari toa his=i ka=wi kai=

2SG-EPEN=AUG=FIRST DEM2 see=CONCUR:S go=IMPER mother=VOC

i ha =no i-a=ri bo ka=ki=a $ni\acute{a}$ -ma

say 3 =CONCUR 1SG-EPEN=TOO ? go=DEC:NONP=1SG here-NEG

şo şaba okirí

DEC savannah other_side

'Let's go and see, mother!' and when she was syaing that I said "I too am going to the farm plot, its on the other side of the savannah.'

MIGUEL CHÁVEZ

(95) nía náa bási

here DEM1 far

'From here it's far away.'

YOCA DURÁN

(96) $ni\dot{a}-ma$ $k\dot{a}=ki$ no-a

here-NEG go=DEC:NONP 1PL-EPEN

'We are going far away.'

MIGUEL CHÁVEZ

(97) $ni\dot{a}-ma$

here-NEG

'Far away.'

YOCA DURÁN

(98) haa yes

'yes'

(99) $n_i\dot{a}$ -ma no $ka=?\dot{a}=ka...$

here-NEG 1PL go=NMLZ:P=REL ...

When we went far...'

(100) toá tsi barí=no tsi hó=ki no-a

DEM2 P5 sun=SPAT P5 come=DEC:NONP 1PL-EPEN

'Over there during the day, we arrive.'

(101) $ho=s\acute{o}$ tsi $no-ki=r\acute{i}$ hini $a(k)=yam\acute{i}(t)=ki$

come=PRIOR:A P5 1PL-EPEN=TOO chicha make=DISTP=DEC:P

'After we arrived we made chicha.'

MIGUEL CHÁVEZ

(102) *aha*

yes

'I see'

(103) náa şɨnípa há=no=kato ha=roʔá mi yonóko

DEM1 year 3=SPAT=REL 3=LIMIT 2:GEN work

tsi ní toa atsa bitf=í=na

P5 INTER DEM2 yuca grab=concur:s=epen

^{&#}x27;And now during this month, and your work is only to bring yuca?'



(104) $h\dot{a}a$ atsa=ki $k\dot{a}=ki$ no-a

yes yuca=DAT go=DEC:NONP 1PL-EPEN

'Yes we will go to the yuca.'

(105) habi atsa=ki ha=kirí ka=ki no-a

surely yuca=dat 3=dir go=dec:nonp 1pl-epen

'Surely we are going in the direction of the yuca.'

(106) karo=ki yáma so nɨá=no karo haboki

lumber=DAT NEG DEC here=SPAT lumber now

naa manka rɨrɨk-ɨ=ʔai tsi naá=no

DEM1 manga fall-ITR=NMLZ:IPV P5 DEM1=SPAT

karo=yá nó=kato

lumber=COM 1PL=REL

'... and towards the lumber, there is no lumber here now... this mango (tree) was recently felled, and from this, we have lumber.'

MIGUEL CHÁVEZ

(107) aha

yes

'I see'

YOCA DURÁN

(108) nɨáma şo pao mi bɨro= ní

far_away DEM stream 2SG view=SPAT INTER

'The stream is far away, do you know it (lit. is it in your view)?'

MIGUEL CHÁVEZ

(109) aha

yes

'I see'

YOCA DURÁN

(110) t'oa rabikişi='=ka karo=k'i tsi k'a=ki

DEM2 other side=SPAT=REL lumber=DAT P5 go=DEC:NON

no-a

1PL-EPEN

'From the other side of the river, we went to the lumber (the lumber was gathered on the other side of the Benicito river from Los Almendros).'

MIGUEL CHÁVEZ

(111) rabikis=kato

other side=REL

'The other side.'

YOCA DURÁN

(112) $o\acute{a}$ $k\acute{a}=ki$ no-a karo

DEM3 go=DEC:NONP 1PL-EPEN lumber

mɨra=ʔái=na

look_for=NMLZ:IPV=EPEN

'Over there we are going to look for lumber.'

MIGUEL CHÁVEZ

(113) habiha

true

'true'

YOCA DURÁN

(114) tiati yáma so karo nɨama
close NEG DEC lumber far_away
'The lumber is not close, it's far away.'

MIGUEL CHAVEZ

(115)haska náa hawi kará=ka noviembre diciembre similar DEM1 what EPIS1=REL november december febrero sinko oi=yá marso toa 0,Sŧ february month march DEM2 five rain=COM tiá=no =ai=kahawi oșŧ toa season=SPAT=NMLZ:IPV?=REL month what DEM2 $i=yamit=(?)\acute{a}$ mi a(k)=?=iiwáti yóka 2sg do=epen=concur:s aux=distp=dec:p Yoca gra mo

'Like this what could it be, in November, December, February, or March, during those five months, during the rainy season (lit. during the season that is with rain), that month, what were you doing grandmother Yoca?'

(116)
$$hawi$$
 yonoko mi $ak=(?)i$

what work 2sg do=concur:s

 $i=yamit=(?)\acute{a}$

AUX=DISTP=INTER:P

'What work were you doing?'

(117)
$$hawi$$
 $yonóko$ mi $ak=(?i$ $i=yamit=(?)\acute{a}$

what work 2sg do=concur:s aux=distp=inter:p

'What work were you doing?'

YOCA DURÁN

(118)ha=ro?á tsi i-a-rí míſni atsa 3=LIMIT P5 1sg-epen-aug a little yuca rihi-2a(k)=2=ii=yami(t)=kino to?a=tí be=DISTP=DEC:P 1PLsift=PURP shave-TR=EPEN=CONCUR:S

MIGUEL CHÁVEZ

(119) ahá

yes

^{&#}x27;I was just shaving a little yuca so that we can make chive (lit. sift the shaved yuca to make chive, i.e. clean it).'

'yes'

YOCA DURÁN

ka=ki tsi bo?o=kan=(?)ái=bo=ma=ni

go=PRIOR:D{A,S} P5 wander:PL=PL=NMLZ:IPV=NEG=INTER

'Yes, I made chive and when I went to get lumber it seemed like there might be people wandering (in the jungle) (lit. Is it not the case that there were those who wander in the jungle? (referring to uncontacted people)).'

MIGUEL CHÁVEZ

(121) ahá

yes

'yes'

- (122) ba?i kitia ba?i kitia tsi ha i=ka(n)=yami(t)=ki path block path block P5 3 be=PL=DISTP=DEC:P
 - 'There were blocked paths in multiple places.'
- (123) haa

yes

'yes'

MIGUEL CHÁVEZ

(124) mi yoá=no kiáki i=yáma tſa?ita Tɨáni

2sg tell=concur lie be=neg gra_fa Teani

 $i=yamit=(?)\acute{a}$

be=DISTP=INTER:P

'When you were telling this, did grandfather Teani say it was a lie?'

(125) $i=y\acute{a}ma=ki$ $ka?i=k\acute{a}(n)=ki$

say=NEG=DEC:NONP know=PL=DEC:NONP

'He didn't say that; they (Teani and my family) know.'

MIGUEL CHÁVEZ

(126) $ka = k\acute{a}(n) = ki$

know=PL=DEC:NONP

'They know.'

YOCA DURÁN

(127) háska náa no?ó iba sokóbo dós tsi há

similar DEM1 1PL:GEN gra dau two P5 3

'Similarly, my two grand daughters who are here ...'

(128) at/a=kas=yami(t)=ki bo/o=kan=(?)ái=bo

grab-TR=VOL=DISTP=DEC:P wander=PL=NMLZ:IPV=PL

'The uncontacted people (lit. those who wander) have almost grabbed

them.'

(129) naa hatóɨpaisa=kirí

DEM1 uncle=DIR

'Beside your uncle.' (130)yáma ha-?-ɨpa tapá=no ŞΟ 3-EPEN-father almond=SPAT NEG DEC 'Her father wasn't there, he was gathering almonds (lit. he in the vicinity of almonds).' MIGUEL CHÁVEZ (131)ahá yes 'yes' YOCA DURÁN (132)tapa $\dot{a}k=(?)i$ ha-to=bɨta=roʔá i=yami(t)=kialmond do=concur:s 3-pl=com=limit 1SG AUX=DISTP=DEC:P 'When I was gathering almonds, I was with them.' MIGUEL CHÁVEZ (133)ahá yes

YOCA DURÁN

'I see'

(134) ha-to= $bit\acute{a}$ =ro? \acute{a} i i= $k\acute{i}$ no=ka tsi3-PL=COM=LIMIT 1SG say=CONCUR:A 1PL=REL P5 $tan\acute{a}$ =i $k\acute{a}$ =ki no-a kai=i

fish=CONCUR:S go=DEC:NONP 1PL-EPEN mother=VOC 'I was with them, when they said, we are going fishing mother.' $bo=ka(n)=t\acute{a}$ (135)i \dot{t} =yami(t)=kigo=PL=IMPER:GO&DO say 1s_G =DISTP=DEC:P "Ok go!" I said. hatoipaisa (136)hatsi notí tsaropa pístia = $2\acute{a}=ka$ ha then boat hull small uncle 3 =NMLZ:P=REL tſarópa ha bo=ka(n)=yami(t)kihull 3 go=PL=DISTP=DEC:P 'Then, there was the boat and the little hull of the uncle, they brought it.' (137)tſaropa=ki $bo=k\acute{a}n=a=no$ hull=DAT go=PL=EPEN=CONCUR 'When they went to the hull...' (138)taná taná=kan=(?)á níi=bo kiá ha tsi fish fish=PL=NMLZ:P stand=PL Р5 REP 3 $i=ka(n)=yam\dot{i}(t)=k\dot{i}$ be=PL=DISTP=DEC:P 'When they were fishing, they were standing.' (139)niá=bo kiá tsi like this=PL Р5 REP 'They were like this (fat).'

MIGUEL CHÁVEZ

- (140) háa no?íria
 - yes people
 - 'Yes, the uncontacted people.'

YOCA DURÁN

- (141) $ni\acute{a}=bo$ tsi $ki\acute{a}$ ha $i=ka(n)=yam\acute{t}(t)=k\acute{t}$
 - like this=PL P5 REP 3 be=PL=DISTP=DEC:P
 - 'It is said they were like this (fat).'
- (142) nɨka=páma tsi kiá hawɨ yóṣa=kato

 - tsaya=yami(t)=ki
 - see=DISTP=DEC:P
 - 'When they looked this (backwards), his (the uncle's) sister (lit. the one who is a woman) saw them.'
- (143) $ho=kan=(?)\acute{a}$ i $ki\acute{a}$ ha $=yam\acute{t}(t)=k\acute{t}$
 - arrive=PL=INTER:P say REP 3 =DISTP=DEC:P
 - 'Have you (pl.) arrived? they said.'
- (144) hátsi kiá ha habá=yamí(t)=ki
 - then REP 3 run=DISTP=DEC:P
 - 'And then they ran away.'
- (145) haba ha=?á tsi ki?á hosó tsi kiá

 $bi=k\acute{a}(n)=yam\acute{t}(t)=ki$ ha 3 come=PL=DISTP=DEC:P 'When they ran away, they arrived white (scared).' (146) $bi=k\acute{a}(n)=ki$ arrive=PL=DEC:P 'They have already arrived.' (147)пí hawi i i=yami(t)=kiwhat **INTER** say 1sg =distp=dec:p "What happened?' I said.' kai='tʃaʔita=' (148)hia honi pa no-kí 1PL-ACC good mother=VOC man large=ERG MIR $at \int a = ki \dot{a} = ki$ grab-TR=CNTRFCT=DEC:P 'Look mother! A large man almost grabbed us!' (149)tsáya=tsa=kan=(?)ai ma-tó SO tana=?i see=IMM:TR=PL=NMLZ:IPV 2PL-EPEN DEC fish=CONCUR:S $bo=ka(n)=t\acute{a}$ i=no=mari $ka=?\dot{a}=s=kato$ go=pl=imper:go&do 1sg=concur=simil go=NMLZ:P=S=REL 'They have now seen you, I didn't say that you should go and fish when you went.'

run

3=NMLZ:P

P5

REP

white

Р5

REP

(150)toá tana=?i $bo=kan=(?)\acute{a}=ka$ yoánoma yáma fish=CONCUR:S go=PL=NMLZ:P=REL after a while DEM1 NEG kana=tí at f-a=kas=i=yam i(t)=kitsi ha Cana=too P5 3 grab-TR=VOL=EPEN=DISTP=DEC:P

> 'When they went fishing over there and for a while there was nothing, then they almost grabbed Cana as well.'

(151) naa tikami=kató=no

DEM1 curve=REL=SPAT

'Here on the curve.'

(152) toa='=ka kana tsi $ki\acute{a}$ $atf-a=kas=i=yam\acute{t}(t)=ki$ DEM2=SPAT=REL Cana P5 REP grab-TR=VOL=EPEN=DISTP=DEC:P

'From other there, they almost grabbed Cana.'

MIGUEL CHÁVEZ

(153) ani=' ba?i='=kato

river=SPAT path=SPAT=REL

'By the river path.'

YOCA DURÁN

(154) haa

yes

'yes'

(155) $tan\acute{a}=?i$ $ka=k\acute{i}=a$ i $ha=yam\acute{i}(t)=k\acute{i}$

fish=CONCUR:S go=DEC:NONP=1SG say 3 =DISTP=DEC:P "I am going fishing" he said." (156)hɨnɨ $\dot{a}(k)=ki$ no-a chicha make=DEC:P 1PL-EPEN 'We had already made chicha.' (157)tsikatsá-wa $wa=k\dot{t}$ tsi ha ka=yami(t)=kino put on top-TR 1_{PL} TR=PRIOR:D $\{A,S\}$ P5 3 go=DISTP=DEC:P 'When we put it on top (of the fire), he went.' (158) $ka=?\acute{a}=ka$ oa='ha tsi tsi kiá ha 3 go=NMLZ:P=REL P5 DEM3=SPAT Р5 REP 3 tia=ka(n)=yami(t)=kiencircle=PL=DISTP=DEC:P 'When he (Cana) went fishing over there, they encircled him (Cana).' (159)ha $bo=kan=(?)\acute{a}=ka$ mɨkɨnɨ=' kiá tsi ha 3 go=PL=NMLZ:P=REL hand=SPAT Р5 REL 3 kospo-a(k)=yami(t)=kidust-APPL/CAUS=DISTP=DEC:P 'When they went, they swiped to grab him and missed (lit. they grabbed dust with their hands).' (160)ha-tó naa atſ-a=yáma sirikí kiá kiá ha tsi

REP

grab-TR=NEG

REP

3

P5

3-PL DEM1 inside

$$wa=ka(n)=yami(t)=ki$$

TR=PL=DISTP=DEC:P

'This one (Cana) was between them, and they couldn't grab him (Cana).'

$$i=yami(t)=ki$$
 $hawi$ ni $kana=$

'He came by himself from there, he arrived white (scared) "What happened Cana?" (I said to him).'

(162)
$$hawi$$
 $kar\acute{a}=ka$ $kai='$ i - a ha

"What could they have been mother! They almost grabbed me, there were a number of them."

(163) ti?í-ria=ka=rákana

COOR-AUG=REL=CERT

'Certainly, there were a number of them.'

(164)
$$i$$
-a ha at f- a = kas = $ka(n)$ = ki mi - a so

ka=?ái=na

go=NMLZ:IPV=EPEN

"They always grabbed me" (he said) where you (Cana) went...'

(165) toka tsi no?ó iba i mi ki
do_so P5 1sG:GEN nephew say 2sG =DEC:P

'That what happened my nephew you said it.'

MIGUEL CHÁVEZ

=?ái=na (166)toá tsi SO oi=yá tia i no DEM2 P5 DEC rain=COM season say 1PL =NMLZ:IPV=EPEN habiha no toa tiempo tsi tapa=ka ki 1_{PL} P5 almond=REL POST? true DEM2 season moto mi nia=?ái=ka fina-wa=yáma=ki bari chive 2s_G throw=NMLZ:IPV=REL dry-V:TR=NEG=DEC:NONP sun 'And during what we call the season of rain, true we ... when it will be the season of almonds (the season one can gather almonds), the sun dries the chive that we throw out (into the sun).'

YOCA DURÁN

(167) $no \quad nia = 2\acute{a} = ka \quad pi \quad ha2ari \quad b\acute{i} = ki \quad no-a$ 1PL 2SG-ACC ANX AGAIN grab=DEC:NONP 1PL-EPEN

'When we put the chive out to sun we pick it up again.'

MIGUEL CHÁVEZ

(168) toka tsi mi ak=(?)i $iyamit=(?)\acute{a}$

do_so P5 2sg do=concur:s aux=distp=inter:p

oi=yá tiá

rain=COM season

'This is what you did during the rainy season?'

YOCA DURÁN

(169) háa i-a-rí=bo bari=kí nia=?á=ka

yes 1-EPEN-AUG=PL/ASS sun=DAT throw=NMLZ:P=REL

bi=yami(t)=ki

grab=DISTP=DEC:P

'I as well (with my daughters) grabbed the chive after throwing it in the

sun.'

(170) $i=y\acute{a}ma=p\acute{i}=ki$ $iw\acute{i}$

be=DISTP=ANX=DEC:P EXPL

'One can't do it unfortunately (it does not dry).'

MIGUEL CHÁVEZ

(171) $i=y\acute{a}ma=ki$

be=NEG=DEC:NONP

'Nothing happens.'

(172) naa aora naa bar $i=y\acute{a}$ tia $a(k)=kan=a\acute{i}$

DEM1 now DEM1 sun=COM season do=PL=INTER:2

tsi tóka=no tsi ...

P5 do_so=concur P5

'And now during the season of the sun what do you do?'

(173) hatiro?á tsi mɨri tsi i=ní mooto

all P5 quickly P5 be=INTER:REMP chive

'When you throw all of it (into the sun), it is quickly ready?'

YOCA DURÁN

(174) ha tsi şo

3 P5 DEC

'Exactly! (lit. that's it)'

MIGUEL CHÁVEZ

(175) yáma tsi so karo tſáſi=kato

NEG P5 DEC lumber damp=REL

'Now the lumber is not damp.'

YOCA DURÁN

(176) yáma tsi so karo tſáſ=kato

NEG P5 DEC lumber damp=REL

'There is no damp lumber.'

MIGUEL CHÁVEZ

(177) finá tsi so

dry P5 DEC

'It is dry.'

MIGUEL CHÁVEZ

| riri-ki=?ái=na | | | | | | | |
|--|--|--|--|--|--|--|--|
| fall-ITR=NMLZ:IPV=EPEN | | | | | | | |
| rati=ʔái=na | | | | | | | |
| | | | | | | | |
| 'Now in the months of september and october the leaves are falling the | | | | | | | |
| | | | | | | | |

(179) toka=no tsi ho?a ki nişo
do_so=SPAT P5 flower PROS type of flower?

'In this time, the flower will be "nixo"

leaves are blossoming again.'

(180)tóa osi=nohawi atsa bana=tí oși DEM2 month=SPAT 3SG:GEN yuca harvest=NMLZ:PURP month пí toa iwati yoka o siki banatí пí DEM2 gra_mo Yoca or harvest=nmlz:purp inter **INTER** corn toa

DEM2

'And will that month be to harvest yuca or just to harvest corn, grand-mother Yoca?'

YOCA DURÁN

(181) $h\acute{a}a$ oi $paki=k\acute{t}$ tsi $bana=k\acute{a}(n)=ki$ yes rain fall=PRIOR:D{A,S} P5 harvest=PL=DEC:NONP siki $iw\acute{t}$ corn EXPL

'Yes, after the rain falls, one can harvest the corn.'

- (182) $bana-2ak\acute{a}$ $ha=k\acute{i}$ $hoc\acute{o}=tsi=p\acute{i}=ki$ harvest-PASS 3 =PRIOR:D{A,S} bloom=IMM:ITR=ANX=DEC:NONP 'When it (corn) is harvested, then it (flowers) blooms.'
- (183) $bari=y\acute{a}$ $ti\acute{a}$ $b\acute{a}na=noma$ $p\acute{t}$ go sun=COM season harvest=PROHIB ANX DEC $n\acute{a}=pi=ki$ die=ANX=DEC:NONP 'During the sunny season, they die.'

MIGUEL CHÁVEZ

(184) $n\acute{a}=ki$ die=DEC:NONP 'They die.'

(185)ha?iki tóa пí hoa payo=?ái tsi from there soften=NMLZ:IPV DEM2 INTER flower P5 hó=ki ói come=DEC:NONP rain

'And from there the flowers soften when the rain comes?'

(186) toka=no tsi bana=ka'(n)=ki siki ha=ni

like so=SPAT P5 harvest=PL=DEC:NONP corn 3=INTER

'During this time one harvests corn, no?'

(187) hátsi na=yáma=ki

then die=NEG=DEC:NONP

'Then they don't die.'

YOCA DURÁN

(188) ha-ʔ-á tsi pɨ so

3-EPEN-SPAT P5 ANX DEC

'From there, yes.'

MIGUEL CHÁVEZ

(189) toá tsi so septiembre octubre osi

DEM2 P5 DEC September October month

'Those months of September and October.'

(190) ni?i hoa tiá

jungle flower season

'The (jungle) flower season.'

(191) $to\acute{a}$ tsi $n\acute{i}$ mi $nik\acute{a}=?i$ $i=yamit=(?)\acute{a}=na$

DEM2 P5 INTER 2SG listen=CONCUR:S AUX=DISTP=NMLZ:P=EPEN

'Is this what you always used to hear?'

YOCA DURÁN

(192) haa

yes

'Yes'

MIGUEL CHÁVEZ

(193) aora bari=yá tiyá so no-a

now sun=com season dec 1pl-epen

'Now we are in the sunny season.'

YOCA DURÁN

(194) tóa tapa a(k)=ka(n)=yamit=?á=na

DEM2 almonds do=PL=DIST=NMLZ:P=EPEN

'From there they have harvested the almonds.'

(195) i-a-rí niá so tapa

1SG-EPEN-too here DEC almonds

'I as well (gather almonds), and here there are almonds.'

(196) naa nakiti= '=kato tsaya=?ai

DEM1 island=SPAT=REL see=INTER:2SG

'By this island, do you see?'

(197) okirí tsi so tapa=yá=kato toá tsi so

other side P5 DEC almonds=COM=REL DEM2 P5 DEC

'Over there on the other side there are almonds.'

(198) nobá tamɨ awi yamabo ití ka=ya=só ɨ=bás

1PL:GEN Tamewoman deceased place go=PERF=PRIOR:A 1SG=BENEF

'He (?) already had gone with the woman of Tame the deceased one for me
...'

(199) $i=b\acute{a}s$ ha $rir-a=imit=(?)\acute{a}=na$

1SG=BENEF 3 fell-tr=distp=nmlz:p=epen

'For me he felled (a tree).'

MIGUEL CHÁVEZ

(200) háa oá tsi ní
yes DEM3 P5 INTER
'Oh, that's how it is?'

YOCA DURÁN

(201) $ha-2-\acute{a}$ gobo ha $a(k)=ka(n)=imit=(?)\acute{a}=na$ 3-EPEN-SPAT house 3 make=PL=DISTP=NMLZ:P=EPEN 'And from there they made a house.'

MIGUEL CHÁVEZ

(202) ha-?-á tapa rabɨ ma-to-rí mɨra=?ái=na

3-EPEN-SPAT almond some 2PL-EPEN-AUG look_for=NMLZ:IPV=EPEN

'And from there you looked for some almonds.'

YOCA DURÁN

(203) toa i tapa $a(k)=y\acute{a}ma=im\acute{i}(t)=k\acute{i}$ naa $tfa?ita=\acute{}$

DEM2 1sg almond do=NEG=DISTP=DEC:P DEM1 gra fa=ERG i-a $yo \hat{i}$ - $wa = yam \hat{i}(t) = ki$ 1sg-acc ruin-V:TR=DISTP=DEC:P 'From there I didn't harvest almonds. This grand father ruined it for me.' (204)kará=ka ha=nohawi anoma tsi what 3=CONCUR EPIS2=REL **PROHIB** Р5 hawí t[aʔíta hawí ha?íni i=ba3sg:gen nephew 3sg:gen girl 1sg=benef kana=' ha papa bi=tá i =yami(t)=kifather grab=IMPER:GO&DO Cana=VOC say 3 =DISTP=DEC:P 'What was it that she had, her nephew, her daughter... "go and grab me some (lumber) for father Cana" she said.' (205)hátsi tóa $ak=(?)\acute{a}=ma$ \dot{t} tapa ŞO then DEM2 almond 1s_G DEC take=NMLZ:P=NEG $ka=yam\dot{t}(t)=k\dot{t}$ go=DISTP=DEC:P 'Because of this, I gathered the almonds and I left.' (206)toá tsi οá p_{i} \dot{t} nika=yami(t)=kiрį DEM2 P5 ANX DEM3 ANX 1s_G do so=DISTP=DEC:P yáka=kí \dot{t} ka=yami(t)=kiiwi tsi рį town=DAT Р5 ANX 1s_G go=DISTP=DEC:P **EXPL**

'When I went there, I went like this (turned around) and I went to town (Riberalta).'

MIGUEL CHÁVEZ

(207) habiha

true

'true'

(208) hawɨnianí=parí ma raka=yamɨt=(ʔ)á

where=first 2PL live=DISTP=INTER:P

'Where did you live first?'

YOCA DURÁN

(209) $h\acute{a}a$ $ni\acute{a}$ nomi pifa no i=yami(t)=ki

yes here 1PL-RFLX little 1PL be=DISTP=DEC:P

'Well, we were here (alone me and Rabi).'

(210) toá so tápa

DEM2 DEC almond

'Over there there are almonds.'

(211) $t\acute{a}pa$ so $to\acute{a}$ $to\acute{a}$ wai $a(k)=k\acute{a}s=ki$

almond DEC DEM2 DEM2 farm plot do=VOL=DEC:NONP

nobá tami

1PL:GEN Tame

^{&#}x27;There are almonds; over there they want to make a farm plot, our Tame.'

MIGUEL CHÁVEZ

(212)
$$n\acute{a}a$$
 $h\acute{o}o$ $t\acute{a}pa=?\acute{a}=ka$ $a(k)=tikin=(?)\acute{a}i=ka...$

DEM1 come almond=NMLZ:P=REL do=AGAIN=NMLZ:IPV=REL ...

'And now the almonds have come and (people) are harvesting them again...'

2PL-EPEN DEM1 2SG think=NMLZ:IPV=REL gra fa Teani=COM=A

think=NMLZ:IPV=REL almond look for=NMLZ:IPV=EPEN

oi=yá tiá=no

rain=COM season=SPAT

'You are thinking this with grand father Teani (Rabi) you are thinking that you will look for almonds during the rainy season.'

YOCA DURÁN

(214)
$$ha-2-\acute{a}$$
 $ka=\cancel{s}i=k\acute{i}=a$ $h\acute{a}a$ $ka=kas=k\acute{i}=a$

3-EPEN-SPAT go=REMF=DEC:NONP=1SG yes go=VOL=DEC:NONP=1SG

i-a-ri

1sg-epen-aug

'I am going there, yes I myself am planning to do.'

(215)
$$h\acute{a}a$$
 $tapa$ i $a(k)=y\acute{a}ma=yam\acute{i}(t)=ki$

yes almond 1sG do=NEG=DISTP=DEC:P

'Yes, I didn't get any almonds (last season).'

(216)
$$haboki$$
 tsi $i-a-ri$ $ka=kas=ki=a$

now P5 1SG-EPEN-AUG go=VOL=DEC:NONP=1SG

'Now I want to go.'

MIGUEL CHÁVEZ

(217) haboki tsi bo=kan=(?)ai

now P5 go=PL=INTER:2

'Now you are going?'

YOCA DURÁN

(218) $a(k) = s \acute{o} = ma$ i $his = bay \acute{a} = im\acute{t}(t) = ki$

take=PRIOR:A=NEG 1SG see=DO&GO=DISTP=DEC:P

'Without taking anything (i.e. almonds) I left (lit. saw and went).'

MIGUEL CHÁVEZ

(219) toa tapa ma $ak=(?)\acute{a}i=ka$ ma-tó orikití

DEM2 almond 2PL do=NMLZ:IPV=REL 2PL:GEN food

bi=ti ma fina=?ái=na

grab=NMLZ:PURP 2PL think=NMLZ:IPV=EPEN

'Your thought is that you will gather almonds over there to buy your food.'

YOCA DURÁN

(220) toa nobá orikití piſa bi=tí no-ki-rí

DEM2 1PL:GEN food little grab=NMLZ:PURP 1PL-EPEN-AUG

a(k)=kas=yami(t)=ki a(k)=yama no wa=yami(t)=ki do=VOL=DISTP=DEC:P do=NEG 1PL TR=DISTP=DEC:P

'We wanted to do it (gather almonds) to get a little of our food there, (but) we weren't able to do it.'

(221)ha-ro?á nobá bonó kɨʃpi=roʔá bono nobá 3-LIMIT 1PL:GEN bonus 1PL:GEN bonus because=LIMIT tsi nokirí hawi piſa no pi=yami(t)=kisomething little 1PL eat=DISTP=DEC:P Р5 1PL-EPEN-AUG 'Only our bonus, because of our bonus, we ate a little something.'

MIGUEL CHÁVEZ

(222) toa tsi ni toa mató mibi=?ái=na

DEM2 P5 INTER DEM2 2PL:GEN help=NMLZ:IPV=EPEN

'And that helps you?'

YOCA DURÁN

- (223)hatsi i-a-rí $ka=tiki(n)=k\acute{a}s=ki$ yáma tsi SO then 1sg-epen-aug go=AGAIN=VOL=DEC:NONP NEG Р5 DEC ha-ʔ-á ka=?ái=na i-a-rí 3-EPEN-SPAT 1sg-epen-aug go=NMLZ:IPV=EPEN 'So I am planning to go again, (but) there is no one to go with (there is no way to go).'
- (224) boca=' tsi naa kamion bo=kas=yami(t)=ki

Boca=ERG P5 DEM1 car carry=VOL=NEG=DEC:P 'Boca wanted to take me in this car.' (225)ka=wi=yami(t)=kino=bɨtá tsi i ha 1PL=COM Р5 go=IMPER say 3 =DISTP=DEC:P "Come with us." he said." (226)no=bɨtá tsi bo=ka(n)=wi1PL=COM Р5 go=PL=IMPER 'Let's go together; come with us.' (227)ha=?á i tsi papi ha tsaya=yami(t)=ki3=NMLZ:P P5 paper 3 look at=DISTP=DEC:P say 'When he said this, he looked at a notebook.' (228)ha?arí dos meses=ro?á SO mi-a already months=LIMIT 2-EPEN two DEC 'Recently, two months before you (arrived).' tsik-i=?ai=kato='(229)naa tsi tres ki

(229) naa tsik-i=2ai=kato=' tsi tres kiDEM1 $come_out$ -ITR=NMLZ:IPV=REL=SPAT P5 three PROS

i ha =yami(t)=ki

say 3 =DISTP=DEC:P

"When it comes out (the car), it will be three months." he said."

(230) hama náa kuatro tsi pɨ so náa but DEM1 four P5 ANX DEC DEM1 tsik-i=7i $ka=7\acute{a}=kato$

come out-ITR=CONCUR:S go=NMLZ:P=REL

'But from now four months have passed since it (the car) came out.'

(231) $t \circ ka = no$ $t \circ i - a$ $ha \circ bo = kasi = yam i(t) = ki$

'And this time they wanted to take me away.'

(232) $t\acute{o}ka=no$ i-a ha $bo=kas=(?)\acute{a}$ tsi ...

do_so=concur 1sg-acc 3 take_away=vol=nmlz:p p5 ...

'But when he wanted to take me ...'

(233) $p\acute{a}pi$ $tsaya=s\acute{o}$ tsi ha $ka=y\acute{a}ma=yam\acute{t}(t)=k\acute{t}$

paper see=PRIOR:A P5 3 go=NEG=DISTP=DEC:P

'When he looked at his notebook (looked at the date), he didn't go.'

(234) haʔarí piſa tsi so ma-to

still small P5 DEC 2PL-EPEN

'There isn't nothing still.'

MIGUEL CHÁVEZ

(235) haʔíkí tsi naa oṣɨ= ˈ tsi

over there P5 DEM1 month=SPAT P5

bo=tsi=kas=kan=(?)ai

go=IMM:ITR=VOL=PL=INTER:2

'Over there during this month, you want go to?'

YOCA DURÁN

(236) náa oṣi= tsi yáma tsi ṣo no-ki-rí

DEM1 month=SPAT P5 NEG P5 DEC 1PL-EPEN-AUG

ka=?ái=na

go=NMLZ:IPV=EPEN

'During this month we have nothing to go with.'

(237) $ha?ari palmito a(k)=ti=b\acute{a}$ tsi so

still palm tree do=NMLZ:PURP=PL=BENEF P5 DEC

Pia naa=parí

Pea DEM1=FIRST

'It's still necessary for Pea to work on palm tree lumber first.'

(238) papi=pari $ha=b\acute{a}$ $a(k)=y\acute{a}ma$ ka=?ini $haw\acute{i}$ raisi

paper=FIST 3=BENEF do=NEG go=INTER 3SG:GEN in law

'Is his in law not going to make a paper for him first?'

MIGUEL CHÁVEZ

(239) náa hawí permiso bi=tí

DEM1 3SG:GEN permission get=NMLZ:PURP

'To get this permission.'

(240) aora iwati yoka mi-a nika=kas=ki=a

now gra mo Yoca 2SG-ACC listen=VOL=DEC:NONP=1SG

tſani wɨtsa

story other

'Now, grandmother Yoca, we want to hear you, another story.'

(241) náa yoi pi no tſani=?ái no nama=?ái

DEM1 bad COND 1PL speak=NMLZ:IPV 1PL dream=NMLZ:IPV

wistí~wistí ma nama=yamit=(?)á kiisi=tí

something 2PL dream=DISTP=INTER:P cut=NMLZ:PURP

namá o riso=tí namá~nama no

dream or die=NMLZ:PURP dream~dream 1PL

 $ak=(?)\acute{a}i=na$

do=NMLZ:IPV=EPEN

'Now when we dream of something bad, something you dreamt of to cut what we do when while dreaming?'

(242) no-kí hawi=şobá tʃiba=ʔái=na

1PL-ACC what=COM chase=NMLZ:IPV=EPEN

toka nama ak=(?)i mi $i=yamit=(?)\acute{a}$

do so dream do=CONCUR:S 2SG AUX=DISTP=INTER:P

'When someone chases us with something (with what) do you ever dream like this as well?'

YOCA DURÁN

(243) $h\acute{a}a$ $nam\acute{a}=?i$ $i-a-r\acute{i}$ $i=yam\acute{t}(t)=k\emph{i}$ yes dream=CONCUR:S 1SG-EPEN-AUG AUX=DISTP=DEC:P

Yes, I have dreamt (like this).'

(244)
$$toa$$
 i $nama=?\acute{a}$ tsi $koi=n\acute{a}i$ i

 $i=yam\dot{i}(t)=k\dot{i}$

be=DISTP=DEC:P

'When I dreamt I was sad.'

MIGUEL CHÁVEZ

(245)
$$hawi \quad nam\acute{a}=' \quad mi \quad his=i \quad i=yam\acute{t}=(?)\acute{a}$$

what dream=SPAT 2SG see=CONCUR:S AUX=DISTP=INTER:P

mi nama=?ái=na

2sg dream=nmlz:ipv=epen

YOCA DURÁN

DEM1 1SG:GEN dau_in_law 1SG-ACC beside=REL

 $nam\acute{a}=?i$ $i=yam\acute{t}(t)=k\acute{t}$

dream=CONCUR:S AUX=DISTP=DEC:P

'My daughter in law here was beside me when I was dreaming.'

(247)
$$i$$
- a - ri $nam\acute{a}=?i$ $i=yam\acute{t}(t)=k\acute{t}$

1SG-EPEN-too dream=CONCUR:S AUX=DISTP=DEC:P

'I was dreaming this whole time.'

^{&#}x27;What were you seeing in the dream when you were dreaming.'

(248) nɨbí=roʔá so hawí sobo

here=LIMIT DEC 3SG:GEN house

'Here is her house.'

(249) toka=no mooto mifini i $a(k)=y\acute{a}ma=no$ i=ki

like_so=SPAT chive a_little 1SG make=NEG=CONCUR1SG=DAT

a(k)=(?)i $i=yamit=(?)\acute{a}=ka$ tsi so toa

give=concur:s aux=distp=nmlz:p=rel p5 dec dem2

'When I didn't make chive, she always gave it (chive) to me.'

MIGUEL CHÁVEZ

(250) hátsi ní toa

then INTER DEM2

'And so that one?'

(251) $mi-\acute{a}$ $mi-\acute{b}i$ ha $i=yamit=(?)\acute{a}$

2sg help 3 AUX=distp=inter:p

'She was helping you?'

YOCA DURÁN

(252) haa toa tsi so mibi $i=yami(t)=?\acute{a}=kato$

yes DEM2 P5 DEC help AUX=DISTP=NMLZ:P=REL

'Yes, she was the one helping me.'

(253) no?ó ha?í háska tsi so ha?arí

1sg:gen girl similar P5 DEC still

'I thought of her as my child (lit. She was similar to a child to me still).'

kása=ká(n)=no

be_angry=PL=CONCUR

'So there are some who become angry with their daughter in laws.'

- (255) nobá sokoba= oto=ka=rákana i i = ?ái=na

 1PL:GEN child=GEN pair_with=REL=CERT say 1SG =NMLZ:IPV=EPEN

 "He is the wife (lit. the one she is paired with) of our child." I said.'
- (256) toa hátsi a(k)=yáma=ki=a i i =yami(t)=kiDEM2 then do=NEG=DEC:NONP=1SG say 1SG =DISTP=NMLZ:P

 "And this (getting mad at my daughter in law) I do not do it" I said (to myself).'
- (257) $o\acute{a}$ tsi $boka(n)=t\acute{a}$ $o\acute{a}=no$ DEM3 P5 go=PL=IMPER:GO&DO DEM3=SPAT

'Go over there!'(Yoca is talking to her grand children listening in)

MIGUEL CHÁVEZ

(258)habokí yáma tsi mi=kí toka ni Р5 like so now NEG **INTER** 2sg=dat mi naaris=no mi=bɨtá náa moto moto DEM1 2sg lack=CONCUR 2sg=com chive chive

wɨṣa=ʔái=na yáma tsi ní

toast=NMLZ:IPV=EPEN NEG P5 INTER

mi=ki $t\acute{o}ka=ka$ $ak=(?)\acute{a}i=na$

2SG=DAT like so=REL do=NMLZ:IPV=EPEN

'And now there is no one (to help you) in this way and you lack someone like this to toast chive with you, there is no one like this who gives you chive?'

YOCA DURÁN

(259) hátsi náa nobá páka

yes DEM1 1PL:GEN Paca

'So this is our Paca (nickname of her daughter who just arrived).'

MIGUEL CHÁVEZ

(260) hátsi so tóa

then DEC DEC2

'Oh that's her!'

YOCA DURÁN

(261) hama $wisa=s\acute{o}=ro?\acute{a}$ $i=k\acute{i}$ $bi=?\acute{a}i$

but toast=PRIOR:A=LIMIT 1SG=DAT bring=NMLZ:IPV

tsi șo tóa

P5 DEC DEM2

'But right after toasting, she was the one who brought me (chive).'

(262)hama náa i=bás atsa *rihi-?ak=(?)ai* but DEM1 1SG=BENEF yuca shave-CAUS/APPL=NMLZ:IPV $ta2\acute{t}=kato$ náa $i=bit\acute{a}=kato$ tsi ŞO i-a P5 DEC DEM1 1SG-ACC beside=REL 1SG=COM=REL 'But this one, this is the one who shaves yuca for me, the one beside me, the

(263) káro bitſ=í tsi so tóa

lumber grab=CONCUR:S P5 DEC DEM2

náa i=bitá=kato

one who is with me.'

DEM1 1SG=COM=REL

'That is the one who gets lumber, this one with me.' (Yoca switches to *naa* when she points to the child)

(264) no?ó kái şáwɨ ɨ kɨna=ní=na

1sG:GEN mother sloth 1sG call=NMLZ:REM=EPEN

'I used to called my mother "sloth".'

MIGUEL CHÁVEZ

ka=?=ita=?á=kato $ka=?=ita=?\acute{a}=ka$ (265)naa DEM1 go=EPEN=RECP=NMLZ:P=REL go=EPEN=RECP=NMLZ:P=REL bari hawi mi $a(k)=?=ita=?\acute{a}$ iwáti yoka what 2sg do=EPEN=RECP=INTER:P Yoca sun gra mo

'And now this week (lit. this one that went recently) what did you do this week grand mother Yoca?'

(266)
$$n\acute{a}a$$
 $ka=?=ita=?\acute{a}=\varsigma=ka$ $bari$ $haboki$

$$DEM1$$
 $go=EPEN=RECP=NMLZ:P=S=REL$ day/sun now

$$n\acute{a}a$$
 $ka=?=ita=?\acute{a}=\varsigma=ka$ $bari$ naa

DEM1 go=EPEN=RECP=NMLZ:P=S=REL day/sun DEM1

no oṣa=ʃina=ʔá=na

1PL sleep=ATNIGHT=NMLZ:P=EPEN

YOCA DURÁN

(267)
$$a(k)=y\acute{a}ma=k\acute{i}=a$$
 $no?\acute{o}$ $bak\acute{i}=na$ \acute{i} $do=Neg=Dec:Nonp=1sg$ $1sg:gen$ $boy=poss$ $1sg$ $mibi=fìn\acute{a}=k\acute{i}$

help=ATNIGHT=DEC:P

'I was not going anything I was just helping my nephew (lit. the one who is of my boy).'

MIGUEL CHÁVEZ

(268)
$$hini$$
 $ak=(?)\acute{a}i=na$

chicha make=NMLZ:IPV=EPEN

'making chicha.'

^{&#}x27;And this week (lit. the sun(s) that went recently), yesterday (lit. the sun that went recently) that we slept through at night.'

YOCA DURÁN

(269)
$$h\acute{a}a$$
 $h\acute{i}n\acute{i}$ $ak=(?)\acute{a}i$ tsi $mibi=ta(n)=k\acute{i}$

yes chicha make=NMLZ:IPV P5 help=GO&DO=DEC:P

i-a-rí

1SG-EPEN-too

'Yes, when they were making chicha I too went and helped.'

MIGUEL CHÁVEZ

(270) haboki yáma tsi ni mi ak=(?)ái=na

now Neg P5 inter 2sg do=nmlz:ipv=epen

'And no are you not doing anything?'

YOCA DURÁN

(271) yáma tsi ní yonoko=?ái=na

NEG P5 INTER work=NMLZ:IPV=EPEN

'Now we are not working.'

(272) toa rabi tsi

DEM2 Rabi P5

'That Rabi...'

(273) naa semana ho=tikin=(?)ái=kato hawi tsi ak=(?)aí

DEM1 week come=AGAIN=NMLZ:IPV=REL what P5 do=INTER:2

'This week that is coming again what are you doing?'

(274) toka=no tsi $no?\acute{o}$ moto $nia=tiki(n)=k\acute{i}=a$

like_so=SPAT P5 1SG:GEN chive throw=AGAIN=DEC:NONP=1SG 'This week I am throwing my chive (into the sun).'

MIGUEL CHÁVEZ

(275) mi moto tsi nia=?aí

2SG:GEN chive P5 throw=INTER:2

'You are going to throw chive (into the sun)?'

YOCA DURÁN

(276) $h\acute{a}a \quad i \quad a(k)=ita=?\acute{a}=ka \quad nia=k\acute{i}=a$

yes 1sg do=recp=nmlz:p=rel throw=dec:nonp=1sg

'Yes I am going to throw what I made (in the sun).'

(277) toka=no tsi i-a-rí karo

like so=SPAT P5 1SG-EPEN-AUG lumber

mira=tiki(n)=ki=a

look for=AGAIN=DEC:NONP=1SG

'This day I am going looking for lumber again like this.'

(278) tiati yama so karo

close NEG DEC lumber

'The lumber is not close.'

(279) obí nobá sobósini tsi naatani=kí=a

over there 1PL:GEN old house P5 pass by=DEC:NONP=1SG

'Over there I am going to pass by our old house.'

MIGUEL CHÁVEZ

other side=REL week 3PL:GEN chive toast=CMPL=PRIOR:A

mi $a(k)\sim a(k)=kas=(?)\acute{a}i=ka...$

2sg do~do=vol=nmlz:ipv/inter:2?=rel ...

'The next week after you have toasted all of your chive, what are you going to be doing?'

YOCA DURÁN

other P5 change=CAUS=DEC:NONP=1SG 1PL:GEN Tame=BENEF

a(k)=ki=a

make=DEC:NONP=1SG

'I am going to change to another, I am making (the chive) for our son Tame.'

(282)
$$habi$$
 $atsa$ $bit f=i$ $ka=ki=a$

surely yuca get=CONCUR:S go=DEC:NONP=1SG

hawi atsa tsi so toa

3SG:GEN yuca P5 DEC DEM2

MIGUEL CHÁVEZ

(283)
$$nia=yo=s\acute{o}$$
 tsi $raati=ma=tikin=(?)a\acute{i}$ throw away=CMPL=PRIOR:A P5 change=CAUS=AGAIN=INTER:2SG

^{&#}x27;Surely I am going to get yuca; that is her yuca.'

'After throwing the chive in sun are you going to change to another?'

YOCA DURÁN

(284) háa

yes

'yes'

(285) hawi atsa tsi so toa atsa=ya=ma so i-a

3SG:GEN yuca P5 DEC DEM2 yuca=PROP=NEG DEC 1SG-EPEN

'That was her yuca; I don't have yuca.'

(286) no?o=na hono=' nia=yo=ni=ki

1sg:gen=poss taitetu=erg throw_away=cmpl=remp=dec:p

'Of mine, the taitetu threw away everything.'

MIGUEL CHÁVEZ

(287) tóa tsi ní mi tfáni

DEM2 P5 INTER 2SG:GEN story

'That is your word?'

YOCA DURÁN

(288) háa

yes

'yes'

(289) $t\acute{o}a$ tsi so $no?\acute{o}$ $baki=b\acute{a}$ $m\acute{o}oto$ $a(k)=k\acute{i}=a$

DEM2 P5 DEC 1SG:GEN boy=BENEF chive do=DEC:NONP

'That's it, I am going to make chive for my son.'

(290) sota witsa hawi=na
$$i=yami(t)=ki$$
 yama no

bag other 3SG:GEN=POSS be=DISTP=DEC:P NEG 1PL

$$pi=?\dot{a}i=na$$
 $h\dot{a}ma$ no $pi=yam\dot{i}(t)=k\dot{i}$

'He had his own bag, there was nothing for us to eat, but we ate.'

'Then I am going to change for him again.'

MIGUEL CHÁVEZ

(292) habiha

verdad

'true'

YOCA DURÁN

(293)
$$hat\acute{o}$$
 $koko$ $yopa=yam\acute{\iota}(t)=ki$

'He looked for his uncle and didn't find him.'

(294)
$$mi-2-iwa=ki$$
 tsi $voa=so=wi$

'You should tell your mother.'

(295)
$$y$$
áma t si s o m i= b a= r i $a(k)$ = t i= k ato

NEG P5 DEC 2SG=BENEF=too do=NMLZ:PURP=REL

i ható koko yopa=yami(t)=ki

and 3PL:GEN uncle look for and not find=DISTP=DEC:P

'Now there is nothing of what he made for you and he looked for his uncle and couldn't find him.'

MIGUEL CHÁVEZ

(296) hatsi so toa

then DEC DEM2

'Then that's it.'

YOCA DURÁN

(297) haa $yoa=imit=(?)\acute{a}$ tsi so toa $i-a-r\acute{i}$

yes tell=distp=nmlz:p p5 dec dem2 1sg-epen-too

bit f = i = na

grab=CONCUR:S=EPEN

'Yes that's what he told (us) that's why I am grabbing it (the yuca).'

MIGUEL CHÁVEZ

(298) *habiha*

true

'true'

YOCA DURÁN

(299) atsa=yá=ma so i-a

yuca=PROP=NEG DEC 1SG-EPEN

'I don't have yuca.'

MIGUEL CHÁVEZ

- (300) háska mí-a nika=tiki(n)=kas=kí=a iwáti yoka similar 2sg-ACC listen=AGAIN=VOL=DEC:NONP=1sg gra_mo Yoca 'Again, I want to ask you something again, grand mother Yoca.'
- (301)naa sokobo=?as mi sati=bo mi DEM₁ child=s 2sg:gen half=COLL 2sg:gen famila=bo mihimi=ba=na=bofamily=COLL 2sg:gen relative=PL:GEN=POSS=COLL familia tisi niana=no0 or family other fight=CONCUR hoi i=kan=nohaniama=só рi mi fight say=PL=CONCUR COND 2sg miss=PRIOR:A hato=kí mi hiko=?iní mi hiko=yama=?iní 2sg 3PL=DAT 2sg enter=INTER enter=NEG=INTER

'When your clan (lit. your half or your sister) or your family fight with your in-laws (those who are associated with your relatives, lit. those who are possessed by your relatives) or the family of another clan, the young ones, if they argue and you are not directly involved (lit. you miss it), do you enter (into the fight) or do you not enter (into the fight)?'

YOCA DURÁN

(302) $niana=kan=(?)\acute{a}i=ka$ $ha-t\acute{o}$ $his=(y)\acute{a}ma=k\acute{i}=a$

fight=PL=NMLZ:IPV=REL 3-ACC:PL look=NEG=DEC:NONP=1SG

'When they were fighting I never look at them.'

MIGUEL CHÁVEZ

(303) $his=(y)\acute{a}ma=a\acute{a}$

see=NEG=INTER:S

'You don't look?'

(304) haska yáma ní mí şatɨ=bo=yá

similar NEG INTER 2SG:GEN half=PL=COM

hoi=ni=na

argue=NMLZ:REMP=EPEN

'Similarly, you have never fought with your one of your sisters (lit. halves)?'

YOCA DURÁN

(305) yáma so í-bi sáti=bo hói ik=í=na

NEG DEC 1SG-RFLX half=PL fight AUX=CONCUR:S=EPEN

'I myself never fought with my sister (lit. half).'

(306) hátsi so náa no?ó bakí=na=bo

then DEC DEM1 1SG:GEN boy=POSS=ASSOC

'So this is what the son of my son is like.'

(307) no?ó bakí=na sobo witsa hatótikí

1sg:gen child=POSS house other others $ka = y \acute{a} ma = k \acute{i} = a$ i=kan=ikiá i-a-rí toa be=PL=REP know=NEG=DEC:NONP=1SG 1SG-EPEN-too DEM2 iwáti yoni=yá toka i=yáma=kí=aYoni=COM be=NEG=DEC:NONP=1SG gra mo do so į =? $\acute{a}i=na$ say 1s_G =NMLZ:IPV=EPEN

'They say that the son of my son fights in another house, but I know nothing about that, I never argued like this with grandmother (my sister) Yoni I say (to myself).'

- (308) ka2i=yáma=ki=aknow=NEG=DEC:NONP=1SG
 'I don't know anything.'
- (309) háska náa no?ó ha?í=bo yoa=yáma=kí=a
 similarly DEM1 1SG:GEN daughter=PL tell=NEG=DEC:NONP=1SG
 'Similarly I tell my daughters.'
- (310) haska no?ó ha?i=bo=kí waſiko=yáma=kí=a
 similarly 1sG:GEN girl=PL=DAT be_cheap=NEG=DEC:NONP=1sG
 'Similarly I cannot be cheap with my daughters.'
- (311) ha-2-ipa=' $ak=(?)\acute{a}=ka$ $ha-t\acute{o}=kiri$ raa ... 3-EPEN-father kill=NMLZ:P=REL 3-PL=DAT=DIR send

'When her father kills something I always send it to them.'

(312)
$$hat\acute{o}$$
 $rabiti=ba='$ $ak=(?)\acute{a}=ka$ $i=kir\acute{i}$

3PL:GEN friend=PL=ERG kill=NMLZ:P=REL 1SG=DIR

 $raa=k\acute{a}(n)=ki$

send=PL=DEC:NONP

'And when her friends (family) kills something they also send it to me.'

(313) háska náa no?ó ɨba=rí

similar DEM1 1SG:GEN nephew=too

'And similarly my nephew as well.'

MIGUEL CHÁVEZ

(314) háska náa mi sobo wítsa fifó=?i

similarly DEM1 2SG house other pass_by=CONCUR:S

 $ka=?\acute{a}=ka$ $h\acute{o}i$ $i=k\acute{a}(n)=no$ $ha-to=k\acute{i}$

go=NMLZ:P=REL fight AUX=PL=CONCUR 3PL-EPEN=DAT

hiko i=yáma=?aí

enter be=NEG=INTER:2

'Similarly when you go to another house to visit, when they fight do you get involved (lit. enter) or not.'

YOCA DURÁN

(315) yáma ha naa=rí hói i=kan=(?)ái ha-tó

NEG 3 DEM1=too fight AUX=PL=REP 3-PL:ACC

his=(y)áma=kí=a sobo witsa=ro?a

see=NEG=DEC:NONP=1SG house other=LIMIT

i=kan=ikiá i=ka(n)=ki

AUX=PL=REP be=PL=DEC:NONP

'I do not look when they fight, they argue with others; it is said and it is said.'

(316) ha-tó nika=yama=kí=a tana i-mi

3-PL:ACC listen=NEG=DEC:NONP=1SG distance 1SG-RFLX

so i-a ha-to kasohó i=mi so i-a

DEC 1SG-ACC 3-ACC:PL behind 1SG-RFLX DEC 1SG-EPEN

'I do not listen to them I am so far away, I myself am behind all of them.'

MIGUEL CHÁVEZ

(317) iwati Yoka no fina bino=kás=ki ni?i

gra mo Yoca 1PL forget=VOL=DEC:P jungle

şɨatí i=kan=(?)ai=ka iki yama pi sɨatí=no

medicine say=PL=NMLZ:IPV=REL sickness NEG COND medicine=SPAT

hawi iki=ki o tfifo=ki hawi şia=?ai

what sick=CONCUR:A or have_diarrhea=CONCUR:A what drink=INTER:2

i=kan=ní iwati yoka

say=PL=INTER:REMP gra mo Yoca

'Grand mother Yoca, we wanted to forget ... what they call jungle medicine ... to have no sickness by medicine (what medicine can one take) what when one is sick what when one has diarrhea do they call what you drink grand mother Yoca?'

YOCA DURÁN

(318) tʃifopá=na tsi so kakatao hini
diarrhea=POSS P5 DEC cat's_claw water
'For diarrhea one can use the juice of cat's claw.'

MIGUEL CHÁVEZ

(319) kakatao hini
cat's_claw water
'Juice of cat's claw.'

YOCA DURÁN

(320) kakatáo hɨnɨ hátsi nifi_raosó hɨnɨ
cat's_claw liquid then vine_white water

'The cat's claw liquid (Lin. Uncaria guianensis) and then the liquid of the white vine (Lin. Arrabidaea platyphylla).'

(321) ti i i pi so tfi f op a = na QUANT ANX DEC diarrhea = POSS

MIGUEL CHÁVEZ

^{&#}x27;These things are for diarrhea.'

DEM2 P5 boil-pass=inter:nonp

'And that is what is boiled?'

YOCA DURÁN

(323) háma tsi so tóa

but P5 DEC DEM2

'No that's not right.'

(324) $\int iri = y \acute{a} ma = ki$

boil=NEG=DEC:NONP

'One doesn't boil it.'

MIGUEL CHÁVEZ

(325) $i=y\acute{a}ma=?in\acute{i}$

do=NEG=INTER:NONP

'One doesn't do that (boil)?'

YOCA DURÁN

(326) ha=ro?á makawatiapi hɨnɨ

3=LIMIT ayahuasca water

'That's just ayahuasca juice.'

(327) tóa tsi şo kɨis-i=ʔái=na

DEM2 P5 DEC cut-ITR=NMLZ:IPV=EPEN

'That one (the ayahuasca) is cut.'

MIGUEL CHÁVEZ

cut-tr=prior:a p5 dem2 cup=spat rep

ka=?ini tóa tsi a(k)=ka(n)=?ini $m\acute{a}tsi=kato$

go=inter:nonp dem2 p5 drink=pl=inter:nonp cold=rel

'After cutting it (the ayahuasca) does it go in a cup and that one just drinks it cold?'

YOCA DURÁN

(329)
$$wis-a=ta=s\acute{o}$$
 tsi $a(k)=k\acute{a}(n)=ki$ toa

shave-TR=GO&DO=PRIOR:A P5 drink=PL=DEC:NONP DEM2

makakatiápi hɨnɨ

ayahuasca water

'After it is shaven they drink / one drinks that, the ayahuasca juice.'

MIGUEL CHÁVEZ

DEM2 P5 INTER diarrhea=POSS

'Does that work for diarrhea?'

YOCA DURÁN

(331) pokó=na tsi so tóa

stomach=POSS P5 DEC DEM2

'That is for the stomach.'

MIGUEL CHÁVEZ

stomach=POSS P5 INTER DEM2=then

'That is for the stomach then?'

similarly medicine NEG =CONCUR medicine COND

no $h\acute{a}skapi=m\acute{a}=no$ $a(k)=k\acute{a}n=(?)a\acute{i}$

1PL similar=NEG=CONCUR do=PL=INTER:2

 $wis-a=s\acute{o}=na$ o $kiis-a=s\acute{o}=na$

shave-TR=PRIOR:A=EPEN or cut-TR=PRIOR:A=EPEN

'Similarly when there is no medicine and if there is medicine if the things are the same and the medicine does nothing, do you shave or cut before taking something?'

YOCA DURÁN

(334) haa

yes

'yes'

MIGUEL CHÁVEZ

(335) háskapi ní toa

similar INTER DEM2

'Is that one similar?'

YOCA DURÁN

3-EPEN-father have diarrhea=CONCUR 1PL:GEN Bina=ERG

ama=yami(t)=ki maipáya

give=DISTP=DEC:P melipona_bee

'When her father had diarrhea our Bina gave him (honey from) the melipona

bee.'

melipona_bee drink? 3 give=DISTP=DEC:P

'He gave him the melipona bee drink.'

MIGUEL CHÁVEZ

(338) haska ni toa maipayarí

similar INTER DEM2 melipona bee

'Is melipona bee honey similarly good?'

YOCA DURÁN

(339) háska tsi so toa maipáya

similarly P5 DEC DEM2 melipona_bee

'The melipona bee honey is similary (good).'

MIGUEL CHÁVEZ

(340) haʔarí toa yono=kan=(ʔ)aí niʔitʃa=ˈ=ka

still DEM2 work=PL=INTER:NONP:2 jungle=SPAT=REL

siatí siri

medicine old

'Do you still use the old medicine of the jungle?'

YOCA DURÁN

(341) haa

yes

'yes'

MIGUEL CHÁVEZ

(342) náa niáma ma wisí wisí ma ko=?iní

DEM1 far 2PL each 2PL wander=INTER:NONP

tʃaʔíta Tɨani=yá mi-ʔ-ípa yamabo=yá

uncle Teani=COM 2-EPEN-father deceased=COM

ma raká~raká=honá=pao=ní=na

2PL live=COMING:ITR=HAB=REMP=EPEN

'This ... each one of you wandered far with uncle Teani (Rabi siri) your now deceased father where you used to live...'

(343) tóa nɨáma ma ka=ʔá=ka oṣa=ka=ʔaí naa

DEM2 far 2PL go=NMLZ:P=REL sleep=PL=INTER:2 DEM1

 $k\dot{a}=?i$ i=ni

go=CONCUR:S AUX=INTER:REMP

'When you went far did you sleep as he went?'

YOCA DURÁN

(344) haa

yes

'yes'

(345) nɨáma pɨ so sobo ka=ʔá =kato

far ANX DEC house go=NMLZ:P=REL

'The house where we went was sure far.'

(346) toa=á tsi no ho=ní=kɨ nɨpaṣ=ka

DEM2=SPAT P5 1PL come=REMP=DEC:P middle=REL

sobo=?á=na

house =S=EPEN

'From there we arrived at the house that was in the middle.'

(347) wai a(k)=ka(n)=ni no? \acute{o} naa= $ba=\acute{o}$

farm plot make=PL=NMLZ:REMP 1SG:GEN DEM1=PL=ERG

a(k)ní tsi pɨ so náa

do=NMLZ:REMP P5 ANX DEC DEM1

'The ones who did the chaco ... this is what my children did.'

MIGUEL CHÁVEZ

(348) hátsi tsi ni náa

then P5 INTER DEM1

'These ones?'

YOCA DURÁN

- (349) haa ani=' ta2i='=ka nawi no tsaya=ni=ki
 - yes river=SPAT beside='=REL set_aside 1PL see=REMP=DEC:P

'Yes, we visited the set-aside (farmplot) by the river.'

- (350) no his=itá=kɨ papa ha-ʔ-ɨpa ha
 - 1PL see=RECP=DEC:P father 3-EPEN-father 3

bi=ka(n)=ni=ki

bring=PL=REMP=DEC:P

'We went to see father, and they brought his father.'

MIGUEL CHÁVEZ

- (351) hátsi ní náa
 - then INTER DEM1

'Is it these ones?'

YOCA DURÁN

- (352) hátsi so náa
 - then DEC DEM1

'It's these ones.'

(353) oá parí tsi so nobá sobo=ti ta?i

over there first P5 DEC 1PL:GEN house=too beside

'Over there beside where our first house was.'

(354) toa=kirí tsi so naa naa nobá

DEM2=DIR P5 DEC DEM1 DEM1 1PL:GEN

taſi=na ha mai=kato boka yamaba= mai

Tashi=POSS 3 earth=REL Boca deceased=GEN earth

'In that direction this is where the cementary of my (son) Tashi is (lit. that which is earth), (which is also) the cementary of the deceased Boca.'

(355) $toa=na=?\acute{a}$ tsi no $ho=n\acute{i}=k\acute{i}$

DEM2=EPEN=S P5 1PL come=REMP=DEC:P

'From there we came here (to Siete Almendros).'

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