A GRAMMAR OF AKUNTSÚ, A TUPÍAN LANGUAGE

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This work is dedicated to Akuntsú people

*babaoro oanoa pi jã ete!*

Thank you!
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ABSTRACT

This dissertation presents a description of the main aspects of Akuntsú grammar, as spoken by five monolingual people who live in the Southeast region of Rondônia state, Brazil. Akuntsú people have until recently been an isolated indigenous group, now the only surviving survivors of genocide. Akuntsú is a critically endangered language.

This study presents an analysis of the phonology and morphosyntax of the language. It takes a functional approach to describing the structures of the language and the function that each grammatical component serves. This study is based on fieldwork research carried out since 2004, where the analyses were grounded on several texts. This dissertation introduces aspects of the Akuntsú people and culture (chapter 1); in chapter 2, I describe Akuntsú phonology and relevant properties of morphophonology; grammatical categories and word-structures are introduced in chapter 3; nouns, verbs, adjectives and adverbs, ideophones, particles and interjections are discussed in chapter 4, 5, 6 and 7 respectively; and simple clause types in chapter 8.

Typologically, Akuntsú has been revealed interesting phonological and morphological characteristics. The stop consonants in Akuntsú have different surface representations, such as a voiceless-voiced consonant cluster, which alternates intervocally and under stress assignment. Another unique feature relates to its morphology. The morpheme used in the related Makuráp, Tuparí and Mekéns languages (members of the Tuparían subfamily) identified as a genitive classifier to signal possession of animals is, in Akuntsú, replaced by kinship terms, as though possessed animals were now treated as sons or daughters. It shows that the drastic social changes
they have suffered in being reduced to five members is indeed reflected in a particular linguistic construction. Aside from these linguistic traits, languages spoken in Rondônia state in Brazil, such as Akuntsú, have an important value, both by their linguistic diversity and by their location in a region which is claimed to be the main area of the Tupían homeland. By describing Akuntsú, it is possible to further contribute to linguistic science, especially to the study of historical linguistics in the area.

Enhancing the accessibility of information on this language will be valuable for scholars with various interests, but is especially of value to those interested in grammatical properties of languages generally, and in what Akuntsú grammar specifically can contribute to the understanding of typology and our knowledge of the extent of what is possible in human languages.
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CHAPTER 1
INTRODUCTION

1.1 Background information

Akuntsú is a Tupían language highly endangered both because of its small number of speakers — five monolingual speakers — and because the speakers cannot pass their language on to another generation, mainly due to kinship taboos and the refusal to allow men from other groups to marry the youngest speaker. The youngest survivor is a woman in her 30s, with four other Akuntsú over forty, with no children and no prospects for increasing their group. In short, assuming these circumstances do not change in the future, this language is doomed to disappear.

There are currently seventy references\(^1\) of Isolated Indigenous group, those not in contact with mainstream Brazilian society and whose languages are not known and have not yet been studied, and 15 references of Indians of recent contact (Vaz 2013)\(^2\), of which Akuntsú is one.

1.1.1 History of contact and the current situation

In 1984, the men who worked for the Yvipitã farm (a farm currently located near

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\(^1\) For the National Indian Foundation, the term reference is related to the information on Indigenous tribes that are officially registered by the Coordination of Isolated Indians and Indian of recent contact.

\(^2\) Vaz, Antenor, 2013. Povos Indígenas Isolados e de Recente Contato no Brasil – Políticas, direitos e problemáticas.
Akuntsú territory) communicated to the National Indian Foundation (FUNAI) their first contact with Indians in the nearby rainforest: Indians who had thrown arrows in their direction, for which reason the men asked for FUNAI's protection to keep doing their work safely. However, news of Isolated Indians was not a new phenomenon; in 1976, Nambiquara Indians had already confirmed the presence of uncontacted Indians in the left bank of Corumbiara River³. In 1985, Marcelo dos Santos started the first expedition to search for clues of Indians in the location previously mentioned by the men who worked for the Yvipitã farm. By the time of the expedition, Marcelo and his team had encountered villages and gardens destroyed by farm tractors in Yvipitã's neighbor farm, who kept their men armed with guns to avoid the presence of Indians⁴. Soon after, FUNAI requested an official intervention in the farm area by the Ministry of Justice in Brazil, due to clues of Indians’ presence. However, in April 1986, the government enacted an official intervention of the area, but in December 1986 the Government canceled the intervention and gave a preliminary injunction in favor of the farmers. However, Marcelo dos Santos and his team, including Altair Algayer, kept the investigation secret in order to confirm the presence of Isolated Indians in this area—the investigation was conducted with no support from the Brazilian Government. In 1995, in another expedition to the same area, and now working together with journalist for O Estado de São Paulo and Indigenist cinematographer, Vincent Carelli, they finally made contact with the first Indigenous group who had lived in that area, the Kanoê group, a group with only four survivors at that time⁵. By that time, the farmers had

³ Leão, Maria Auxiliadora Cruz Sá. 1995. Parecer No 149 DID/DAF.

⁴ Santos, Marcelo. 1985. Relatório Referente a Levantamento Efetuado na Área “Vale do Corumbiara”, FUNAI.

⁵ Algayer, Altair and Marcelo dos Santos.1995. Relatório No VI - Índios Isolados so Vale do Corumbiara/O Contatto
destroyed most of the rainforest. A small part of the report describing the first contact with
the Kanoê group is reproduced below:

...Nossa equipe multidiciplinar andou quatro dias pela mata e três na Toyota. Apesar de
curta, sem dúvida essa foi a mais importante expedição realizada pela F.C.Guaporé neste
ano de 1995, pois no dia 03/09/95 fizemos contato com o grupo indígena que
procurávamos. Encontramos dois índios na maloca, um homem de aproximadamente 20
anos e uma mulher de 25... Foram muito corajosos em nos convidar a entrar na aldeia.
Concluímos que mais pessoas residiam na maloca, pois ouvimos barulho na mata...os dois
índios falavam apenas sua própria língua...

[...Our multidisciplinary team walked for four days through the forest and three days by car
(Toyota's car). Eventhough it was a short expedition, it was, without doubt, the most
important expedition realized by the Guaporé team in this current year of 1995, because on
September 3rd of 1995 we made contact with the Indian group that we were looking for.
We found two Indians inside their hut, a man approximately 20 years old and a woman of
25... They were very courageous by inviting us to come in. We concluded that more people
lived in the hut, since we heard noises coming from the forest... the two Indians spoke only
their language... ] (Algayer and Santos' report - September, 1995 - original report written in
Brazilian Portuguese).

The Kanoê group (with four monolingual Kanoê speakers by the time of the contact
— now reduced to Txiramanty, Purá [Txiramanty's brother] and Buquá [Txiramanty's son])6
helped FUNAI contact another group located in the same region (the Akuntsú people), where
both tribes are survivors of the genocide committed by the colonizers and settlers of the
southeastern region of Rondônia during the last three decades of the 20th century7. This
second group, with seven survivors, which the Kanoê called akutsu — as the Kanoê have
referred to the Tupían groups of the Omerê since the beginning of the contact — was
contacted one month after FUNAI had contacted the Kanoê of the Omerê. The name is a

6 There are more Kanoê who lives close to the tributaries of Guaporé River; however, the Kanoê of the Omerê
are the only ones who are still monolingual speakers. In 2004, there were only three Kanoê of the Guaporé who
"maintain the language alive in their memories" (...que mantêm a língua viva na memória.) (Bacelar 2004:33).

7 Valadão, Virgínia. 1996. Os índios ilhados do igarapé Omerê. In: Carlos Alberto Ricardo (org.), Povos
Kwazá word, *akucũ*, meaning "outsider Indians" (Bacelar 2004:298). By the time the Akuntsú were contacted by FUNAI, there were a total of only seven people out of a larger population in the past (as related by the Akuntsú). In 1999, one of the children passed away, victim of a tree that fell down on their huts where they were sleeping during a terrible day of storms; these storms also caused a serious injury to Konibú's leg, who had to be taken out of the rainforest for the first time in order to have an emergency surgery. The accident affected his leg movements, where a platinum disk had to be inserted. In 2009, the oldest woman in her 80s, called Ururu, passed away due to a heavy cold. Colds are very serious diseases for them; they have only been building resistance to this kind of illness during the years of contact.

Currently, Akuntsú is spoken by only five monolingual speakers (the entire population). There are three women, two men, and no children. Among the women, there are Pugapía (or Aramira) who is in her 60s, and her two daughters, Aíga (also named as Txařú) or Nanoj in her 40s and Enotéj (or Kani) in her 30s. Pupák and Konibú (or Kwatin atʃjo) are then the only male survivors. Konibú is the oldest Akuntsú in his 80s and Pupák is in his 40s. They are all part of the same consanguineal family, in which Pugapía is Pupák’s sister and Konibú is uncle of both Pugapía and Pupák. After the massacre, Konibú explains that he had to take Pugapía as his wife, because he didn’t have a woman anymore, and even though they knew it would be taboo (in their patrilineal kinship system), they both had no choice; especially Pugapía, who urgently needed a man to hunt for her and her daughters.

Akuntsú and Kanoê people have been sharing the same territorial area for a while. The Akuntsú relate that they have known the Kanoê tribe since the time they moved to the Omerê River; according to Konibú, one of the most important things about this meeting was
to know Txiramanty, whose shamanic power was/is very precious for the Akuntsú people. The only thing that both tribes have in common is that fact that they have shared the same territorial area for years. Their language and culture are totally unrelated and their social relations are nowadays pacific, though they had had difficult moments in the past. According to previous reports, after the contact, the staff have reported instances of situations where the Kanoê people want to control the Akuntsú people, especially the Kanoê woman, Waymoró. However, despite their differences, there were moments where the Kanoê and Akuntsú people have been in harmony, and there were even promises of future inter-marriage; unfortunately, all the attempts were always frustrated. All these differences resulted in Waymoró's death; in 1997 the Akuntsú people killed her. After that, their already unstable friendship was totally broken.

Txiramanty (Kanoê woman and shaman of the group) got pregnant (her second pregnancy — her first son, Operá, died in 2003). Her son, Buquá, is also Konibú's son (according to Konibú). The boy has been learning Portuguese and Akuntsú, though his primary language is Kanoê. Txiramanty raised him alone in her village, and they had limited contact with the Akuntsú people during that time. Buquá's Akuntsú language knowledge has been improving over approximately the last four years; nowadays he has a good level of understanding in practical situations and he has been developing his level of speech.

1.1.2 Current and traditional geographic location

Rondônia is a state located in the north part of Brazil, surrounded by the Alto Madeira river basin (South Amazonas State) to the north, by Mato Grosso state to the east, and Bolivian lowlands to the south and west (see map 1.1 below).
Map 1.1 Map of states and rivers located in the north side of Brazil. RO is the abbreviation of Rondônia (http://www2.transportes.gov.br/bit/04-hidro/3-rios-terminais/rios/00-Figuras/Iguapore.htm, 10-2012).

Rondônia state is considered the region with the highest concentration of Tupían linguistic subfamilies and with great cultural diversity, probably the most diverse region within South America. The languages of the Tupían family have a very peculiar geographic distribution (Rodrigues 2007a): five of these linguistic subfamilies — Puruborá, Ramaráma, Mondé, Tuparí and Arikém — are concentrated in the state of Rondônia. For the Tupí-Guaraní family, only three Tupí-Guaraní languages are found in this state. Besides the
presence of Tupían language and society in Rondônia and adjacent areas, there are also isolate languages, those which are not affiliated with any other known language; and there are isolated societies, those not in contact with the Brazilian society who, due to their own decisions, remain uncontacted until today. Therefore, all these characteristics make the area of Rondônia and its adjacent regions in need of much future research to shed light on the prehistory of early Tupían groups.

Regarding to the river location, the largest concentration of the Tupían linguistic subfamilies is close to the tributaries of the Guaporé-Madeira and Aripuanã Rivers (Rodrigues 2007a). Only the Arikém subfamily is situated outside of this area, on the tributaries of the Madeira River basin. Due to the high concentration of Tupían speakers in that area, Rodrigues (1958) and Urban (1998 [1992]) proposed that somewhere between Guaporé-Madeira and Aripuanã River would be the homeland of early Tupían speakers; and according to linguistic (Rodrigues 1958; Urban 1998 [1992]) and archaeological (Noelli 1996, 1998) studies, their dispersion may have begun (about) 5000 years BP.

As described earlier, the Akuntsú had been attempting to escape the intense deforestation of their ancestral lands at the hands of farmers and colonizers. They were until recently an isolated indigenous group, now the only survivors of a recent genocidal massacre. The few surviving Akuntsú took refuge near the Omerê River, where they were contacted. Akuntsú have been living on one side of the bank of the Omerê River, while the Kanoê people have been living on the other side of the bank. In the area between these two groups, in an effort to help to protect the few survivors from outside influences, FUNAI built a house on Akuntsú lands, and prohibited unauthorized people from going there without official
permission. Map 1.2 below indicates the current location of Akuntsú people, and the other green areas represent the other Indigenous areas located in Rondônia state.

Map 1.2 Map of the state of Rondônia, Brazil, showing the Indigenous area found in this state. Akuntsú area is indicated by the square located in the lower part of the map (courtesy of FUNAI, CGIIRC, Frente de Contato Etno-Ambiental Guaporé).

Akuntsú tell stories about their origin, where they came from and what happened to them before finally taking refuge in the highlands of the Omerê River (their actual location). It is quite tricky to connect the descriptions given by the Akuntsú with current data of the hydrography of the region, mostly because the directions that the Indians refer to are always connected to the environment. For example, they say that to get to the river *ikitfaro* one must head northwest of the village, and walk until one finds many Brazil nut trees.

In 1996, during the first meeting with Passaká (Mekéns ethnicity), Konibú explained how he and his family survived outsider attacks, and how their tribe was killed and some of
the bodies have disappeared. Passaká translated that it was in the region of ikitfaro that "Konibú began to hear the overthrow" and then "they moved to their other village near by ikitaren river". Based on Konibú's later stories, it is possible to infer that ikitaren and ikitfaro are confluent; the river mouth of the ikitfaro flows into the Corumbiara River (called betia by them). Besides these two rivers, the Akuntsú give the direction of their traditional location by describing, river by river, up to the ikitaren and ikitfaro, which has allowed the re-creation of their journey from their traditional location up to their current location in the Omerê River. The most important rivers mentioned by them are moë, kawra ki, k'ato ki, k'itap ki, tfarap ki, and k'ai ki. Based on the tentative reconstruction, Algayer and I have mapped their possible traditional location.

According to Konibú’s oral narratives, Akuntsú people lived for a long time in the area on the banks of ikitaren and ikitfaro. Between these two rivers, they built longhouses and they had wide gardens, with many crops. The plantation was vast, with plenty of maize, banana, peanuts, manioc, papaya, and sweet potatoes. However, it all ended after the attacks—they lost most of the seeds, and after that weren't able to cultivate enough crops, as they did before. There are indications that the attacks came first from the ikitfaro River, which marked the beginning of their expansion close to the shores of the Corumbiara River, and finally to the shores of Omerê River (actual location of the group). He states that it was when they lived near those rivers that they were shot (each man has scars from gunshots).

The Akuntsú report that there were a great number of white people all over the land, and that

8 These stories are also confirmed in other recordings in which I talk to them about the rivers and their tributaries; this conversation was also recorded by Vicent Carelli.

9 According to oral histories from Mr. Pedro Kampé, member of an ethnic group linguistically related to Akuntsú, the river ikitaren is also the name they call the head of the Tanaru river. Thus the river ikitaren mentioned by the Akuntsú is probably the same Tanaru river referred to by other related tribes.
they could also see that near the shores of the Corumbiara the white people had built an airplane landing strip.

Once they took refuge on the Omerê tributaries (in the highlands), they began to live with Kanoê people. About the meeting with the Kanoê, Konibú always mentions the strength of the woman shaman who has great power. He also talks about the youngest Akuntsú birth, Enotéj, who was born next to the headwaters of the ikîpiton (tributary of the Omerê).

A question worth answering is this: how does the story of the Akuntsú and their traditional territory fit into the general findings about the original location of Tuparían Indians? Based on the facts described above, it is possible to attempt to draw the trajectory of the Akuntsú, and propose that they traditionally came from the perimeter situated near the lower headwaters of the river Tanaru up to the Corumbiara River. Thus, the region near the lower headwaters of the river Tanaru, up to the riverbank of Corumbiara, are the known territories and exploited areas of the Akuntsú in the past.

The homeland of the early Tuparíán speakers is assumed to be the central area of the Pimenta Bueno River (Miller 2009). According to archaeological indications, the Proto-Tuparí began to spread southward from their homeland by approximately 2900 years ago, while the Proto-Tupí-Guaraní began their dispersion early on, about 2000 years BP. Two of the Tuparíán groups were earlier described near the Pimenta Bueno River, namely the Kepikiriwát and Tuparí—the literature reports that they were there between 1934 and 1948. Makuráp, Wayoró (Ajurú) and Mekéns were located a little further away from this region. Historical data show that during the first cycle of rubber extraction, the Makuráp were concentrated between the headwaters of Rio Branco River and on both banks of the high
level of the Colorado River. The Wayoró were also along the upper reaches of the Colorado River, closer to its headwaters. As for the Mekéns, historical data of their location report that they traditionally lived near the Guaporé River and its tributaries.

1.1.3 Material culture

In their village, there are two huts; Konibu and the three women live in one of these huts, and in the other one lived Ururu (who passed away) and her son Pupá. Now, Pupá lives alone in his hut; his sister, Pugapía, helps him with cooking and with other activities designated as pertaining to women, such as preparing chicha (fermented drink) and gathering.

Their huts are built of wood poles and covered with paxiúba leaves. The men’s main activity is hunting and fishing. They have three types of arrow points made of wood, where each one is used to kill different types of animals (see one of the arrow types and other illustrations related to Akuntsú material culture in Appendix C). Bone points are not common. The other extreme of the arrow is ornamented with feathers tied with black or red lines made of tucum fiber (nowadays they like to use cotton strings). Nowadays, fishing is done with lines and hooks; however, in the dry season, the women tend to prefer the practice of traditional fishing, which consists of grabbing the fishes with a piece of wood (usually done in a shallow stream) to a dry area where they kill them with their hands or machetes.

In the dry season, they are also responsible for the preparation of their planting fields. All the Akuntsú, including the women, clear and plant their fields. The field needs to be big enough to provide food for the entire year, which means that dry season is synonymous with hard and difficult work for the Akuntsú.
In their garden, they mainly cultivate manioc, potatoes, bananas, papayas, corn, peanuts and yams. The Akuntsú also like to gather grubs; they usually eat them toasted, and they also feed their pets with raw grubs. Among their other activities, there is also the manufacture of maricos (traditional baskets made with tucum fibers), the preparation of fermented drinks, and the preparation of tobacco for shamanism purposes.

Regarding their material culture, the Akuntsú make necklaces from seeds and river shells. All of them wear necklaces; the men also like to wear their necklace draped diagonally across the body. The more necklaces they wear, the more they feel protected against evil spirits. The Akuntsú people have the upper and lower lip pierced, where they wear a small wooden labret, with the exception of Aíga (Txarúj) and Pupák, who have only the lower lip pierced. In addition to their pierced lips, all them have pierced the nasal septum, where they also wear a small wooden labret through it. They also wear bracelets and anklets made of cotton. Sometimes, they hang on their bracelets bones from different animals.

Akuntsú also cultivate annatto and tobacco. As described in detail in Aragon (2008:17-18), the process of annatto preparation is usually done in the dry season, and consists of several steps before getting the right consistency to be used in their hair. Additionally, they also use genipap juice to paint their bodies. However, it has rarely been produced by the Akuntsú people; it has been only documented a few times after contact.

Shamanism has a symbolic significance in their cultures. They believe that it is through shamanism that they talk to the spirits, and ask them for protection and cures for themselves from unexpected diseases.
1.1.4 Language situation

After 1995, the Kanoê people (Indians who share the same Indigenous Area with the Akuntsú) were the ones who had more daily contact with the FUNAI members. As a consequence, FUNAI staff learned some Kanoê words. The Akuntsú, then, began to learn and use the Kanoê and Portuguese words to request some essential material needs, as soon as they realized that they could be understood in that way. However, the knowledge that both FUNAI and the Akuntsú have of Kanoê is restricted to words for some animals (pig, some species of birds and monkeys), for ‘sun,’ ‘moon’ and the verb ‘to sleep,’ ‘to see’ and ‘to hunt’ (without the use of verbal inflection or any other type of verbal morphology that is obligatory in Kanoê verbs). The Akuntsú people’s knowledge of Portuguese words is limited to: ‘manioc,’ ‘machete,’ ‘stick,’ ‘cold,’ ‘rice’ and other terms related to agricultural tools. This means that Akuntsú are not able to build any kind of sentence either in Kanoê or in Portuguese; thus communication, when it occurs, is very restricted and limited to gestures mixed with ideophones and onomatopoeias.

1.2 Genetic affiliation and grammatical overview

This section introduces a brief discussion on the genetic affiliation of Akuntsú and provides a survey of the main typological features found in this language.

1.2.1 Akuntsú in the Tuparían subfamily

The term Tupían “stock” (family) was first used by Rodrigues (1955) to refer to a linguistic family which included the Tupí-Guaraní subfamily and other smaller and lesser-known subfamilies. In 1986, Rodrigues revised the Tupían stock, including nine subfamilies:
Aweti, Mawé, Jurúna, Mundurukú, Arikém, Tupari, Mondé, Ramaráma, and Puruborá. The recently revised Tupían family is divided into two main branches: Western and Eastern (Cabral and Rodrigues 2001, Dietrich 2010a, Rodrigues and Cabral 2012), where Akuntsú belongs to the Eastern branch.

![Figure 1.1 The revised Tupian branch divided into two main branches (adapted from Aragon 2008 *apud* Cabral and Rodrigues 2001).]

With respect to the genetic classification of Akuntsú, this language is classified as a Tupían language, member of the Tuparian subfamily (Gabas 1995, 2005 and Cabral and Aragon 2004a, 2005). Besides Akuntsú, six other languages (based on the table proposed in Rodrigues and Cabral (2012)) are classified as members of the Tuperian subfamily of the Tupian family: Tupari, Makuráp, Mekés (Sakirabiat), Wajoró (Ajurú), Kepikiriwat (extinct) and Waratégaya (Amniapé, also extinct).
1.1 Tuparí, BR-Ro
1.2 †Kepkiriwát (Quepiquiriuate), BR, Ro
1.3 Makuráp (Macurap, Macurape), BR, Ro
1.4 Mekéns (Mekém, Sakurabiat, Sakyrabiat), BR-Ro
1.5 Akuntsú (Akunsú) – BR, Ro
1.6 †Waratégaya (Amniapé), BR-Ro
1.7 Wayoró (Wayurú, Ayurú, Ajurú), BR-Ro

<table>
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<th>Table 1.1</th>
<th>Tuparí subfamily, adapted from Rodrigues and Cabral (2012:497).</th>
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In a recent comparative study\(^{10}\), it was posited that, based on lexicostatistic comparison, "Akuntsú and Mekéns are closer to each other than any of the other languages, sharing a cognate rate of 79%," whereas Akuntsú shares a rate of 71% with Wayoró, a rate of 66% with Tuparí and 51% with Makuráp (Nogueira and Galucio (2011:9)).

**1.2.2 A survey of Akuntsú typological features**

Phonologically, Akuntsú has the syllable structure pattern of ((C)V(C)). Non-initial syllables must begin with a consonant. In its consonantal inventory there is the underlying form /tʃ/, but not /s/ and /h/. Among the consonants, /ŋ/ cannot occur syllable-initially, while only nasals, glottal, and unreleased stops can occur finally. There are 5 underlying oral vowels and 5 underlying nasal vowels\(^{11}\).

Morphologically, Akuntsú is an agglutinative language (although not highly), with some degree of synthesis. It is mostly a suffixing language. Akuntsú has two major open

\(^{10}\) For a comparative study of the Tuparí subfamily, see also Moore and Galucio's (1994) study.

\(^{11}\) See appendix A for a brief survey of phonological similarities and differences found among Tuparian languages.
word classes: nouns and verbs. Adjectives and adverbs are considered a small set of open word classes, and their status is subject to interpretation and requires careful attention. There are also closed word classes of quantifiers/numerals, demonstratives/deictics, particles and interjections. Nouns can bear derivational and inflectional morphology. The morphemes that code lexical information on nouns include: (i) locatives, (ii) datives, (iii) translatives, (v) instrumentals and (iv) inessives. The derivational morphology includes, but is not limited to, morphemes that signal the diminutive and augmentative. Word formation also includes compounding and reduplication. Verbs are divided into two main classes: intransitive and transitive. There are no overt copulas. Derivational verbal morphemes include, among others, valence-changing morphemes signaling: (i) antipassives, and (ii) causatives. Core arguments of the verbs are coded either by nouns or personal pronominal clitics. There is also a sub-class of auxiliary verbs and directional morphemes. Negation is either expressed by particle or/and by suffix. The negative suffix occurs both in nominal and verbal roots.

Akuntsú is predominantly head-final. Objects precede verbs. The most frequent word order is SOV. The basic clausal constituents may be described basically as [PRONOMINAL CLITICS + NOUNS, POSSESSED + NOMINAL MORPHOLOGY + OBJECT + VERBAL MORPHOLOGY + VERB + VERBAL MORPHOLOGY + AUXILIARY]. Clause combining involves coordination, subordination, and complementation. Coordination is done by the simple juxtaposition of clauses; complementation is usually in the form of nominalizations.

1.3 Previous historical literature

For historical documents on the Tuparían groups, Caspar (1957, 1958, 1975), Snethlage (1937, 1939), Levi-Strauss (1948, 1955 [2004]), Curt Nimuendajú (1925), and
Rondon and Farias (1948) provided the first information on the Tuparían subfamily, regarding their geographic, linguistic and anthropological identification.

In roughly 1934, Franz Caspar registered the location of some indigenous peoples of this area on a map, with a detailed study of the Tupará people. In 1949, Hanke gathered data from Mekéns located on a tributary of the Guaporé River. These data were analyzed in cooperation with Swadesh and Rodrigues, and it served as the basis for the first comparative study that sought to classify Mekéns (Hanke, Swadesh, and Rodrigues 1958). In 1934, Snethlange, after his trip to the Makuráp area, continued to travel on to other indigenous areas, such as the Sierra Allianza, rising to the Rio Branco. During his journey, he met with Wayoró (Ajurú) people, reporting that they were reduced to a small group who had already been absorbed into the Makuráp culture. According to Snethlange, the Wayoró language was a mixture of Makuráp with other Tupian languages. In 1913, General Cândido Rondon recorded a list of 117 words collected among the Kepkiriwat people (extinct) on the Baron Melgaço or Maquêpiaquê River. In 1927, the ethnographer João Barbosa de Faria collected another Kepkiriwat vocabulary with a larger number of words (Rondon and Faria 1948).

Lévi-Strauss (1948) was the first who mentioned the cultural similarities among the Indians in Rondônia, especially the Indians located close to the Guaporé River. He divides the Guaporé cultural complex into two parts: the Chapacura area, to the west of the Rio Branco, and the Tupían area, in the eastern part. The Guaporé region together with the Mamoré region is considered one of the most diverse linguistic regions, which includes different linguistic features not only related to Tupían languages but also to language isolates (Crevels and van der Voort 2008).
Regarding the material culture of the community located on the right bank of the Guaporé River (the earlier location of the Akuntsú people), Maldi (1991) reported that many cultural elements of these communities are similar, while others are identical. The preparation of a kind of basket called marico, baskets of various sizes from tucum-fiber, is one of the elements common among the people of this region. Other items are also similar, such as manioc cultivation, the construction of round houses, and the consumption of chicha daily or on ceremonial occasions. These characteristics led Maldi to call this area "the Marico Complex," including not only speakers of the Tupían languages there, but also speakers of isolated languages as well.

However, regarding Akuntsú itself, the first information officially appeared only in 1995, when the first contact with the Omerê groups was done by FUNAI12.

1.4 Methodology and presentation

This section provides notes on the monolingual situation, a brief discussion on the methodology employed in the fieldwork, as well as discussion of both documentation and description, focused on: (a) the main points related to the best-practices recommendations for language documentation; (b) the different approaches related to language documentation and language description, showing the methodologies that are more effective in the Akuntsú case, and explaining the reasons that some of them can be applied in a monolingual setting and others not. The discussion of the methodology applied in the fieldwork is based on previous

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The last subsection provides a presentation of this study and its goals.

1.4.1 Notes on fieldwork with monolinguals

According to the best-practice recommendations for documenting languages, there are some central topics that must be focused on when one is dealing with language documentation (Himmelmann (2006:15). As these topics are relevant to the case of documenting Akuntsú (some more than others), I will detail and present each point based on both Himmelmann's point of view and other authors' views, as follows:

(1) **Focus on primary data:** primary data is the main subject of documentary linguistics; it means a "corpus of recordings of observable linguistic behavior and metalinguistic knowledge" (Himmelmann 2006:10). According to Lehman (2001:5), "the primary purpose of language documentation is to represent the language for those who do not have direct access to the language itself," and the first step to achieve it is through the collection of primary data. One issue surrounding primary data is whether “primary data” means a corpus of natural discourse (only), or to whether it should also consist of elicited data. For Himmelmman (2012:202) "elicitation (broadly understood) is necessarily a part of any documentation project (...)", and, as such, there is no reason to not use elicitation corpora as part of primary data. Note that elicitation is extremely hard to do in a monolingual setting, and depending on the subject that the linguist wants to investigate, I would say that elicitation is not possible at all. However, note that for some morphosyntactic topics, elicitation is not the most effective approach for gathering quality data among monolingual speakers: in most
cases, the speakers will not agree with possible answers or will not understand some questions, mainly because they are not experiencing the relevant situation at the moment of the elicitation.

(2) **EXPLICIT CONCERN FOR ACCOUNTABILITY**: primary data needs to be clearly identified with metadata (details of the recording context), to make further analysis possible. The techniques of metadata have been described in much literature including Good (2002), Aristar-Dry (2004), Nathan and Austin (2004), among others. Nathan and Austin (2004) discuss techniques for aligning metadata in language documentation materials, especially in digital audio and video. They explain that "the collection of recordings of authentic linguistic events" needs to be accompanied by "thick metadata" which includes the creation of "transcriptions, annotations, and other commentary and analysis" in order to maintain the accessibility and the use of digital electronic archives (Nathan and Austin 2004:184). Woodbury (2010:13) explains that "material needs to be transparent, preservable, ethical and portable," which means that for the purpose of transparency, primary data needs to be accompanied by careful annotation.

In a monolingual context, documentation covers recording primary data in a way that involves not only the primary data collection, but also a careful metadata description, which needs to be done immediately after the recording of the speech event in order to accurately describe the details, including gestures used, position of speaker, etc. In addition, the transcriptions also need to be followed by a careful linguistic analysis, which helps the researcher to come up with the best gloss. It is important to do transcriptions at the end of the

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13 The idea of ‘thick’ descriptions appears in Clifford Geertz (1973) when he talks about 'thick' versus 'thin' descriptions of cultures.
day while things are fresh in the mind. Moreover, it will be extremely relevant to decide on what still needs to be documented in terms of linguistic structure and primary data while one is undertaking the fieldwork.

(3) **Concern for Long-term Storage and Preservation of Primary Data:** primary data needs to be archived to ensure the longevity of the material. Nowadays, it is possible to identify a large number of archives concerned with maintaining as well as possible the longevity of data.

(4) **Work in Interdisciplinary Teams:** it is important to have multidisciplinary researchers working on language documentation. In this way, it is possible to access different perspectives from different disciplines, which may include (but not limited to) anthropology, biology and archaeology. The different backgrounds of different researchers can be a good strategy for linguists to improve the outcomes of their linguistic documentation projects. The Akuntsú documentation project has been organized with interdisciplinary contributions, which it seeks to develop more deeply in the future.

(5) **Close Cooperation with and Direct Involvement of the Speech Community:** it is important to have the involvement of the community. This involvement may take two forms: (a) helping the linguist with the language documentation project (as co-researcher), or (b) being responsible for documenting his/her own culture and language—in this case the linguist is encouraged to train the speakers to produce quality materials. In a monolinguall setting with only five people, it is extremely necessary to have their cooperation to document their language, and their direct involvement is considered more than relevant. However, it is not precisely direct involvement in the sense cited above, i.e. being responsible for
documenting their own language. The direct involvement takes the form of their cooperation and awareness that teaching someone else their language and culture is worth doing for the preservation of their culture and language — in the sense that their language and culture will be known and documented.

Another relevant topic to highlight is the discussion of whether or not language documentation needs to take place in connection with language description. According to some scholars, documentary linguistics is primarily concerned with recording as much audio and video as possible from the speakers of the target language and adequately archiving data for future analysis, leaving analyses to be carried out later on. Other scholars, on the other hand, suggest that documentary linguists need to be concerned with gathering primary data, translating them and providing an adequate linguistic analysis of the structures of the language. The fact is that, without a doubt, "the dividing line between documentation and description is not sharp" (Lehmann 2001:8). Himmelmann (2012) provides the following definition for language documentation and language description: (a) language documentation is concerned with "primary data and their interrelationships, including issues such as the best ways for capturing and archiving raw data, transcription, native speaker translation, etc.," and (b) language description deals "with the question of how valid descriptive generalizations can be derived from a set of primary data" (Himmelmann 2012:199). Even though documentary and descriptive linguistics are defined differently, Himmelmann emphasizes that this separation is mainly theoretical, and that in practice it is hard to split them, especially because documentation and description are connected in such a way that they complement each other. It is even harder to separate language documentation from description when language documentation involves monolingual speakers.
Another point of discussion raised in the field of documentary linguistics regards the quality and quantity of the data and metadata, i.e., the documentary corpus. The question then raised is: when should language documentation be considered complete? Is it complete when one has enough quality materials, or when one has collected a sufficient quantity of corpus materials? According to Austin (2006), the materials behind an "adequate documentation" should contain: all the basic phonology, morphology, and syntactic construction, a lexicon that covers all basic vocabulary and different texts in a variety range of genres and registers; or document a language until nothing new is coming up. From the point of view of a monolingual situation, in order to have a good quality of documented materials that contain instances of different structural aspects of the language and a variety of cultural manifestations, the researcher necessarily needs to wait for the occurrence of spontaneous data which expresses not only the linguistic structure of the language, but narratives of their beliefs and life reality. It is essential to spend as much time as possible among the speakers, participating in their main activities, because in that way, spontaneous data is much likely to occur than in hours of elicitation (when it is possible). For example, the best change in documenting Akuntsú was in 2006 when they began to invite me to go to the jungle with them, to help the women to grab food from an old garden far away from their villages, and to look for special seasonal fruits in the jungle. In that way, the morphology and syntax of the language started to come up more frequently than before, i.e., I began to learn and record utterances on specific topics from natural events. I have finally started to get a good grasp on the subject of recordings, and to get more familiar with both language and culture.
In terms of quantity of data in a monolingual situation, it is extremely easy to gather natural narratives and conversations (high quantity of primary data). However, the subject of the recordings needs to be monitored by the researcher, which is not always an easy task—i.e., if the researcher starts to randomly record natural discourse, it will be very hard to keep track of the content of the data; consequently, its metadata will be lost, and there will be no chance for the linguist to create a detailed transcription of the gathered corpus afterwards.

With regard to some methods used in the Akuntsū case, to avoid losing the quality of the data (in terms of metadata and linguistic description), most of the audio and video are concentrated on the moment of their activity, recording explanations and themes related to some of their cultural activities, for example step-by-step recordings of the preparation of their fermented drink, manufacture of traditional baskets made with tucum fibers, and descriptions of daily and common activities, such as tending their garden, preparation of their tobacco and shamanism, preparation of traditional food, and extraction of nut oil. This has been a good strategy to get both quantity and quality in the documentation, mostly because the context helps to control the data collected; after doing careful transcriptions, it will be possible to test the data (the gloss and analyses) the next time that they do the same activity (which occurs more than two times a week, depending on the season and type of activity).

In addition, it is important to point out that the literal and complete translations of conversations and texts are very challenging when previously non-encountered topics with many new lexemes are the main subject matter of the recordings. In a monolingual situation, the annotation of data (including morpheme-by-morpheme analysis) is a slow process, mostly because of the difficulty of achieving it without the input of native speakers of the language. For this reason, the task of providing glosses for the grammatical meaning of each
morpheme requires careful reflection. Note that building up a lexical database (future project) in monolingual research means that some lexical items in these texts have just not come up before, and determining their meaning without the help of native speakers needs time and dedication.

Another issue in documenting an endangered language, on one hand, and documenting a language spoken by monolingual speakers, on the other, is the changes which occur over time. From the first fieldwork undertaken in 2004 until now there have been a lot of changes, including the fact that the speakers are getting old, and not as 'isolated' as before. Since 2008, the Akuntsú have begun to get colds often. Colds affect the Akuntsú not only physically but also psychologically; they stop their normal cultural activities when they get colds (even the weaker colds), e.g. the urucu extraction, fermented drink preparation, and shamanism practice; they do only the necessary things. In October 2009, the oldest woman in her 80s, called Ururu or ‘cotton,’ passed away. After this episode, the five remaining Akuntsú were affected by their loss for months, especially Ururu’s son, Pupák, who was still in mourning by the time that I met them. After that, all of them built a house near FUNAI’s house in order to recover from a terrible cold that they got, especially Konibú, who became very gravely ill with a serious pulmonary infection (pneumonia). In addition, people change as they age, and the Akuntsú do not have the same energy to do their regular ceremonies as before.

Each monolingual community differs in many aspects (culturally and socially speaking), which will play an important role in choosing the appropriate methodology to be applied within the monolingual community. Some noteworthy points to be made here for monolingual settings in general is that one needs to be conscious that unplanned spontaneous
speech will occur all the time, and if one knows how to control the quality of this material, through careful notes and detailed description of the context, it might be considered a good quality linguistic corpus. There is also the necessity to observe the language, as well as to apply methods to promote situations that one will be able to learn from — for example, asking some of the speakers to help them in some activities and then learning from daily contact; or just being aware that any gesture or any unexpected situation will be excellent to connect documentation and language analysis. For instance, the sound of a jaguar near the village may be a good situation for collecting stories and myths.

1.4.2 Methodology and documentation design

Because the Akuntsú are all monolinguals, data collection takes place through daily contact and constant interaction while I am with the group, learning more of their language through interaction and participant observation in the cultural context. The methodology is mostly based on “sampling, reliability and naturalness documentation” (Himmelmann 1998). For Akuntsú documentation, it is essential to observe, ask questions related to their current or recent activities, and record while in the context. The methods employed here are descriptive and functionalist, focusing on interpreting the morphosyntax of the language through an inductive approach.

The use of stimuli, such as video, photos and questionnaires, was also employed in the field and has proven valuable for some aspects of the research, though not sufficiently useful to gather specific language structures. For those situations, the best method found so far is participating in daily activities (such as gardening, gathering firewood, etc.) or trying to act out the situation with speakers. All of them want to contribute cultural knowledge and
personal stories. In addition to trying to help me understand the definitions of words, they often want to tell me stories about specific daily situations and unusual events.

The linguistic analyses have consisted of four main parts: (a) phonological, (b) morphological, (c) syntactic, and (d) semantic analysis. While in the field, I analyze the data and try to come up with hypotheses, in order to test them with the speakers. Data has been transcribed morpheme-by-morpheme using the ELAN program and translated interlineally, translated freely into English and Portuguese. Some parts of the data are also organized into a Microsoft Word document and then exported into FLEx, where I have been building the database for the dictionary, as well as some of the morphological analysis. Other parts of the data, which mostly include transcriptions of conversations, are still handwritten. Comments and notes are taken on matters related to Akuntsú activities and stories in order to help understand the data. Annotation mainly includes place, consultant’s information, date, general description of the situation involved, individuals that were involved into the conversation, and main gestures used during the talking. All these metadata have been extremely helpful to the current analyses.

Recording sessions involve audio and video recording. Audio recordings have been recorded in digital format (WAV) with mainly a Zoom H4 recorder and with a Shure SM58SLC cardioids dynamic microphone and a Sony ECM-MS957. The data is archived in WAV and MPEG format.

The Akuntsú have no children, and they understand what will be lost when they are gone. The ethical issues include respecting the wishes and decisions of the Akuntsú people, and following the dictates of FUNAI, which is legally responsible for the Akuntsú, for all the activities related to them, and for their protection.
There are problems encountered in documenting a monolingual language, such as Akuntsú, and some of them are briefly mentioned here. The most common problem seen during the first months of fieldwork among monolinguals is how to gather the first corpus. In order to start up getting the first lexical items, the method used is to point to things (cultural elements, parts of the body, etc.) and to act out different movements to gather verbs, such as 'to sleep,' 'to jump,' 'to cut,' etc. In addition, another strategy used in gathering lexical items is to show the speakers pictures; however, the pictures, especially the ones with small animals, confused them, since they were not used to seeing animals from that perspective.

When we are transcribing without help from native speakers, the task can be very difficult, but when we talk about transcribing speech styles other than the 'normal' one without the help of native speakers, this can be even more problematic. There are aspects of Akuntsú speech style that are worth mentioning: for example, as I got to know the Akuntsú, I became impressed with their way of telling me some stories (especially the most important events that happened in their lives), because all of them spoke simultaneously (literally), and I didn't know whom I should pay attention to, and I especially didn't know to whom I should direct the microphone. Of course, the transcription of these recordings was and still is a very slow process, since the speech is extremely rapid. Another speech style that I have seen is one wherein they thicken their voices, talking louder than the usual, in such a way that the difference in pitch between women and men is almost imperceptible. Those speech styles are mostly used to camouflage what they are saying; they are used in different cultural contexts.

In addition to the monolingual setting, there is the issue of the number of speakers. This means that there are limitations on the speakers available for daily work. At the time that I first undertook fieldwork, the Akuntsú were the ones who chose my 'instructor' (not the
opposite, as usually occurs), the person who would be in charge of teaching me the language.

Audio recording is not always possible, because sometimes all of the speakers are busy with their daily activities, e.g. cooking, looking for seasonal fruit in the jungle, feeding their pets, etc. So, in the meantime, what is possible is to take notes on cultural aspects or on any structural aspects of the language that I can hear\textsuperscript{14}. In situations where audio recording is not possible, video recording may be a good option to gather a documentary corpus. The camera does not bother the Akuntsú, and they do not change their behavior towards the camera at all. However, my concern with video was/is always about how to deal with audio quality, which tends to lose its definition in video recordings, mostly because of the environment, which is always outdoors; indoors is problematic because of the darkness of their huts and because of the noise of their pets (birds of various species) that they usually keep inside of their huts; and because of the fact that Akuntsú are always moving around, doing their daily activities, which makes it a challenging task to handle the camera properly\textsuperscript{15}.

Ethical practices involving recently-contacted Indians are key to maintaining their vitality and ensuring that their identity (culture and language) will not be lost after contact with outsiders. It is very important to follow FUNAI's positive policies and rules in order to help them preserve the Indians’ rights.

\textsuperscript{14} I also carry a fieldwork notebook (a journal). The notebook was important to annotate data, especially in cases when audio recording was not possible. The notes are valuable, for example (but not limited to) further matching with previous data and/or hypotheses, and also to annotate the speaker context at the moment that the data is being recorded.

\textsuperscript{15} Besides this, of course, there is the issue of the process of inputting information (interlinear analysis, gloss and storage space) of video recordings into ELAN.
1.4.3 The goal and presentation of this dissertation

The direct goal of this dissertation is to describe the main aspects of Akuntsú grammar, which in turn will provide useful material in the production of a grammar itself. Nevertheless, the most relevant goal of this study is to avoid the loss of an otherwise undescribed language with its unique grammatical structure, associated culture and knowledge systems that can never be replaced, keys to a whole group’s identity.

Some of the texts used in the preparation of this dissertation include Akuntsú traditional oral stories and descriptions of primary cultural activities, such as (1) the preparation of the fermented drink, and manufacture of traditional baskets made with tucum fibers; (2) description of daily or common activities, such as tending their garden, preparation of tobacco and shamanism, preparation of traditional foods (for example, corn and manioc flour), extraction of nut oil, fishing, hunting, and honey collection. As for the data available in this dissertation, almost all of the examples presented here were tested and checked in the field while I was at the point of writing the dissertation or when some of the chapters were already in draft form.

As for the organization of this study, this dissertation includes 9 chapters. Chapter 2, “Phonology,” discusses the main phonological aspects of the Akuntsú system; the inventory of consonants and vowels are presented in tables and discussed in prose. Their phonetic realizations are addressed based on the environments that trigger the appearance of allophones. The main morphophonological aspects of the language are described, followed by the investigation of the syllabic pattern of the language and the constraints involved in the syllabic structure, and soon after the stress pattern of this language is proposed. Chapter 3, “Word-structure and grammatical category,” presents the terminology and definitions used in
this dissertation, presenting also a brief overview of the word-classes found in Akuntsú and their definitions based on semantic and morphosyntactic criteria. In CHAPTER 4, “Nominal morphology,” the main morphological aspects of nouns are described, including the types of nouns, nominal morphemes, derivation, composition and reduplication processes with respect to nouns and the pro-forms (pronouns and demonstratives). Finally, the chapter concludes with the numeral quantifiers and a discussion on genitive constructions and nominal phrases. In CHAPTER 5, “Verbal morphology,” I mainly present the types of verbs, as well as verbal morphemes such as transitivizers, directional morphemes and auxiliaries, and verbal aspects. In CHAPTER 6, “Adjectives and adverbs,” these two word classes are discussed, focusing on the differences and similarities that they share with other parts of speech. In CHAPTER 7, “Particles, ideophones and interjections,” there is a description of the main particles, ideophones and interjections found in the language, frequently found in texts. In CHAPTER 8, “Simple clause types,” the goal is to investigate the main non-verbal clauses in this language, and to provide a brief description of the sentence types, mainly focusing on negative and interrogative clauses.

The present description is an on-going project, part of a larger documentation project that aims to document and describe the Akuntsú language with the following goals:

(1) To contribute to FUNAI’s work of providing protection and promotion of Recently Contacted Indians, securing their human rights;

(2) To provide a reference grammar of Akuntsú;

(3) To create a dictionary;

(4) To expand the linguistic and ethnographic documentation by expanding the database of texts on Akuntsú history and culture.
Although the main traits of the language are described in this dissertation, some of the areas not presented in this study and others that merit detailed description will be set aside for the future grammar, which includes (but is not limited to): coordinated and subordinate clauses (focalization and topicalization in combining clauses); word-order of the language; discursive and lexicography analysis; intonation level in focus constructions (with focus on predicates and on constituents); and the nature of intransitive predicates.
CHAPTER 2
PHONOLOGY

2.1 Introduction

This chapter presents the basic phonological structure and prosodic analysis of Akuntsú; this chapter is an extended version of the analysis in Aragon (2008). I use feature geometry (Clements 1985, Sagey 1986, Clements and Hume 1995), as well as segmental phonology, to account for the distribution of the phonemes and their allophones in different syllable positions. Features are used to identify and group similar classes of sounds. Throughout this chapter, spectrograms and/or waveforms will be presented along with brief acoustic analyses when relevant for the discussion and visualization of the subject matter.

Compared to the other four Tuparian languages, Akuntsú and two other related languages — Wayoró and Makuráp — are the only ones that have /tʃ/ in their consonantal inventory but lack /s/ and /h/. Furthermore, the discussion of vowel length provides arguments that, despite the fact that long vowels are contrastive in most of the Tuparian languages, in Akuntsú vowel length is phonetically motivated, so that vowels do not contrast in length.

The stress pattern of disyllabic words may suggest a possible lexical stress in the language, and as such it will be only phonologically marked in words when necessary for the analysis. Below, it is summarized the symbols used in this chapter, as following:
In this chapter, segmental phonology (§2.2) is presented, including a description of the vowels (§2.2.1) and the distribution of consonants (§2.2.2). In addition, there is a discussion of the main topics concerning the phonotactics of the language (§2.3), followed by a presentation of processes involved in the morphophonology of the language (§2.4) and a presentation on the prosody pattern, including a first description of Akuntsu rhythmic patterns (§2.5). Finally, a summary of the section is presented (§2.6).

2.2 Segmental Phonology

Given the phonological model adopted in this study, in Akuntsú there are 14 underlying consonants. Phonetically, 14 of the consonants can occur syllable initially in a CV(C), including [p], [b], [t], [d], [ʧ], [ʤ], [k], [g], [m], [n], [j], [w], [kʷ] and [ɡʷ]. Only 8 of the surface consonants can occur finally including [p’], [t’], [k’], [ŋ], [m’], [n’], [j], and [w], while [r] occurs only intervocally (see details in §2.1 below). There are 5 underlying oral vowels and 5 nasal vowels. Later in this chapter, the reasons for adopting the following as the underlying representation of vowels and consonants are explained. Table 2.1 below is divided into natural classes according to place of articulation features and manner of
articulation features. The major class features found in Akuntsú are presented in table 2.2. Note that in the sections on vowels and consonants, detailed tables of consonants and vowels are presented with arguments and discussion of the natural classes identified.

<table>
<thead>
<tr>
<th>Articulation Feature</th>
<th>[labial]</th>
<th>[coronal]</th>
<th>[dorsal]</th>
<th>[labial, dorsal]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[- vocalic]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[- continuant]</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>k\textsuperscript{3}</td>
</tr>
<tr>
<td>[delayed release]</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>[+ nasal]</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>[- nasal]</td>
<td>j</td>
<td>w</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[- continuant]\textsuperscript{16}</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+ continuant]</td>
<td>o</td>
<td>i</td>
<td>i</td>
<td>e</td>
</tr>
<tr>
<td>[+ nasal]</td>
<td></td>
<td></td>
<td></td>
<td>a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ō</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ĩ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ē</td>
</tr>
</tbody>
</table>

\textbf{Table 2.1} - Phonemes in Akuntsú.

\textsuperscript{16} Note that the features [+ continuant] and [+ voice] are redundant for vowels.
The affricate is the only non-continuant that has [delayed release] as a feature that represents its manner of articulation. Unlike the alveolar [+coronal] [-anterior] [-strident], the affricates are [+coronal], [+anterior] [+strident]. In addition, the alveolar differs from the palatal /j/ in their manner of articulation: the alveolars are [+continuant] and the palatal [-continuant], whereas both have [+coronal] [-anterior] features.

As for the feature [voice], [+continuant] and [+nasal] sounds are by default [+voice]. For the [-continuant], [-delayed released] and [-labial, -dorsal] consonants, there is a binary opposition where the contrast is made between the feature [±voice]. Below, table 2.2 describes the major class that represents the phonemes in the language.

<table>
<thead>
<tr>
<th></th>
<th>[vocalic]</th>
<th>[sonorant]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral consonants</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nasal consonants and glides</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Vowels</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

*Table 2.2 - Major class features*

A feature [vocalic] has been used in the literature instead of [consonantal] and [syllabic] (Clements 1990). The [vocalic] feature is defined according to the articulatory and acoustic properties (inherent phonological properties) that segments have, not according to syllable position as the [syllabic] feature does.

According to previous literature, and based on the Akuntsú data, the [vocalic] feature was the one chosen here to better distinguish approximants from vowels (see §2.2.1.5 for glide discussion). The [consonantal] feature is also not needed to provide the difference between glides and vowels (since glides are [+consonantal]).
2.2.1 Vowels

The Akuntsú vocalic inventory is composed of five underlying oral segments: close-front /i/, close-mid-front /e/, close-mid-central /ɨ/, close-mid-back /o/, and open-central /a/, represented in the table 2.3, as follows:

<table>
<thead>
<tr>
<th>Coronal</th>
<th>Dorsal</th>
<th>Labial (labial-dorsal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-low</td>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>+high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-low</td>
<td>e(ɛ)</td>
<td>o(u)</td>
</tr>
<tr>
<td>-high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+low</td>
<td></td>
<td>a</td>
</tr>
<tr>
<td>-high</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.3 - Oral vocalic phonemes (major allophones in parentheses).

To summarize, the features that identify the vowels according to the degree of opening of the vocal cavity and the position of the tongue in terms of backness or frontness are [coronal] and [dorsal]. Depending on the roundness of the lips, the vowels are characterized as labial or non-labial. In addition to these features, vowels also carry features associated with height: [-/+low] and [-/+high]. Coronal spreads from front vowels and dorsal spreads from non-front vowels (Clements and Hume 1995), and thus, in Akuntsú [dorsal] is used to represent central vowels: /i/ and /a/, and /o/ that as a back rounded vowel is represented by [labial] and [dorsal] features. In addition, [labial] is the only feature that differentiates /o/ from the other vocalic phonemes.

The phoneme /a/ is the only one specified with the feature [+low] which is essential to differentiating this phoneme from the other vowels. The difference between the two coronal vowels /i/ and /e/ is that /e/ is [-low, -high] while /i/ is [+high, -low]. Note that, in figure 2.1 below, /e/ tends to be lower than /o/, with /e/ more closely related to the position of
open-mid vowels. One might argue that this vowel could be represented as /e/ due to its lower position in the vocalic space; however, I will continue to represent it as /e/ to be consistent with the phonemes proposed for most of the Tuparian languages.

Aragon (2008) classified /i/, /ɨ/ and /o/ as high vowels. However, after more acoustic analysis, we have determined that those vowels do not have identical height. Carvalho and Aragon (2009) presented a preliminary vowel table for Akuntsú over the mean Z values of the data sample, which already displayed a difference of height among the three vowels in question in that study. Table 2.3 above shows an adapted based-feature analysis of the underlying vowels in which /ɨ/ is not of the same height as /i/ (though /ɨ/ is still considered a [+high] vowel), with an articulatory height (F1) closer to the mid-vowel /o/ rather than to the high-vowel /i/. Figure 2.1 below is presented in order to help the visualization of vowel height in Akuntsú.

![Figure 2.1 - Vowel space of Akuntsú with average values for each vowel category over F1 (Bark) and F2 (Bark) dimensions. Legend (from bottom to top): ○ /a/, + /e/, x /o/, □ /ɨ/, and ▽ /i/. (Adapted from Carvalho and Aragon 2009).](image-url)
In Akuntsú, there are inherently nasal vowels, but also phonetically nasalized vowels. The nasalized vowels (rather than underlyingly nasal) occur by assimilation from nasal consonants. Inherently nasal vowels differ from oral vowels because of their [+ nasal] feature, as follows:

<table>
<thead>
<tr>
<th>Coronal</th>
<th>Dorsal</th>
<th>Labial (labial-dorsal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-low</td>
<td>ī</td>
<td>ī</td>
</tr>
<tr>
<td>+high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-low</td>
<td>ě</td>
<td>ū</td>
</tr>
<tr>
<td>-high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+low</td>
<td>ā</td>
<td></td>
</tr>
<tr>
<td>-high</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.4 - Nasal vocalic phonemes.

2.2.1.1 Vocalic description and contrast

As represented in tables 4 and 5, there are five underlying oral vowels and five nasal vowels in the language. Each phoneme has a set of surface variants. Among the oral vowels, for the high coronal vowel /i/ we find [i, ɨ, ī, ɨ], while for the mid coronal vowel /e/ we identify [e, ɛ, æ, ě, ě]; for the high dorsal vowel /ɨ/ the variants [i, u, ə, ɔ, ī] are found, for the mid labial /o/ there are [o, u, ɔ, ʌ, ʊ, ʊ̃, ɔ̃, ʌ̃], and finally, for the low central vowel /a/ the surface forms are [a, a, ɔ, ʌ, ɐ, ɔ̃, ʌ̃]. These surface forms can be laryngealized [+constricted glottis]\(^\text{17}\) when adjacent to glottal segment or depending on prosodic variables (more on creaky voice in §2.2.1.3). Vowels can also be phonoetically long. Lengthening is mostly motivated by stress, phonotactics and speech rate (see details in §2.2.1.4). There are no underlying diphthongs in the language (more in §2.2.1.6).

\(^{17}\) Vowels produced with audible creaky voice are characterized as [constricted glottis] (Clements & Hume 1995:292).
The contrasts distinguishing the vowels in oral and nasal contexts are illustrated by the set of minimal pairs presented below:

**ORAL VOWELS:**

<table>
<thead>
<tr>
<th>/i/ vs. /i/</th>
<th>(2.1) a. /pi/</th>
<th>b. /pi/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>['pi]</td>
<td>['pi]</td>
</tr>
<tr>
<td></td>
<td>‘foot’</td>
<td>‘to shoot’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/i/ vs. /a/</th>
<th>(2.2) a. /ita/</th>
<th>b. /iti/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>['ita]</td>
<td>[i’ti]</td>
</tr>
<tr>
<td></td>
<td>‘to arrive’</td>
<td>i=ø-ti</td>
</tr>
<tr>
<td></td>
<td>3s=r-mother</td>
<td>3s=r-daughter.of.man</td>
</tr>
<tr>
<td></td>
<td>‘his/her mother’</td>
<td>‘his daughter’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/e/ vs. /i/</th>
<th>(2.3) a. /itek/</th>
<th>b. /itak/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[i’tek’]</td>
<td>[i’tak’]</td>
</tr>
<tr>
<td></td>
<td>i=t-ek</td>
<td>i=ø-tak</td>
</tr>
<tr>
<td></td>
<td>3s=r-house</td>
<td>3s=r-daughter.of.man</td>
</tr>
<tr>
<td></td>
<td>‘his/her house’</td>
<td>‘his daughter’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/e/ vs. /i/</th>
<th>(2.4) a. /kete/</th>
<th>b. /kite/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[k’e’te]</td>
<td>[’gite]</td>
</tr>
<tr>
<td></td>
<td>‘there’</td>
<td>‘one/alone’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/e/ vs. /i/</th>
<th>(2.5) a. /ke/</th>
<th>b. /ki=/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>['k’e]</td>
<td>[ki]^{18}</td>
</tr>
<tr>
<td></td>
<td>‘DEM’</td>
<td>‘1PL.INCL’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/i/ vs. /a/</th>
<th>(2.6) a. /tiri/</th>
<th>b. /tara/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>['tiri]</td>
<td>[’tara]</td>
</tr>
<tr>
<td></td>
<td>‘two’</td>
<td>‘question word’</td>
</tr>
</tbody>
</table>

---

^{18} Personal pronouns are considered clitics and as such they do not bear stress. More on clitics in section 3.2.2.
/o/ vs. /i/

(2.7) a.  /opo ape/  
[o po a'pe]  
o=ø-po + ape  
1s=R-hand + skin  
‘my hand’s nail’

b.  /opi ape/  
[o pi a'pe]  
o=ø-pi + ape  
1s=R-foot + skin  
‘my foot’s nail’

/o/ vs. /e/

(2.8) a.  /okoro/  
[o'koro]  
o=ø-koro  
1s=R-bowl  
‘my bowl’

b.  /ekere/  
[e'kere]  
e=ø-kere  
2s=R-ribs  
‘your ribs’

/o/ vs. /i/

(2.9) a.  /kop/  
['kop’]  
‘red’

b.  /kip/  
['kip’]  
‘leg/wood/louse’

/o/ vs. /a/

(2.10) a.  /kapa/  
[k’a’pa]  
‘to roll’

b.  /kobo/  
[ko’bo]  
‘beans(sp.)’

NASAL VOWELS:

/ĩ/ vs. /i/

(2.11) a.  /ĩka/  
[ĩ'ka]  
ĩ-ka  
smell-TR  
‘to smell’

b.  /ika/  
[i’ka]  
i=k-o-a  
3s=ingest-THV  
‘(He/she) eats it’

/ĩ/ vs. /i/

(2.12) a.  /ĩka/  
[ĩ'ka]  
ĩ-ka  
smell-TR

b.  /ika/  
[i’ka]  
i-ka  
genipap-TR
‘to smell’  ‘to genipap (to paint with genipap\textsuperscript{19} liquid)’

\textbf{/i/ vs. /e/}

(2.13) a. /otʃik\textsuperscript{w}a/  b. /otʃe/
\[ o\text{‘tʃik\textsuperscript{w}a}]
\text{1s=kiss}
\text{‘(He/she) kisses me’}

\textbf{/ẽ/ vs. /e/}

(2.14) a. /k\textsuperscript{w}ẽ\textsuperscript{w}ẽ/  b. /k\textsuperscript{w}e/
\[ k\text{‘ẽ’k\textsuperscript{w}ẽ}\]
\text{‘scissors’}
\text{‘game meat’}

\textbf{/ẽ/ vs. /ã/}

(2.15) a. /jẽ/  b. /jã/
\[ j\text{‘ẽ}\]
\[ j\text{‘ã}\]
\text{‘mouth’}
\text{‘to sit/stay, sitting’}

\textbf{/ẽ/ vs. /ĩ/}

Minimal-pairs were not found for these vowels. The nearest minimal pairs found to illustrate this contrast would be: /k\textsuperscript{w}aẽ/ [wa’ʔẽ] ‘pan’ vs. /kotaĩ/ [kuta’ʔĩ] ‘love bird (sp.)’

\textbf{/õ/ vs. /o/}

(2.16) a. /õ/  b. /o==/
\[ ‘tongue’
\text{‘1s’}

c. /õpa/  d. /opa/  
\[ ‘to beat’
\[ o=õ-pa
\text{1s=R-thigh}
\text{‘my thigh’}

\textsuperscript{19}Genipa americana
/û/ vs. /û/  
(2.17)  a. /û/  
        [ˈʔʊ]  
        ‘tongue’  

b. /ɨ/  
        [ˈʔɨ]  
        ‘genipap’

/ō/ vs. /ɨ/  
(2.18)  a. /kõjka/  
        [kõˈjka]  
        kõj-ka  
        pound-TR  
        ‘to pound’

b. /kɨnka/  
        [kɨnˈka]  
        kɨn-ka  
        sift-TR  
        ‘to sift’

/ɨ/ vs. /ɨ/  
(2.19)  a. /akɨʃen/  
        [akɨʃɛn]  
        ‘vegetable (sp.)’

b. /ki/  
        [ˈki]  
        ‘liquid’

/a/ vs. /a/  
(2.20)  a. /korã/  
        [kuˈrã] ~ [kõˈnã]  
        ‘white grub (sp.)’

b. /ikora/  
        [iˈkora]  
        i=kor-a  
        3s=search  
        ‘(He/she) searches for it’

c. /tʃoã/  
        [tʃoˈʔã]  
        ‘cricket (sp.)’

d. /itʃoa/  
        [iˈtʃoa]  
        i=tʃop-a  
        3s=see-THV  
        ‘(He/she) sees it’

It was not easy to find minimal pairs in the language to identify contrasts that distinguish vowels by the presence/absence of the [nasal] feature on a specific vowel. This is seen in examples (2.11) and (2.12) where forms are repeated, and especially between /ẽ/ and /ĩ/ where no minimal pairs were found (only near minimal pairs).

Even with a large corpus analyzed, it is rare to find minimal pairs to illustrate nasal
vowels in contrast. Note, however, that this is not unusual cross-linguistically. According to various reports in the literature, such as Ferguson (1963:18), underlying nasal vowels are indeed less frequent than oral vowels in most languages that have contrastive nasal vowels.

2.2.1.2 Nasality in vowels

In this section, I describe the basic patterning of nasality in vowels in the language, outlining a hypothesis to account for the distribution of underlying nasalized vowels and surface nasalized vowels.

Nasalized vowels in the language are contrastive only in stressed syllables. In stressed syllables, underlying oral vowels will not assimilate the nasal feature of adjacent consonants, as they do in unstressed syllables. That is, in unstressed syllables, vowels tend to become nasalized (showing up as surface nasal vowels) as a result of progressive or regressive assimilation when adjacent to a [+nasal] segment, either a nasal consonant or a nasal vowel. Thus, the fact that there are instances of vowels adjacent to nasal consonants that cannot become nasalized supports the analysis that nasal vowels in the language are contrastive only in stressed position. Vowels that are underlyingly oral in stressed position followed by a nasal segment do not become nasalized through the spreading of the [+nasal] feature of the adjacent nasal segment, as follows:

(2.21) a. /æ=na/ [na] *[nã] ‘essive’
   b. /i=ma-ra/ [i.’ma.ra] *[i’mãra] ‘to spill it as usual’

3s=keep/spill/put-HAB

20 Both types of nasal assimilation, progressive and regressive, are possible in Akuntsù, as shown further in this section. Experimental studies need to be undertaken to determine whether or not regressive or progressive assimilation is stronger in this language. This will be the focus of a future study (Aragon forthcoming).
Therefore, it is possible to find minimal or near-minimal pairs with both oral and underlying nasalized vowels following nasal segments in stressed syllables, such as: /ma/ ‘to keep/spill/put’ vs. /mã/ ‘certainty.’

On the other hand, oral vowels may become nasalized vowels by the optional assimilation of the feature [+nasal], which applies from left to right in progressive assimilation (2.22a-e) or from right to left by regressive assimilation (2.22f-j), where the nasal feature is spread from underlying nasalized vowels.

Moreover, as a result of progressive assimilation, optional syllable-final nasal segments are produced when nasalized vowels precede an obstruent.

(2.22) a. /ameko/ [ɔ.mẽŋ.'ko] ~ [ɔ.mẽ.'ko] ‘jaguar’
b. /nako/ [nẽŋ.'ko] ~ [nẽ.'ko] ‘man/male’
c. /peniket/ [pe.nĩŋ.'kʲɛt'] ~ [pe.nĩ.'kʲɛt'] ‘ladybug (sp.)’
d. /meti/ [mẽn'.di] ~ [mẽ.'di] ‘maripa (fruit sp.)’
e. /o=ø-mepit/ [o.'mẽm'.bit'] ~ [o.'mẽ.bit'] ‘my son’
   1s=Rs-son/daughter.of.woman
f. /imimere/ [õ.mõ.'me.re] ‘Omerê (river’s name)’
g. /jâj/ ['jâj] ~ ['nâj] ‘tooh’
h. /kojôpe/ [kõ.'nõ.pe] ‘(At) night’

---

21 Through a process of nasal harmony, nasal assimilation affects only glides and vowels. In (22j) below, the obstruent became [+voice] due to the fact that voiceless consonants tend to vary in voicing word-initially. For further details see section 2.2.2.1.
Compare figure 2.2 (a-b) which illustrate two spectrograms that show variation in the production of the token /ameko/ ‘jaguar.’ The first picture shows a token where no syllable-final nasal segment is produced, as seen in the outlined part shown by the circle. In figure (2.2b), however, the speaker is producing a nasal segment syllable-finally as a result of progressive assimilation of the [nasal] feature that spreads from the segment [m] up to the vowel [ɛ]; the resulting [ɛ] then goes further to create also the surface [ŋ].

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Pronunciation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i=ðpa/</td>
<td>to beat</td>
<td>ŋù.’ba] ~ [nõ.’ba]</td>
<td>‘to beat him’</td>
</tr>
<tr>
<td>3s=beat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ki=jê/</td>
<td>our mouth</td>
<td>[gĩ.’jê] ~ [gĩ.’jê]</td>
<td>‘our mouth’</td>
</tr>
<tr>
<td>1PL.INCL=mouth</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.2 (a) - No nasal segment after nasalized vowel
(b) Homorganic nasal segment after nasalized vowel

One would argue that instead of having for instance /ameko/, we should postulate /amenko/ [ɔ.mɛŋ.ko] as the underlying form of this word (as well as for others that undergo the same process), and say that the nasalization of the vowel would occur due to regressive assimilation spread from the coda nasal segment /n/, rather than saying that the vowel becomes nasalized from progressive assimilation spread from the onset nasal segment /m/.

Note that the third personal pronoun may have the following phonetic realizations: [j] before oral vowels, [j̃] ~ [ŋ] before nasal vowels and [i] before consonants.
However, this would create a puzzle since one would have to argue and explain why there is sometimes variation between [ɔ.mẽŋ.'ko] ~ [ɔ.mẽ.'ko] by creating additional rules to account for this variation.

Note that there are cases where regressive or progressive assimilation may not occur because: (a) nasal assimilation is optional across syllable boundaries or it may be very low (see (2.23a-b). Nasal spreading tends to prefer vowels that are contiguous by tautosyllabic nasal segment. This means that, in some cases, syllabification can affect nasal assimilation, interfering in the spreading of the [+nasal] feature; (b) the type of consonant can be an obstacle to the spreading of the [+nasal] feature. In Akuntsú, for example, sonorants are more likely to spread the feature as they can also be affected by nasality (2.23c-e), while obstruents tend to completely block any tentative spreading of the [+nasal] feature (2.23f-g).

Note here that the progressive assimilation usually occurs in adjacent segments that are [+nasal] or [+continuant].

(2.23) a. /tʃajá/ [tʃa.'ɲe] ~ [tʃe.'j̃̃] ‘earring’
    b. /e=ɔ-amĩna/ [e. mĩ.ŋe] ~ [e.ə.'mĩ.ɲe] ‘your knee’

Based upon the nasal harmony process across languages, Piggott (1992) argues that languages may be divided into two patterns: (a) languages that have a set of consonants,
namely obstruents and liquids, that block the spreading of the feature [nasal]; and (b) languages in which all obstruents and liquids are transparent to the process of nasality, and do not block the spread of the feature [nasal] to adjacent segments (in this pattern, consonants are dominated by the spontaneous voicing (SV) node, rather than by the soft palate (SP) articulator node). In face of Piggott's discussion, we would argue that Akuntsú could not fit the patterns above, mainly because obstruents block the process of nasal harmony in the language, whereas liquids do not block nasality.

Nasalization may also have an effect on vowel quality; the quality of the vowel often changes when it carries the [+nasal] feature. As seen in some of the examples above, high and mid vowels tend to lower while low vowels tends to raise their height, as seen below:

<table>
<thead>
<tr>
<th>Oral vowels</th>
<th>Nasalized Vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>ã ~ ã ~ ã</td>
</tr>
<tr>
<td>e</td>
<td>ê</td>
</tr>
<tr>
<td>i</td>
<td>ë</td>
</tr>
<tr>
<td>i</td>
<td>ë</td>
</tr>
<tr>
<td>o</td>
<td>õ ~ õ ~ õ ~ õ</td>
</tr>
</tbody>
</table>

*Table 2.5 - Quality of [+nasal] vowels.*

2.2.1.3 Laryngealized (creaky) vowels

In this section, I will discuss creaky (laryngealized) voice in the language, providing the cues that signal the presence of laryngealized vowels and their motivation. In Akuntsú, there are no underlying creaky-voiced vowels, which means that voice quality does not play any distinguishing role in lexical items; rather, it is possible to identify three main types of creaky voice depending on function. The implementation of laryngealization is mostly
motivated by prosodic variables; for example, vowels in stressed syllables are highly marked by tightened glottis. Arguments in favor of laryngealization as a phonetic motivation rather than as a phonemic characteristic of vowels in Akuntsú are also presented in this section.

The [glottal] feature is one that motivates creaky voice in surrounding vowels in this language. Glottal stop may be realized either as a complete closure or as creakiness in surrounding vowels.

Aragon (2008) stated that the likelihood of creaky-voiced vowels is not restricted only to the presence of an adjacent glottal stop in the language. Note that for cases such as the one in (2.24d) below, Rodrigues (2003) argued that there is a relation between nasalization and laryngealization attested in different Brazilian indigenous languages, where the nasality provokes the manifestation of the glottal feature and vice-versa (Rodrigues 2003:19); this was also found among Tuparí speakers (Rodrigues and Alves 1992).

(2.24) a. /kipek/ [ki.'bɛk'] ‘papaya’
    b. /atap/ [a.'tæp'] ‘hair’
    c. /pea/ [pe.'ʔa] ‘firewood’
    d. /i=ø-men/ [iʔ'mɛ̃n'] 3s=R-husband ‘her husband’

In order to explain laryngealization in the language, Carvalho and Aragon (2009) showed that the main acoustic cues of laryngealized vowels in the language are seen in: (a) variation in the duration of jitter that tends to be higher in creaky-voiced vowels than in

---

24 According to Gordon and Ladefoged (2001), syllable position, stress, and adjacent glottal stops are likely locations for the occurrence of laryngealization cross-linguistically.

25 Matisoff (apud Rodrigues 2003:19) also called attention to this phenomenon (where nasality influences glottalization) among some Asian languages.

26 Fluctuations in pitch.
vowels that have a normal mode of vibration (modal vowels); and from (b) the difference in amplitude between H1-H2 in creaky-voiced vowels and non-creaky voiced vowels, where the laryngealized vowels have higher H1-H2 values than modals.

After having justified the arguments above, Carvalho and Aragon compared vowels in stressed and unstressed syllables where the results supported the hypothesis that indeed, by comparing vowels in stressed syllables with those in non-stressed syllables, the vowel quality in stressed syllables tends to be much more marked by constricted glottis than their unstressed counterparts. In conclusion, Carvalho and Aragon claimed that:

"[...] Although there is no evidence for a lexical, underlying contrast between modally-voice and laryngealized vowels in Akuntsû, the strength with which pressed voice (i.e., laryngealized voice) is realized in the language suggests a role for this distinguished phonetic event beyond that of variations in phonation setting [...]" (Carvalho & Aragon 2009:12).

Creakiness - Type 1

Stress motivates creakiness in the language. In figure 2.3 below, by comparing the two vowels of the token [kɪˈbæːk] ‘papaya’, we see that [æː] is being produced with asymmetrical glottal pulses (by tightening the vocal chords) with increased jitter when compared with the first vowel [i].

![Figure 2.3 - Laryngealized vowel in /kipek/ [kɪˈbæːk] ‘papaya’.](image)

50
Note from Figure 2.3 (a sample token from among others) that creaky-voiced vowels tend to be longer than modal vowels, where the vowel [i] measures 164 ms. and [æː] 191 ms. This is not a characteristic only of Akuntsù. Kirk et al. (1993) reported earlier that non-modal vowels tend to have longer duration (§2.2.1.4 for vowel length).

By considering the fact that stressed syllables tend to be more marked by constricted glottis in the language, I may assume that creaky voice functions to play on the perception of a syllable’s prominence in the word, since creaky voice enhances the level of energy, by increasing the loudness.

However, there are some examples in which vowels, even though in unstressed position, may have a higher level of constricted glottis than those in stressed syllables, which leads us to describe a second type of creaky voice in the language.

**Creakiness - Type 2**

This type of laryngealization can be explained by speech rate and the insertion of the glottal feature syllable-initially and syllable-finally, which in this case is being phonetically realized as creakiness on the vowel. In example illustrated below, the epenthesis of the glottal is due to speech rate, whereas the word is being used emphatically in a careful and slow speech. Careful and slow speech is often realized in the language with lengthened vowels caused by the creakiness and/or the speech rate. Consider the spectrogram shown in figure 2.4 below, which shows a word being pronounced in slow speech.
Figure 2.4 - Unstressed syllable highly laryngealized /eni/ [ɛːnɪ] ‘hammock’.

Now, compare figure 2.4 with figure 2.5 (below) where the same word is been pronounced under different prosodic conditions, i.e., in figure 2.5 the speaker is saying this word in normal speech (opposite situation found in the figure 2.4 above).

Figure 2.5 - Stressed syllable highly laryngealized /eni/ [ɛːnɪ].

The vowel in stressed position (the final vowel) is longer than the one in the unstressed syllable, which is the opposite situation of both vowels (initial and final) described in figure 2.4 above.

In this language, syllable-initial or syllable-final vowels (specially those at the end of
a prosodic unit) tend to bear some degree of laryngealization.

Thus, the tightening of the vocal folds in these positions is often motivated by (a) the epenthesis of a glottal stop resulting in a glottalized\(^{27}\) consonant when in syllable final position (2.25a), (b) creaky vowel (2.25b) (due to TYPE 1, TYPE 2 or TYPE 3 conditions, as presented further in this section), or (c) the presence of a full glottal stop (2.25c). Examples are provided below:

(2.25)  
a. /otat/ \[\text{ʔt}.\,\text{t}\.\] ‘fire’

b. /tato=na/ \[\text{t},\,\text{d}\.\,\text{n}\.\] ‘(It is) an armadillo’

c. /apaɾa-tʃo/ \[\text{ʔap}\,\text{aɾ}\.\,\text{ʃ}\.\] ‘big banana’

In (2.25a-b), the words are pronounced in careful and slow speech where speakers tend to reinforce the perception, and therefore the clarity, of the speech through a natural process of fortition, which is a phonetic process that optimizes individual segments—that is, yields them to be easily perceived and articulated by the speakers (Donegan and Stampe 2009). In (2.25c), the glottal stop works as a good indication of word-boundary between two grammatical elements. In other words, the epenthesis of a glottal stop in those contexts tends to increase the perception of the syllable boundary or phrasal boundary, i.e., laryngealized vowels syllable-finally and/or word-finally in unstressed position come from the presence of an emphatic glottal stop.

\(^{27}\) The term glottalized is being used in this study to mean that either the consonant or the vowel has a sequence involving V or C and glottal stop, or that the V is laryngealized.
Creakiness - Type 3

Besides the creakiness of Type 1 and Type 2, pragmatic variables also influence the distribution of creaky voice. Paralinguistic use also causes creakiness. In Akuntsú, Aragon (2008) argued that the recounting of past traumatic or stressful situations might be accompanied by creaky voice in the whole phrases and/or stretches of speech, in utterances longer than words. Creaky voice, in this case, functions in the language to enhance the expression of emotions.

Creakiness in Akuntsú also varies across speakers, which means that the level (high vs. low creaked vowels) and the manifestation of laryngealization tend to be speaker dependent, as well.

2.2.1.4 Vowel length

Acoustic duration is the main cue to distinguish between long and short vowels; however, other factors, such as stress, voicing, gender, numbers of syllables in the word, rate of speech, and vowel height (cf. Diehl 1996, Lehiste 1970) have been found to affect vowel duration in languages. Vowel length is common cross-linguistically where several languages have contrastive long and short vowels phonemically. In these languages, there are “pure” length contrasts, as in Finnish, where duration is the sole feature distinguishing the vowels. However, in languages such as Spanish, two degrees of length depend on the context, on whether the vowel is stressed or not. Vowels are shorter in unstressed syllables and longer in stressed syllables — a phonetic difference, but not a phonemic one. English, for example, is another instance of a language that has a difference in length depending on different phonetic contexts, but vowel length is not phonemic in English. The difference between languages
such as Spanish and English, and languages with a true phonemic vowel-length contrast is that in Spanish and English long and short vowels are not distinctive — they are conditioned by certain phonetic contexts, such as whether the adjacent consonant is voiced or whether the vowel is stressed.

To verify the status of vowel length in Akuntsú, this section first investigates the interaction of stress with vowel length in Akuntsú to determine whether or not the quantity of vowels is increased under stress. Secondly, it examines the phonological and acoustic evidence to determine underlying vowel length in the language.

For Akuntsú, there is no previous analysis or description of vowel length, especially not of vowel length and the effects of stress on vowel duration. However, in previous descriptions of languages closely related to Akuntsú, at least three of the five Tuparí languages have been analyzed as having phonemic vowel length, a fact that motivates us to undertake a deeper analysis here. The putative minimal pairs below based on auditory perception constitute an argument to support the hypothesis that Akuntsú does have contrastive vowel length. Below putative minimal pairs are proposed. There are relatively few minimal pairs (and near-minimal pairs) based on vowel length alone (compared to those for nasal and oral vowels).

**PUTATIVE MINIMAL PAIRS**

(2.26) a. ['ka:p]  
'flute’

b. ['kap]  
‘wasp’

c. ['pi:pa]  
‘broom’

d. [pi’pa]  
‘arrow (type)’

e. [i’tɔ:]  
‘its pit’

f. [i’top]  
‘his/her father’
Nonetheless, these putative minimal pairs ignore the variables that, according to previous literature on vowel length, may contribute to increasing the duration of vowels, such as: (a) vowel height; (b) adjacent consonants; (c) position of the syllable in the word; (d) syllable structure (closed or open); (e) gender; and (f) rate of speech. But the most important note to make here is that there is variation in my transcriptions, which means that they are not always consistent, and those long vowels presented above are sometimes transcribed as short.

After undertaking some acoustic investigations we found that, not surprisingly, stressed vowels have longer duration than their unstressed counterparts. The purpose of the analysis was to determine if vowel duration varies as a function of stress. All the syllables were taken in isolation. The target syllables have voiceless labial onsets and the same vowel quality in the nucleus, and they are in open syllables. A total of 20 tokens were used. Averages and ratio (vowel duration by word duration) were calculated to present the results. The standard deviation value was used here as a measure of dispersion of the sample.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stressed syllables</td>
<td>0.1361</td>
<td>0.05607</td>
</tr>
<tr>
<td>Unstressed syllables</td>
<td>0.0985</td>
<td>0.04665</td>
</tr>
</tbody>
</table>

*Table 2.6* - Mean of the ratio found for syllables in unstressed and stressed syllables.
On the basis of these findings, vowels in stressed syllables tend to have longer duration than those in non-stressed syllables. Shorter vowels are commonly found in unstressed syllables while the longer ones are found primarily in stressed syllables. As illustrated by the rule below, vowels will be longer when stressed in a normal speech event, as following:

**Rule (Stressed Syllables)**

\[ V \rightarrow [+ \text{long}]/ [+ \text{stress}] \]

Note, however, that the rule above depends on speech events since in careful and slow speech the speaker may optionally lengthen the unstressed vowels (as shown in creaky vowel section above), and thus, unstressed vowels tend to be shorter than the stressed
vowels. The examples provided in creaky vowel section above are repeated here to clarify the discussion, including the ratio of each vowel for each token — the ratios of phonetic long vowels are in bold.

<table>
<thead>
<tr>
<th>SLOW SPEECH</th>
<th>VS. NORMAL SPEECH</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ɛ:n’iʲ]</td>
<td>[ɛ’iʲ]</td>
</tr>
<tr>
<td>[ɛː]</td>
<td>0.354</td>
</tr>
<tr>
<td>[i]</td>
<td>0.151</td>
</tr>
</tbody>
</table>

Table 2.7 - Ratio for vowel in slow and normal speech.

Another fact to address is that vowels tend to be longer in open syllables than in closed syllables. It is possible to visualize it from the values below which present similar results as compared to other tokens analyzed for this language. Though it represents but a sample of the data, it is elucidating, as presented below:

<table>
<thead>
<tr>
<th></th>
<th>STRESSED</th>
<th>RATIO</th>
<th>UNSTRESSED</th>
<th>RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN SYLLABLE</td>
<td>[ɛ’pu] ‘your hand’</td>
<td>0.322 ms.</td>
<td>[u’tek’] ‘my house’</td>
<td>0.284 ms.</td>
</tr>
<tr>
<td>CLOSED SYLLABLE</td>
<td>[tɔp”dut’] ‘manioc’</td>
<td>0.266 ms.</td>
<td>[ut”tat’] ‘fire’</td>
<td>0.220 ms.</td>
</tr>
</tbody>
</table>

Table 2.8 - Ratio for open and closed syllables.

Though it wasn't possible to state contrastive pairs based on vowel length, there are vowels that are longer than others, especially monosyllabic vowels. Based on the data analyzed, I hypothesize that the lengthening of vowels in monosyllabic words is not to assign grammatical meaning, but rather that vowels (with identical quality) tend to be far shorter in

---

28 Vowel height also has an effect on vowel duration. Commonly cross-linguistically, “vowels that are lower in the vowel space are longer than those that are higher in that space” (Myers 2005:434).
disyllabic words (or words with more than two syllables) than in monosyllabic words, due to
the creation of an expansion effect in monosyllabic words in order to maintain roughly
uniform the word duration in the language.

While investigating vowel length, we also need to keep in mind that words with long
vowels should be consistently longer in duration than those with short vowels (Hirata 2004).
After analyzing the corpus, though I couldn't totally control for some of the variables — for
instance, vowel height and adjacent consonants — it was not possible to find cases of words
that seemingly have contrastive length (minimal or near-minimal pairs). It is likely that there
is no phonemic vowel-length contrast in the language based on this first analysis presented
here.

This data suggests that length in this language is predictable. However, one would
argue that there might be possible cases of underlying vowel-length (due to cases of
lengthening in monosyllabic words), and if one would like to consider this hypothesis, the
functional load of vowel length in the language would be extremely infrequent and very
atypical of languages that do have, indeed, contrastive length.

**Typological note**

For Mekéns, Alves and Galucio (2007) investigated the oral vowels in this language
in the speech of three native speakers as part of the experiment. They based their preliminary
study on acoustic analysis (average and standard deviation values for each) in which they
concluded that Mekéns has phonemic short and long vowels. However, the authors did not
discuss factors such as rate of speech and other variables that may cause the lengthening of
vowels.
For Tuparí, on the other hand, Alves (2004) addressed vowel length based on phonological arguments. She argued that the set of minimal pairs in this language is sufficient to diagnose vowel length and to determine phonemic status. Based on the minimal pairs below, Alves (2004) argues that duration is phonemic in Tuparí, because the examples show a contrast between short and long vowels.

**Tuparí** (adapted from Alves (2004))

(2.27) a. /a:p/    b. /ap/
    ‘flute’    ‘lard’

c. /ho:p/    d. /hop/
    ‘father’    ‘clay’

In her phonological study, the minimal pairs above are the only one encountered; however, she also presents examples of long vowels, but those are not compared with their short counterparts. Some of the words found with long vowels are reproduced below:

**Tuparí** (adapted from Alves (2004))

(2.28) a. /a:pe/    b. /py:j/
    ‘road’    ‘soup’

c. /ha:p/    d. /mi:n/
    ‘housing’    ‘hummingbird’

e. /ha:n/    f. /po:t/
    ‘length’    ‘old’

g. /ki:t/    h. /era:t/
    ‘seed’    ‘big’

In Makuráp, Braga (2005) doesn't mention long vowels as part of the vocalic inventory of this language, and neither does she mention whether there is phonetic
lengthening within specific contexts. However, for Wayoró, Nogueira (2011) argues that there is a set of long oral vowels and long nasal vowels in this language. The author supports her analysis with near-minimal pairs and few minimal pairs.

2.2.1.5 Vowels and glides

In this subsection, the goal is to analyze the behavior of [w] and [j] syllable-finally and syllable-initially, where no morphophonological process is involved. Akuntsú has underlying vowels /i/ and /o/\(^{29}\), as well as underlying consonants /j/ and /w/, so the main goal here is to give reasons to support the claim that glides in this language are considered underlying consonants. This subsection deals with the distribution of glides and their sources: the nature of what is transcribed with [j] and [w] will be described.

[w] and [j] behave as [-vocalic] segments word-initially, word-finally, and intervocally, and as such they are treated as consonants in such positions. Some examples of words with approximants follow (see more in §2.2.2.4.2):

**WORD-INITIALLY AND WORD-FINALLY**

(2.29) a. /tʃaw/ [ˈdʒaw] ‘to chew’
   b. /wɛn/ [ˈwɛn] ‘to finish’
   c. /jat/ [ˈjat] ‘2PL’
   d. /baj/ [ˈbaj] ‘buriti (palm fiber (sp.)’

**INTERVOCALICALLY**

(2.30) a. /aw-aw\(^{30}\) [aw.ˈaw] ‘baby/child’

\(^{29}\) Recall that I am using /o/ rather than /u/ to follow the table of vocalic phonemes presented in table 2.3.

\(^{30}\) In this lexicalized form, there is the reduplication of the ideophone aw.
b. /ojoja/ [o.jo.'ja] ‘bee (sp.)’
c. /tawtʃe/ [taw’dʒe] ‘peccary’
d. /tawkop/ [taw’kɔp] ‘holler mokey (Alouatta)’

Motivations

The analysis of [j] and [w] word-initially as consonants is consistent with the fact that all consonants with the exception of /ɾ/ and /ŋ/ can occur at the beginning of words, and considering these surface forms as non-syllabic creates a more symmetrical pattern in the language.

In the claim that word-final glides are surface consonants rather than vowels, one would have to argue that vowels also surface in that position. Considering the distribution of vowels and consonants it is possible to affirm that all vowels occur syllable-finally, which is not the case for the consonants; only unreleased consonants [p’, t’, k’] and the nasals [m’, n’, ŋ] occur finally. Based on this assumption, one could consider the final glides as surface forms of underlying vowels. However, the evidence which most strongly convinced me that the glides are consonants, both underlyingly and on the surface, is a morphophonological process that takes place when the negative suffix is attached to nouns. There are two allomorphs of the negative suffix: =erom and =rom. The first attaches to nouns and verbs that end in a consonant and the other to forms that end in a vowel. In cases where there are glides word-finally, the allomorph chosen is =erom rather than =rom, as shown in (2.31):

=erom ‘NEGATIVE’

(2.31) a. /jãj=erôm/ [ŋɛɟɛrôm] ‘There is no tooth’
2.2.1.6 Phonetic diphthongs

Cross-linguistically, there are two types of diphthongs: underlying diphthongs or true diphthong and those considered phonetic diphthongs (false diphthongs). Akuntsù has false diphthongs, which means that they are not single phonemes; rather, they are sequences of underlying vowels that are subject to constraints regarding their combination (with exception of some VG sequences that are sequences of \[\text{VOWELS} + \text{[-VOCALIC] SEGMENTS}\]). Sequences of vowels in the language are constrained and morphophonologically conditioned.

The main constraints related to the formation of diphthongs in this language can be conditioned mainly by the following characteristics found in this language:

(1) Diphthongs are formed when two unstressed vowels are combined in the same syllable;

(2) Diphthong formation is conditioned by rate of speech.

One noteworthy point from table 2.9 below is related to the lack of examples of diphthongs formed with the high central vowel \(/ɨ/\). Examples of diphthong formation are illustrated in the table 2.9, as follows:

---

31 See Rehg (2007) for discussion on diphthongs.

32 When two vowels are adjacent to each other and one is stressed, the obligatory epenthesis of glottal stop between them avoids diphthong formation.
## Table 2.9 - Possible sequences of false diphthongs.

Diphthong formation in this language is often of two kinds: (i) sequences of vowel + glide\(^{33}\) [VG], (ii) glide + vowel [GV], where glides are formed under the conditions provided in (1) and (2) above.

The examples (2.32a-b) illustrate the distribution of surface glides that come from underlying /o/ and /i/ across word boundary. In these cases, glides form phonetic diphthongs.

---

\(^{33}\) Acoustically the difference between glides and vowels in Akuntsú is that vowels show a slow formant transition and glides are realized with a fast formant transition. Moreover, glides show less constricted spectrogram than vowels, and this is true generally also cross-linguistically (Ladefoged and Maddieson 1996).
since they are vowel-like, but different from vowels in that they cannot form a syllable by themselves. Some cases of glides + vowels (2.32a) and vowels + glides (2.32b-c) sequences are exemplified in the following examples (in boldface):

(2.32) a. /o=ø-akōja/  
1S=R-beard  
‘my beard’

b. /kʷako i=ko-a/  
guan (sp.) 3S=ingest-THV  
‘guan (sp.) is eating it’

c. /ororo i-ko/  
Ururu OBJ.NMLZ-ea  
‘Ururu's food’

In addition, diphthong formation also depends on paralinguistic factors, such as the rate of speech of the speaker, as illustrated below — diphthongs are in boldface:

(2.33) a. /o=ø-atap/  
1S=R-hair  
‘my hair’

b. /o=ø-atap/  
1S=R-hair  
‘my hair’

When the speakers pronounce the word in careful and slow speech, they can optionally place a glottal stop between the sequences of vowels, and as such there is no diphthong formation (as shown in slow speech (2.33b) as opposed to faster speech (2.33a))

---

34 See §2.2.2.1.8 for glottal stop epenthesis.
above). I turn now to some of the main factors that contribute to diphthong formation: **rate of speech** and **stress**.

The sequence of vowels may or may not be tautosyllabic. With respect to glide formation the rate of rate of speech determines glide formation across word boundaries. The same applies to the vowel-vowel sequences that do not involve glides, i.e., the combination of vowels (VV) can be placed in the same nucleus in normal and especially in fast speech, or the vowels of the sequence can be placed in different syllables in slower speech (forming a hiatus (V.V)), as shown below in (2.34).

**Across word boundary**

<table>
<thead>
<tr>
<th>Normal or fast speech</th>
<th>Slow speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2.34) a. /o=ø-ajtfi/</td>
<td>[wa.j.tf]</td>
</tr>
<tr>
<td>Ls=r-wife</td>
<td>[o.øaj.tf]</td>
</tr>
<tr>
<td>‘my wife’</td>
<td></td>
</tr>
</tbody>
</table>

| b. /te=i-ko/          | [tej.ko]    |
| 3Cor=Ojb.Nmlz-ingest  | [te.ıj.ko]  |
| ‘his own food’        |            |

**Word-internally**

<table>
<thead>
<tr>
<th>Normal or fast speech</th>
<th>Slow speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2.35) /ieko/</td>
<td>[ie.'ko]</td>
</tr>
<tr>
<td>‘vulture’</td>
<td>[i.ıe.go]</td>
</tr>
</tbody>
</table>

Thus, as shown above, in this language, instances of hiatus are formed under paralinguistic conditions. Note, however, that the examples in (2.36) below are sequence of **vowel + vowel** where there is no glide formation. This is due to the fact that the last vowel is stressed. In this case, when one of the two sequences of vowels is associated with stress,
speakers consistently syllabify the words and add a glottal between them, to avoid diphthongization. Some examples are given below:

(2.36)  

a. /ei/ [ɛ'ʔi] ‘blood’

b. /kʷaʔ/ [waʔ] ‘pot’

c. /eʔ/ [eʔ] ‘belly’

d. /ai/ [aʔi] ‘caterpillar (sp.)’

Factors such as the one that the final vowel is placed in stressed position and the insertion of a glottal stop, are involved in the avoidance of diphthongization.

2.2.1.7 Speech rate, length, and stress

Depending on the rate of speech, vowels may tend either to become longer or to be deleted. In slow speech, for example, vowels are more likely to have longer length and to bear hard laryngealization than in normal and fast speech, as in the following examples:

**SLOW SPEECH**

(2.37)  

a. /apaɾa/ [aʔpaɾa] ‘banana’

b. /kopiba/ [kəpiba] ‘parrot (sp.)’

On the other hand, in fast speech (and sometimes in normal speech) unstressed vowels and even whole unstressed syllables within words of three syllables or more are more likely to be deleted, as in the following examples:
(2.38) a. /aramĩra/ [nãˈmĩɾə] ‘woman’

b. /takirap/ [kiˈrap] ‘spider-monkey’

c. /ameko/ [mẽˈku] ‘jaguar’

d. /akataba/ [kaˈtaba] ‘tucum (palm fiber (sp.))’

2.2.2 Consonants

The underlying consonants in Akuntsú are characterized by the features [±continuant], [labial], [coronal], [strident], [dorsal], and [labial, dorsal] for active articulators. There are five manners of articulation for the consonants, namely stops, affricates, nasals, flaps and approximants. All the consonants are introduced below described according to their manner and place of articulation. In subsections of this section, I also introduce the distribution of consonants, the forms in complementary distribution, as well as the ones in free variation. Table 2.10 below describes the underlying consonants, represented with IPA symbols.
### Table 2.10 - Consonantal phonemes.

<table>
<thead>
<tr>
<th>Segment</th>
<th>[labial]</th>
<th>[coronal]</th>
<th>[strident]</th>
<th>[dorsal]</th>
<th>[labial, dorsal]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>-sonorant</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td></td>
<td>[- voice]</td>
</tr>
<tr>
<td>Affricate</td>
<td></td>
<td></td>
<td>tf`</td>
<td></td>
<td>[- voice]</td>
</tr>
<tr>
<td>[delayed release]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-sonorant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[+ voice]</td>
</tr>
<tr>
<td>Flap</td>
<td>r</td>
<td></td>
<td>j</td>
<td></td>
<td>[+ voice]</td>
</tr>
<tr>
<td>Approximants</td>
<td></td>
<td></td>
<td></td>
<td>j</td>
<td>w</td>
</tr>
</tbody>
</table>

### 2.2.2.1 Stops

There are five underlying supra-glottal voiceless stopped consonants /p/, /t/, /k/, /tʃ/ and three voiced stopped consonants, the bilabial /b/, the alveolar /d/ and the velar /g/, which is presented later in this section. The stops or obstruents differ from the other segments by being [-sonorant]. The affricate is the only [+delayed release] obstruent; there are no underlying voiced counterparts for the affricate and for the /kʷ/ segment either. The inclusion of the phoneme /kʷ/ in the phonemic chart is discussed in the approximant section, §2.2.2.4.2.
The following sections describe the main phonetic realizations and issues that involve the stop consonants.

### 2.2.2.1.1 The feature voice

Aragon (2008) gave only voiceless stop consonants in the Akuntsú phonemic chart. However, after significantly more data were acquired, it became clear that there is some process in the language affecting voiceless and voiced segments. That is, minimal pairs that contrast in voice were found, even though there are very few cases compared to the number of minimal pairs that distinguish other consonants. The words in which speakers allow change in voicing are those that are here considered to have underlying voiceless stops, while there are other words where speakers do not allow changing voiced stops to their voiceless counterparts, which are here analyzed as phonologically voiced consonants.

Minimal and near-minimal pairs are exemplified below for the words that contrast the voiceless velar /k/ and the voiced velar /g/, as follows:

\[(2.39)\] a. /poga/ vs. /poka/
   \[
   [\text{po'ga}]
   \]
   ‘tortoise’
   \[
   [\text{po'ka}]
   \]
   ‘to burn’

b. /kòm/ vs. /gôn/
   \[
   [\text{'kôm}]
   \]
   ‘PROJECTIVE’
   \[
   [\text{'gôn}]
   \]
   ‘(It is) over’

c. /itʧoʃka/ vs. /itʧoʃga/
   \[
   [\text{i'tʧoʃka}]
   \]
   3s=build
   \[
   [\text{i'tʧoʃga}]
   \]
   3s=bite
   \[
   '\text{(He/she) builds it’}
   \]
   ‘(He/she) bites it’
As for the voiced bilabial stop, there are words that have this segment in which the speakers do not allow the \( b \) to be changed to its voiceless counterpart \( [p] \). Some examples are presented below:

\[(2.40)\]  
\( \begin{align*} 
\text{a. } /\text{abobo}/ & \quad [\text{abo\text{ˈ}bo}] \quad \text{‘bird sp.’} \\
\text{b. } /\text{abatʃo}/ & \quad [\text{aba\text{ˈ}tʃo}] \quad \text{‘grandfather’} \\
\text{c. } /\text{baj}/ & \quad [\text{ˈbaj}] \quad \text{‘garb (made of buriti, palm fiber (sp.))’} \\
\text{d. } /\text{=bô}/ & \quad [\text{=bô}] \quad \text{‘DATIVE/ALLATIVE/INSTRUMENTAL’} \\
\text{e. } /\text{babape}/ & \quad [\text{baba\text{ˈ}pe}] \quad \text{‘gourd’} \\
\text{f. } /\text{āpaba}/ & \quad [\text{ā\text{ˈ}paba}] \quad \text{‘victoria amazonica (plant (sp.))’} \\
\end{align*} \]

Minimal and near-minimal pairs involving \( /p/ \) and \( /b/ \) are illustrated below:

\[(2.41)\]  
\( \begin{align*} 
\text{a. } /\text{i=ø-boro}/ & \quad \text{vs. } /\text{i=poro-ka}/ \\
3\text{s}=\text{R-back} & \quad 3\text{s}=\text{dig-T} \text{R} \\
[\text{i\text{ ˈ}buru}] & \quad [\text{i\text{ ˈ}puru}_\text{ka}] \\
\text{‘his/her/its back’} & \quad \text{‘to dig it’} \\
\text{b. } /\text{pagop}/ & \quad \text{vs. } /\text{bago}/ \\
[\text{pa\text{ˈ}gop}] & \quad [\text{ba\text{ˈ}go}] \\
\text{‘new/young’} & \quad \text{‘ant (sp.)’} \\
\text{c. } /\text{i=pita}/ & \quad \text{vs. } /\text{i=bita}/ \\
[\text{i\text{ ˈ}pita}] & \quad [\text{i\text{ ˈ}bita}] \\
\text{‘(He/she) walks’} & \quad \text{‘its liver’} \\
\end{align*} \]

Finally, minimal and near-minimal pairs involving \( /t/ \) and \( /d/ \) are illustrated as follows:

\[(2.42)\]  
\( \begin{align*} 
\text{a. } /\text{i=dara}/ & \quad \text{vs. } /\text{tara}/ \\
3\text{s}=\text{unfold} & \quad [\text{ˈ}\text{tara}] \\
[\text{i\text{ ˈ}dara}] & \quad \text{‘question word’} \\
\text{‘to unfold it’} & \\
\end{align*} \)
b. /atap/ vs. /dap/

   [aˈtap] [ˈdap]
   ‘hair’ ‘reportative’

c. /təti/ vs. /tʃadi/

   DEM mother [tʃaˈdi]
   [taˈti] ‘armadillo (sp.)’
   ‘that mother’

2.2.2.1.2 Neutralization of the feature [±voice]

The neutralization of the voicing feature occurs in the following contexts:

(i) When voiceless consonants occur after a [+nasal] segment (in boldface);

[+NASAL]

\[ C \text{ [-voice, +labial]} \rightarrow C \text{ [+voice, +labial, -nasal]} /{+nasal} \ ______ \]

(2.43) a. /mepit/ [mẽˈpit] ~ [mẽˈbit] ‘son/daughter of woman’
b. /komata/ [kõmẽˈta] ~ [kõmẽˈda] ‘bean (sp.)’
c. /àka/ [ãˈka] ~ [ãˈga] ‘like this, in that way’

(ii) voiceless consonants may alternate in unstressed position word-initially. Examples are presented below, and the target variation is marked in boldface:

\text{WORD-INITIALLY}

\[ C \text{ [-voice, +labial]} \rightarrow C \text{ [+voice, +labial, -nasal]} /# \ ______ \]

(2.44) a. /pitkip/ [pitˈkip] ~ [bitˈkip] ‘neck’
b. /tato/  \[\text{[ta}'\text{t}o]\] \(\sim\) \[\text{da}'\text{t}o\]  ‘armadillo’

c. /ko/  \[\text{k}o\] \(\sim\) \[\text{g}o\]  ‘to ingest’

(iii) Voiceless consonants may alternate in stressed position word-medially;

\[\text{WORD-MEDIANALLY}\]

\(C\ [\text{-}\text{voice}, +\text{labial}] \rightarrow C\ [+\text{voice}, +\text{labial}, -\text{nasal}]\ /\text{V} \_\text{V} [+\text{stress}]\)

(2.45)  

\(a.\) /ebape/  \[\text{eba}'\text{p}\dot{e}\] \(\sim\) \[\text{eba}'\text{b}\dot{e}\]  ‘forehead’

\(b.\) /atap/  \[\text{a}'\text{t}\dot{a}p\] \(\sim\) \[\text{a}'\text{d}\dot{a}p\]  ‘hair’

\(c.\) /iki/  \[\text{i}'\text{k}\dot{i}\] \(\sim\) \[\text{i}'\text{g}\dot{i}\]  ‘water’

The opposite variation in voicing does not occur, i.e., underlingly voiced consonants do not alternate with their voiceless counterpart in any environment.

2.2.2.1.3 Unreleased stops

In this language, the stops in coda position are unreleased and voiceless \([p', t', k']\), and they do not undergo a voicing process in this position. All the released stops occur in onset positions, both syllable-initially and intervocally.

Below, examples of unreleased stops are presented for each stop: bilabial, alveolar, and velar, respectively:

(2.46)  

\(a.\) /ebapap/  \[\text{eba}'\text{p}\dot{a}t\]  ‘eye’

\(b.\) /ki\text{t}p\dot{e}t/  \[\text{kijt}'\text{p}\dot{e}t\]  ‘fish (generic)’

\(c.\) /ek/  \[\text{ek}'\]  ‘house’
Unreleased consonants become voiced across word boundaries when followed by a vowel (details in section 2.4.2.1).

2.2.2.1.4 Bilabial

Underlying bilabial stop /b/ tends to assimilate the nasal feature of adjacent nasal segments. It commonly occurs through a regressive process of nasal assimilation. There are two possible rules that drive this process, as seen below:

\[ C \ [\text{+voice}, \text{+labial}, \text{-nasal}] \rightarrow C \ [\text{+voice}, \text{+labial}, \text{+nasal}] / \_ \_ [\text{+nasal}] \]

(2.47) a. /mabíra/ [mãˈmíra] ‘manioc flour’
    b. /erêbõ/ [eˈrêmõ] ‘for/to you’

\[ C \ [\text{+voice}, \text{+labial}, \text{-nasal}] \rightarrow C \ [\text{+voice}, \text{+labial}, \text{+nasal}] / \#\#\_ \]

(2.48) /bawrape/ [mawɾaˈpe] ‘shaker’
       /baj/ [ˈmaj] ‘buriti (palm fiber (sp.))’

2.2.2.1.5 Velar

The voiceless velar stop functions differently from the other stops in the sense that it can phonetically become a (full) glottal stop. Voiceless velars may become glottals initially in stressed position. Acoustically, the glottal, in this case, is often realized as a complete closure. Rule 1 below is applied in non-slow speech:

**Rule 1 (Optional Glottal):**

\[ /k/ \rightarrow [ʔ] /\_\_ V[\text{+stress}] \]
(2.49)  a. /poraki/ [poraʔɔ] ‘curassow (sp.)’  
b. /kwako/ [waʔɔ] ‘sweet potato’  
c. /orokoj/ [uruʔɔj] ‘tangerine’

Within morphemes, there is another rule, Rule 1, which indicates that velars may also become palatalized when followed by coronal vowels.

**Rule 2 (Optional Palatalization):**
/k/ → [k̚] / __ V [+coronal]

(2.50)  a. /tokej/ [toˈkɛj] ‘ant (sp.)’  
b. /kiw-kiw/ ['kɪw,kiw] ‘to cut (ideophone)’  
c. /kěm/ ['kẽm'] ‘breast’  
d. /i=o-kiri/ [iˈkiri] ‘its guts’  

At word-boundaries, a rule of intervocalic lenition applies in which velar [k̚] becomes [ɣ] in faster speech:

**Rule 3 (Spirantization)**
[k̚] → [ɣ]/V__##V

(2.51)  a. /iki apeka/ water drink [i,ɬapeʔka]³⁵ ‘to drink water’

³⁵ Note that the vowel deletion rule must be undergone before this rule. The vowel deletion rule says that a vowel is deleted when two vowels that do not share all their articulatory features are encountered at a word boundary in non-slow speech, as shown: V₁##V₂ → øV₂ (more on section 2.4.1). Thus, it occurs as following: iki##apeka → ik##apeka → iyapeka.
b. /Pupak i-mi/ [pu,paɣi mi] ‘Pupak's killed (thing)’
Pupak OBJ.NMLZ-kill
c. /kibek a/ [kibeɣa] ‘fruit of papaya’
papaya fruit

2.2.2.1.6 Alveolar

There are clearly phonological differences between the alveolar stop and flap in this language, since minimal pairs are found, as in the below examples:

WITH /o/
(2.52) /ototo/ vs. /ororo/
[o’toto] [oɾoɾo]
o=ɻ-toto ‘cotton’
1s=R-grandma
‘my grandma’

WITH /e/
/ete/ vs. /erek/
[e’te] [eɾeɾk]
‘RELATIVE’ ‘speech’

WITH /i/
/iti/ vs. /iri/ri/
[i’ti] [iriɾi]
i=ɻ-ti ‘bird (sp.)’
3s=R-mother
‘his/her mother’

Consider the following examples:

<table>
<thead>
<tr>
<th>/t/</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position</strong></td>
</tr>
<tr>
<td>Medial Intervocalic</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Position</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Medial Cluster</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

The alveolar consonant becomes [ɾ], a coronal flap, morpheme-internally or across a word boundary. Note that there are few words that undergo this process morpheme-internally, which will be driven by speech rate; this is discussed further below.

Alveolar [t] becomes voiced syllable-initially. The following examples illustrate alveolars syllable-initially, as previously described in section 2.2.2.1.2.

(2.53) a. /taikop/ [tai’kop’] ~ [dai’kop’] ‘howler-monkey’

b. /ek+top/ [ek’top’] ~ [ek’dop’] ‘roof’

house+cover

c. /o=ø-toa-ap/ [o’top’] ~ [o’dap’] ‘my place.of.lying’

In root-internal position, both /ɾ/ and /t/ are found. It is possible to find [t], [d], and [t’] as allophones of the phoneme /t/, as well as [ɾ] as surface form of the phoneme /ɾ/.

As for the voiced alveolar /d/, it may become a flap through a weakening (lenition) process, in stressed position and in non-slow speech.
(2.54)  

a. /tedo/  [teˈdo] ~ [teˈro]  ‘rubber’

b. /kado/  [kaˈdo] ~ [kaˈro]  ‘necklace’

c. /orodia/  [oɾɔˈdia] ~ [oɾɔˈria]  ‘fruit (sp.)’

d. /kobode/  [koɓoˈde] ~ [koɓoˈre]  ‘bamboo (sp.)’

Note that syllable-finally, the alveolar is unreleased and always voiceless, as seen earlier in this subsection. Across word boundary, the unreleased alveolar obligatorily becomes a flap [ɾ], as exemplified below in rule 1, where in such position the contrast between /t/ and /ɾ/ is neutralized.

**Rule 1: Obligatory flapping**

[t̚] → [ɾ] /__##V

(2.22)  

**emo** ‘also’

a. /o=ø-mepitimemokoa/  
   1s=R-son/daughter.of woman also ingest-THV  [omẽ.piremoˈka]  ‘my daughter also eats’

   ete ‘RELATIVE’

b. /e=t-ete/  
   2s=R-name REL  
   [eˌteɾeˈte]  ‘What is your name?’

-kʷa ‘TRANSITIVIZER AND PLURALIZER’

c. /i=t-et-kʷa/  
   3s=R-nme-TR.PL  
   [itereˈkʷa]  ‘to call it’

-a ‘THEMATIC VOWEL’

d. /te=kʷat-a/  
   3COR=leave-THV  
   [teˈkʷaɾa]  ‘he left’
Across morpheme (2.56a) or word boundary (2.56b), if the alveolar is between vowels and one of them is a nasal vowel, the alveolar can optionally undergo the following alternations: \( /t/ \rightarrow [ɾ] \rightarrow [n] \), as illustrated below:

(2.56) a. /mepit-ẽpit/ \[ [mêpirẽ̞pit\'] \rightarrow [mêpinẽ̞pit\'] \] ‘grandchild.of.woman’
   son/daughter of woman-RED

   b. /i=t-et=erom/ \[ [itẽɾe\'rõm\'] \rightarrow [itẽɾe\'nõm\'] \] ‘(he/she) doesn't have a name’
   3s=R-name=NEG

2.2.2.1.7 Speech rate and lengthening of stops

Voiceless stops in the onset of medial stressed syllables have more alternations than just shown. The allophonic variation of stops is here defined by the position of the consonants in syllables and by speech rates. That is, in slow speech, speakers can length the voiceless consonants due to the long closure of the consonant. Another interesting feature resulting from a slow speech rate (and careful speech) is that when the speakers length the voiceless consonant word-medially, the second half of the closure may become voiced\(^\text{36}\).

As for the lengthening of the consonants, two consonants intervocally tend to be placed in different positions, the first one being placed in the coda position of the preceding syllable and the second one remaining in the onset position of the next syllable; the second voiceless consonant in a VCCV structure may become voiced, as in [oťat\’] ~ [oďat\’] ‘fire’\(^\text{37}\). The rule for this alternation is presented below:

---

\(^{36}\) Aragon (2008 apud Aragon and Cabral 2004b).

\(^{37}\) Instrumental analysis is being undertaken to increase the discussion on this subject matter (Aragon forthcoming).
Optional Gemination, caused by slow speech production:
\[ \emptyset \rightarrow (C_i[^{-\text{voice}}]) / VC_i[^{-\text{voice}}] V[^{+\text{stress}}] \]

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[p]</td>
<td>~</td>
<td>[pp]</td>
<td>~</td>
</tr>
<tr>
<td>/opo/</td>
<td>[o'po]</td>
<td>[op”po]</td>
<td>[op”bo]</td>
</tr>
<tr>
<td>/ipek/</td>
<td>[i’pek’]</td>
<td>[ip’’pek’]</td>
<td>[ip’’bek’]</td>
</tr>
<tr>
<td>[t]</td>
<td>~</td>
<td>[tt]</td>
<td>~</td>
</tr>
<tr>
<td>/k\text{w}ato/</td>
<td>[k\text{w}’ato]</td>
<td>[k\text{w}’at’to]</td>
<td>[k\text{w}’at’do]</td>
</tr>
<tr>
<td>/otat/</td>
<td>[o’tat’]</td>
<td>[ot’’tat’]</td>
<td>[ot’’dat’]</td>
</tr>
<tr>
<td>[k]</td>
<td>~</td>
<td>[kk]</td>
<td>~</td>
</tr>
<tr>
<td>/iki/</td>
<td>[i’ki]</td>
<td>[ik’’ki]</td>
<td>[ik’’gi]</td>
</tr>
<tr>
<td>/ieko/</td>
<td>[i’e’ko]</td>
<td>[i’ek’ko]</td>
<td>[i’ek’’go]</td>
</tr>
</tbody>
</table>

Table 2.11 - Lengthening of voiceless consonants.

The below spectrogram and waveform illustrate a token (out of other tokens) of the word ‘duck’ *ipek*, being produced by a male speaker.

Figure 2.7a - Spectrograms of /ipek/ [ip’’bek’] ‘duck’.
Note that the process of optional gemination is not in free variation, but rather a phonetic realization, caused by slow speech conditions, that varies among speakers.

### 2.2.2.1.8 Glottal Stop epenthesis

Phonologically, glottal stops in the language are not contrastive, as proposed in Aragon (2008). The glottal stop is predictable and phonetically it occurs syllable-initially and syllable-finally, depending on prosodic conditions. The glottal stop is acoustically realized either as a long and silent closure or as creaky voice. Vowels, when adjacent to glottal stops, are always laryngealized (with creaky voice). The epenthesis of glottal stops often functions to assign syllable boundary or word boundary, which varies according to speech rate and speakers. Another common environment for the epenthesis of the glottal is in monosyllabic words with the V(C) structure, where the glottal occurs word-initially:

---

38 See §2.2.1.3 for creaky vowels.
Rule 1 (glottal epenthesis):
\[ \emptyset \rightarrow [?] /##\_V(C) \]

(2.57) a. /\textipa{ap}/ [\textipa{ʔq:p}] ‘fat’
      b. /\textipa{õ}/ [\textipa{ʔò}] ‘tongue’
      c. /\textipa{i}/ [\textipa{ʔì}] ‘genipap/liquid’

In words with two vowels together and one of them is stressed, the glottal stop is obligatorily inserted, as shown:

Rule 2 (glottal epenthesis):
\[ \emptyset \rightarrow [?] /V\_V [+stress] \]

(2.58) a. /\textipa{ei}/ [ɛʔi] ‘blood’
      b. /\textipa{k\textipa{w}a\textipa{ð}/} [k\textipa{w}aʔê] ‘pot’
      c. /\textipa{eo}/ [ɛʔʊ] ‘belly’
      d. /\textipa{ai}/ [aʔi] ‘caterpillar (sp.)’

The epenthetic glottal stop in the cases presented above is not due to syllable constraints, since in Akuntsú onsetless syllables are possible (see for instance /\textipa{abatʃo}/ [a.ba.ʔʃo] ‘grandfather’). Rather, it is used in the language to prevent diphthong formation in stressed positions, as well as to assign syllable or grammatical boundaries (as presented below).

The glottal stop is often phonetically realized as creaky voice, though it can also be realized as a complete closure (see figure 2.8 below). The production of the glottal stop as a complete closure will depend on speech rate. Complete closure is often seen in slow and careful speech.
Figure 2.8 - Two spectrograms of the token /kʰai/ ‘stone’ being produced with creakiness on the left image [wʰai:] and with a complete closure as observed on the right [wʰʔi:].

In the spectrogram on the left, the glottal is realized as an entirely creaky phonation with strongly constricted voicing. Note, however, that in the right image the glottal is manifested as a complete closure and the boundary of the onset and offset vowel is highly marked by intense glottal feature, whereas the vowel [i] in coda position presents heavy creakiness over the vowel, and not only in its boundary. This is explained by the stress, which in this case is placed on the last syllable.

Below, we see the glottal being realized as heavy creakiness to assign word-boundary:

Figure 2.9 - Spectrograms of /apara-aɾa/ [ʔapara:ɾa] ‘big banana’ where the intense constricted
glottis, marked by the arrow, shows the grammatical boundary.

Thus, the above spectrogram illustrates a word boundary marked by creakiness. The heavily constricted activity falls at the syllable-onset position of the second word of the phrase (in boldface) [gːtʃo].

**Glottal stop among Tuparían languages**

Most of the Tupían languages have been described as languages that do present at least surface glottal stops. Among the Tuparían languages, the glottal has been analyzed as follows:

<table>
<thead>
<tr>
<th>Languages</th>
<th>Presence of glottal stop</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Makuráp</em></td>
<td>No phonemic glottal stops; phonetically glottal stops were not discussed.</td>
</tr>
<tr>
<td>Braga (1992, 2005)</td>
<td></td>
</tr>
<tr>
<td><em>Mekéns</em></td>
<td>There is no phonemic glottal stop, though it is inserted in the phonological chart as a major allophone.</td>
</tr>
<tr>
<td>Galucio (2001)</td>
<td></td>
</tr>
<tr>
<td><em>Tupari</em></td>
<td>This author describes two laringeal consonant: a glottal /ʔ/ and a fricative one /h/.</td>
</tr>
<tr>
<td>Demolin, Sandalo and Storto (2004)</td>
<td>They argue that glottal stop is not phonemically.</td>
</tr>
<tr>
<td><em>Wayoró</em></td>
<td>Glottal stop is not considered in the phonological analysis.</td>
</tr>
<tr>
<td>Nogueira (2011)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2.12** - Glottal stops among Tuparían languages.
2.2.2.2 Affricate

The only underlying affricate in Akuntsú is the alveopalatal /tʃ/, with no other sibilants in the language. The /tʃ/ contrasts with the other stops, which is briefly shown below:

(2.59) a. /tʃã/ [ˈtʃẽ] ‘to knead’
/tãm/ [ˈtẽm] ‘full’
/pekã/ [peˈkẽ̃] ‘cold’

b. /tʃe/ [tʃe] ‘come’
/te/ [ˈte] ‘FOCUS’
/ape/ [aˈpẽ] ‘path/skin’

c. /tʃĩkʷa/ [ˈtʃĩkʷa] ‘to kiss’
/-tĩn/ [ˈtĩn] ‘DIMINUTIVE’
/kĩn/ [ˈgĩn] ‘to sift’
/tiɾa/ [tiˈra] ‘flower (generic)’
/tʃira/ [ˈtʃĩra] ‘to leave’
tʃet-a leave-THV

d. /iʃõga/ [iˈʃõga] ‘(he/she) bites it’
i=tʃõga 3s=bite
/tõga/ [tuˈga] ‘belly button’
/põga/ [puˈga] ‘tortoise (sp.)’

Note that even though the examples above show instances of affricates syllable-initially, they never appear syllable-finally. Note also that affricates do not undergo gemination in the language as the other stops do.

It is interesting to note here that the names from Portuguese that have sibilants are
nativized with the affricate, as for example, [mãtʃeˈru] ‘Marcelo’, [dʒamuˈew] ‘Samuel’ and [tʃamaˈra] ‘Samara’.

2.2.2.3 Nasals

The underlying nasals are /m/, /n/ and /ŋ/. The nasals [m] and [n] occur syllable-initially, both word-medially and word-initially. /ŋ/ occurs word-finally\(^{39}\), where it is the only place that /m/, /n/ and /ŋ/ nasal phonemes contrast.

(2.60) **WORD-INITIALLY**

<table>
<thead>
<tr>
<th>/m/</th>
<th>/n/</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ma/ [ma]</td>
<td>/na/ [na]</td>
</tr>
<tr>
<td>‘to/put/spill’</td>
<td>‘ESSIVE’</td>
</tr>
<tr>
<td>/mõ-/ [mõ-]</td>
<td>/nõ/ [nõ]</td>
</tr>
<tr>
<td>‘CAUSATIVE’</td>
<td>‘other’</td>
</tr>
</tbody>
</table>

**WORD-MEDIALLY**

<table>
<thead>
<tr>
<th>/emo/</th>
<th>/enõ/</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ɛmũ]</td>
<td>[ɛnũ]</td>
</tr>
<tr>
<td>‘too/also’</td>
<td>‘to you’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>/eimi/</th>
<th>/ini/</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ɛjˈmi]</td>
<td>[iˈni]</td>
</tr>
<tr>
<td>‘your game’</td>
<td>‘sting’</td>
</tr>
</tbody>
</table>

Lit. Your killed thing

2s-OBJ.NMLZ-kill

**WORD-Finally**

<table>
<thead>
<tr>
<th>/m/</th>
<th>/n/</th>
<th>/ŋ/</th>
</tr>
</thead>
<tbody>
<tr>
<td>/anĩm/ [anĩm]</td>
<td>/tũ/ [tũ]</td>
<td>/nĩŋ/ [nĩŋ]</td>
</tr>
<tr>
<td>‘worm (sp.)’</td>
<td>‘small’</td>
<td>‘striped’</td>
</tr>
<tr>
<td>/kẽm/ [kẽm]</td>
<td>/âm/ [ʔẽm]</td>
<td>/âŋ/ [ʔẽŋ]</td>
</tr>
<tr>
<td>‘cold’</td>
<td>‘rope’</td>
<td>‘penis’</td>
</tr>
</tbody>
</table>

\(^{39}\) It may occur word-medially by a regressive assimilation process of the nasal feature, when preceded by a velar, as in /peniket/ [peniŋ ˈkɛt] ‘ladybug (sp.)’.
Nasal vowels that precede stops word-internally tend to assimilate the feature place of the stops through a regressive homorganic process. As previously discussed in section 2.2.1.2, the speaker is producing a nasal segment syllable-finally as a result of progressive assimilation of the [nasal] feature that spreads from the segment [m] up to the vowel, and then the resulting [Ṽ] goes further to also create the surface nasal consonant. See the following examples:

(2.61) a. /mepit/ [mẽ̱.ˈbit] ‘son/daughter.of.woman’
b. /meti/ [mẽ̀.ˈdi] ‘maripa (fruit sp.)’
c. /makora/ [mã̱ŋ.ˈku.ra] ‘squirrel (sp.)’

However, note that underlying stops do not undergo the process of homorganic assimilation with preceding stops at word boundaries, as shown below:

(2.62) /kẽ̱m##ki/ breast##liquid [kẽ̱m̚’ki] not *[kẽ̱n’ki] ‘breast milk’

2.2.2.4 Flap, approximants and labialized velar

There is only one underlying flap /ɾ/ and two approximants, /j/ and /w/, in the language. The fact that Akuntsú has only one liquid is typical of Tupian languages (Rodrigues 1999:113), which usually have only one liquid phoneme. Firstly I describe the flap and then the approximants are analyzed.

---

40 Attaelea maripa
2.2.2.4.1 Flap

The voiced alveolar flap /ɾ/ in Akuntsú occurs syllable-initially in intervocalic position. As was briefly mentioned above, the flap is found neither word-initially nor word-finally. Some examples of the occurrence of the flap are presented below:

(2.63) a. /oboro/ [o.'bu.ru] ‘my back’
   o=φ-boro
   ls=ɾ-back
b. /takirap/ [to.'ki.rap’] ‘spider-monkey’
c. /tiri/ [’ti.ɾi] ‘two’
d. /erape/ [e.'ɾa.pe] ‘tomorrow’
e. /arato/ [a.ɾa.'to] ‘cocoa’

In nasal environments the flap may be nasalized [ɾ̃] or may become the alveolar nasal consonant [n], which are the two possible variants in this environment.

(2.64) a. /aramīra/ [e.ɾe.'mî.ɾe] ~ [e.nē.'mî.nē] ‘woman’
b. /nirām/ [nî.'ɾēm’] ~ [nî.'nēm’] ‘to defecate’
c. /erē/ [ê.'ɾē] ~ [ê.'nē] ‘2S.EM’
d. /jērom/ [jē.'ɾūm] ~ [jē.'nūm] ‘DEM’

Depending on speech events, vowels may be deleted when unstressed (§2.2.1.7 for interaction among vowel, speech rate and stress); however, when the vowel is followed by a flap [ɾ], there are two options: (1) the vowel is not deleted in conformity to syllable constraints, since a flap is not allowed syllable-initially; or (2) the flap has to undergo some type of process. In the case of for example the word /aramīra/ ‘woman’, [ɾ] becomes the
alveolar nasal [n] to further undergo the vowel deletion process\textsuperscript{41}, word-initially, as seen in the following: [ârâmǐrâ] → [ânâmǐrâ] → [nâmǐrâ] ‘woman’.

2.2.2.4.2 Approximants and the labialized velar

In this section the approximants will be described. First, arguments will be provided to explain the insertion of the labialized velar in the phonological chapter. Secondly, the distribution of /j/ will be presented (2.2.2.4.2.2). A comparison with earlier studies will be also summarized along the subsections.

2.2.2.4.2.1 /w/ and /k\textsuperscript{w}/

Aragon (2008) found two underlying approximants in Akuntsú: the labiovelar /w/, which is pronounced without lip rounding, and the palatal /j/. For the labiovelar, three surface forms were described: [w], [k\textsuperscript{w}] and [g\textsuperscript{w}], conditioned by their position in the syllable, as shown in the following:

(2.65) Labio-velar distributions (Aragon 2008 (adapted))

\[/w/\]
\textsc{word-initially: }[w] \sim [k\textsuperscript{w}] \sim [g\textsuperscript{w}]

(a) \[ [k\textsuperscript{w}a.'?i] \sim [g\textsuperscript{w}a.'?i] \sim [wa.'?i] \]
\[ ['k\textsuperscript{w}e] \sim ['g\textsuperscript{w}e] \sim ['w\textsuperscript{e}] \]
\[ [k\textsuperscript{w}a.'ko] \sim [g\textsuperscript{w}a.'ko] \sim [wa.'ko] \]

‘stone’

‘game meat’

‘guan (sp.)’

\textsuperscript{41} See vowel deletion rule in section 2.4.1.1.
INTERVOCALICALLY: \([k^w] \sim [g^w]\)

(b) \[a.'k^wa] \sim [a.'g^wa]\]
\[e.'k^w'it'] \sim [e.'g^w'it']\]
\[k^w'e.'rep'] \sim [g^w'e.'rep']\]

‘yam (sp.)’
‘honey’
‘black/dark’

SYLLABLE-FINALLY: \([w]\)

(c) \[a.paw\]
\[baw.ra.'pe\]

‘grub (sp.)’
‘shaker’

Based on these examples, the question to be answered is: what is the basic (underlying) form of this segment? Is it \([k^w]\) or \([w]\), or can both be considered underlying in this language? In order to answer the question, I discuss possible hypotheses for considering \([w]\) to be the basic form (the underlying form), as well as possible arguments for considering \([k^w]\) the basic form. At the end of this discussion, I justify my decision based on the most convincing of the hypotheses considered in this current analysis.

HYPOTHESIS 1: if one considers \([w]\) the basic form, then it would be necessary to account for the variation between \([k^w]\) and \([w]\) word-initially and the occurrence of \([k^w]\) intervocally.

With regard to the alternations between \([k^w]\) and \([w]\) found word-initially and the realization of \([k^w]\) intervocally, one would explain that the labiovelar approximant is strengthened to a labialized voiceless velar word-initially and obligatory strengthened intervocally. In turn, it would correctly describe the examples illustrated above and reproduced below for clarification:
WORD-INITIALLY: [w] ~ [kʷ] ~ [gʷ]

[kʷa.'ʔi] ~ [gʷa.'ʔi] ~ [wa.'ʔi]  ‘stone’
[ʼk̚we] ~ [ʼg̚we] ~ [ʼwe]  ‘game meat’
[kʷa.'ko] ~ [gʷa.'ko] ~ [wa.'ko]  ‘guan (sp.)’

INTERVOCALICALLY: [kʷ] ~ [gʷ]

[a.'k̚a] ~ [a.'g̚a]  ‘yam (sp.)’
[ɛ.'k̚i] ~ [ɛ.'g̚i]  ‘honey’
[k̚ɛ.'ɾep] ~ [g̚ɛ.'ɾep]  ‘black/dark’

Note that if [kʷ] occurred only in word-medial position, we would say that [kʷ] and [w] were in complementary distribution; however, this is not the case, because [kʷ] is optionally found in word-initial position in variation with [w]. By accepting this hypothesis, one would have to explain the motivations that trigger the syllable-initial fortition. An alternative possible motivation of the reinforcement process could be the fact that the velar release burst provides an important clue for the perception of the labiovelar [w], as [-vocalic], in opposition to vowels, that are [+vocalic]; the fortition process would, then, increase the perception of the consonant, as well as avoiding possible missyllabification, i.e., to avoid placing [w] in coda position in fast speech, e.g. *[aw.'a] rather than [a.'wa] ‘yam (sp.)’.

A parallel argument can be offered to the fortition hypothesis42. There is a change from Proto-Tupian (PT)43 where **w > k in Akuntsú, as in **wup > [kup’] ~ [kop’] ‘red’, where we would argue a possible intermediate stage as in: **wup > kʷup > kup (/kop/).

42 Note that this is a hypothesis to account for the variations ([kʷ] ~ [w]) diachronically; however, I want to clarify that, for now, it cannot be considered strong evidence due to the lack of data to compare them historically. Nonetheless, I think that it is worth mentioning, since it may be a case for further investigation.

43 The Proto-Tupian examples used in this study are from Rodrigues (2007b) and Rodrigues & Cabral (2012).
change would be found only in word-initial position followed by a rounded vowel\textsuperscript{44}: \textit{**w} / [+round] [+vocalic] \textrightarrow [k] in the language. If we consider other environments where there is no adjacent back round vowel, as in PT \textit{**(w)aku} > [k\textsuperscript{w}a\textquoteright ku] \textrightarrow [wa\textquoteright ku] ‘guan (sp.),’ the alternation between [k\textsuperscript{w}] and [w] is still attested in Akuntsú.

However, two other arguments may weaken this hypothesis. Firstly, one would have to account for words that do not have the overlap between [k\textsuperscript{w}] and [w] word-initially, where there is only [w] is realized word-initially: [\textquoteright w\textsuperscript{en}] ‘to finish,’ [wata\textquoteright wa] ‘bird sp. (onomatopeic),’ [\textquoteright w\textsuperscript{er}\textsuperscript{u}, w\textsuperscript{er}"\textsuperscript{u}] ‘bee (sp.),’ [w\textsuperscript{a}] ‘near’ [wip] ‘to slide.’ Besides, minimal and near-minimal pairs can be also found word-initially (though few cases were found), as in:

\begin{align*}
\text{(2.66) a.} & \quad /k\textsuperscript{w}iri/ \quad \text{vs.} \quad /wiri/ \\
& [\textquoteright k\textsuperscript{w}iri] \quad [\textquoteright wiri] \\
& \text{‘day/clean/empty’} \quad \text{‘to curl’} \\
\text{b.} & \quad /k\textsuperscript{w}e/ \quad \text{vs.} \quad /w\textsuperscript{en}/ \\
& [\textquoteright k\textsuperscript{w}e] \quad [\textquoteright w\textsuperscript{en}] \\
& \text{‘game meat’} \quad \text{‘to finish’} \\
\text{c.} & \quad /k\textsuperscript{w}\text{\text#{305}m}/ \quad \text{vs.} \quad /w\text{\text#{305}m}/ \\
& [\textquoteright k\textsuperscript{w}\text{\text#{305}m}] \quad [\textquoteright w\text{\text#{305}m}] \\
& \text{‘solitary tinamou’} \quad \text{‘near’}
\end{align*}

Secondly, a phoneme *\textit{k}\textsuperscript{w} has been postulated in Proto-Tupari (Galucio and Nogueira 2011, Moore and Galucio 1994).

**HYPOTHESIS 2:** If one considers [k\textsuperscript{w}] to be the basic form, it would be plausible to argue that there are two different phonemes /k\textsuperscript{w}/ and /w/ in Akuntsû; if one argues in favor of /k\textsuperscript{w}/ as the underlying form, this analysis would also lead to the postulation of /w/ as a

\textsuperscript{44} Investigation is needed in order to affirm whether or not it is considered a regular change.
phoneme, in order to justify the instances where /w/ occurs syllable-finally (and does not alternate in those words with [k^w]; /k^w/ would occur only in syllable-initial position and /w/ both syllable-initially and syllable-finally. In the examples shown above, where [k^w] and [w] varies word-initially, the alternations between [k^w] and [w] would be justified by the loss of the velar closure before silence through a lenition process. Thus, in light of the discussion presented above, I assume that there is an underlying phoneme /w/ and a separate phoneme /k^w/ in the language, as argued in hypothesis 2 above.

(2.67) /k^w/

**WORD-INITIALLY: [w] ~ [k^w] ~ [g^w]**

(a) /k^wai/ [k^w^ai] ~ [g^w'a^i] ~ [wa'i] ‘stone’
/k^we/ [k'we] ~ [g'we] ~ [we] ‘meat’
/k^wako/ [k^wako] ~ [g^wako] ~ [wa'ko] ‘guan (sp.)’

**INTERVOCALICALLY: [k^w] ~ [g^w]**

(b) /ak^w a/ [a'k^wa] ~ [a'g^wa] ‘yam (sp.)’
/ek^w i t/ [ε'k^w i t] ~ [ε'g^w i t] ‘honey’
/k^w erep/ [k^w erep] ~ [g^w erep] ‘its stripes’

(2.68) /w/

**WORD-INITIALLY:**

(a) /wip/ ['wip] ‘to slide’
/watawa/ [wa'tawa] ‘bird (sp.)’
/wâ/ [wâ] ‘near’

**WORD-MEDIALLY:**

(b) /awtjê/ [aw'tjê] ‘peccary’
The approximant /w/ and the labiovelar stop /kʷ/ can both be distinguished from /k/ with minimal pairs:

(2.69)  

(a) /kʷi/ [ˈkʷi] ‘axe’  
/wip/ [ˈwip] ‘to slide’  
/ki=/> [ki] ‘1PL.INCL’

(b) /kʷa/ [ˈkʷa] ‘TR.PL’  
/-ka/ [ˈka] ‘TR’  
/wâ/> [ˈwâ] ‘near’

(c) /kʷe/ [ˈkʷe] ‘game’  
/ke/ [ˈkʲe] ‘DEM’  
/wêⁿ/> [ˈwêⁿ’] ‘to finish’

Now, we turn to answer the following question: Why should we consider the form [kʷ] a unit consonant rather than a sequence as in [kw]?

Three criteria are discussed here that may shed light on this matter: (1) productivity, (2) syllable structure, and (3) timing duration of Cw.

Ladefoged (1968) and Chan (1985) have taken the productivity of Cw combinations in languages as an argument for choosing Cw as part of the phonemic inventory of languages.
(cited in Suh (2009:9)). In languages that have several instances of Cw with different stop segments (with labials, alveolars and velars), they argued that to minimize the numbers of phonemes in the language (economy\textsuperscript{45}), it would be plausible to claim that sequence Cw is a cluster, rather than a unit segment. Akuntsú Cw combinations only occur when C is a velar, which means that there is no wide range of Cw consonantal segments in this language, which lead us to argue that in the case of Cw, /w/ is realized as a secondary articulation of labialization, rather than as a cluster.

Another criterion is syllable structure in this language. Akuntsú has no complex onsets. The syllable pattern in this language is (C)V(C)(C); vowels always occupy the head of the syllable (nucleus position); the onset position can be occupied by a single consonant ((C)V); the coda position can be occupied by a consonant (V(C)). Thus, if one were to consider k + w as a sequence of two consonants, this would go against the phonotactics of this language, where complex onsets are not allowed.

A third criterion to be analyzed is the timing duration of the Cw combination acoustically (Ladefoged and Maddieson 1996). By comparing the timing duration of a CVw with CwV, we can see from a spectrogram observation that the CVw has a greater duration than CwV — almost 100 ms. of difference in duration.

In turn, the three criteria above imply that in Cw combinations, [w] is realized as a secondary articulation of labialization, i.e., Cw is a unit segment.

\textsuperscript{45} Languages tend to have symmetrical inventories (though asymmetrical inventories are also possible, while less common) in order to maximize speakers’ perception and minimize the articulatory efforts by selecting vowels and consonants that are more functional and more economical (Chomsky & Halle 1968; Clements 2003; Donegan & Stampe 2009).
2.2.2.4.3 Palatal /j/

There is one palatal in the language, /j/, which can be distinguished from /w/ as well as from /tʃ/ by means of minimal pairs.

(2.70)  

a. /jat/  
       [ˈjat的帮助下]  
       ‘2PL’
/wã/  
       [ˈwã的帮助下]  
       ‘near’

b. /jã/  
       [ˈjẽ的帮助下]  
       ‘to sit/stay, sitting’
/tʃã/  
       [ˈtʃẽ的帮助下]  
       ‘to knead’

c. /jẽ/  
       [ˈjẽ的帮助下]  
       ‘DEM’
/wẽn/  
       [ˈwẽ有利于n的帮助下]  
       ‘to finish’

d. /jat ø-anam/  
       2PL R-head  
       [jœraˈnẽm的帮助下]  
       ‘your heads’
/tʃarínãm/  
       [tʃariˈnẽm的帮助下]  
       ‘hummingbird (sp.)’

Approximants are the consonants that have more affinity with vowels, especially because they also can undergo nasal harmony, like vowels do. There are two nasal surface forms for the palatal consonant [j] when adjacent to a nasal sound: [j] or [ɲ]. The nasal allophones vary freely when surrounded by nasal consonants or vowels, as in the following example:

(2.71)  

/tʃajã/  
       [tʃaˈjẽ的帮助下] ~ [tʃaˈɲẽ的帮助下]  
       ‘earring’
/jẽn/  
       [ˈjẽ有利于n的帮助下] ~ [ˈɲẽ的帮助下]  
       ‘feces/stinky’
/pakãja/  
       [paˈkẽ有利于j的帮助下] ~ [paˈkẽ有利于a的帮助下]  
       ‘agouti (sp.)’
/jõ/  
       [ˈjũ的帮助下] ~ [ˈɲũ的帮助下]  
       ‘here’

As visible in the data presented above, palatal approximants are also reinforced and may become a nasal consonant either word-initially or in intervocalic position.
2.3 Phonotactics

Aragon (2008) described the syllable pattern of this language as ((C)V(C)(C)). Thus, it is possible to find syllables of the shapes CVCC, CVC, CV, VC, and V. The language does not have complex onsets, and has no consonant clusters. Vowels always occupy the head of the syllable (the nucleus). The nucleus is always occupied by only one vowel. Syllables can have more than one mora; the onset position can be occupied by only one consonant ((C)V), and the coda position can be occupied by only two consonants (V(C1)(C2)), where C1 is always an approximant. Only unreleased voiceless stops and nasals /m, n, ŋ/ occur in coda position, whereas /ɾ/ and /tʃ/ can only occupy onset position. The syllable structure types are illustrated in table 2.13:

<table>
<thead>
<tr>
<th></th>
<th>INITIAL</th>
<th>MEDIAL</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>/a.tap/ ‘hair’</td>
<td>/a.pa.ra/ ‘banana’</td>
<td>/ko.a/ ‘parakeet (sp.)’</td>
</tr>
<tr>
<td>CV</td>
<td>/ki/ ‘liquid’</td>
<td>/tʃa.tʃa.kop/ ‘taxi (sp. of ant)’</td>
<td>/a.ra.mī.ra/ ‘woman’</td>
</tr>
<tr>
<td>VC</td>
<td>/ek/ ‘house’</td>
<td>/i.ap.na/ ‘There is fat in him’</td>
<td>/o.ip/ ‘I came back’</td>
</tr>
<tr>
<td>CVC</td>
<td>/tit.pe/ ‘fig’</td>
<td>/pit.kip/ ‘neck’</td>
<td>/ki.pek/ ‘papaya’</td>
</tr>
<tr>
<td>CVCC</td>
<td>/kojt.pe/ ‘older.sister’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.13 - Syllable structure type.

2.3.1 Constraints

Below, we illustrate the phonemes according to their possible places in the syllable structure of this language.
Onset                      Rhyme (ρ)
                          Nucleus
                                 Coda
  C1     V     C2

[p, b, t, d, k, ʔ, tʃ, dʒ, m, n, ɲ, ŋ, j, ɨ, kʷ, gʷ, w, j]  All oral and nasal vowels  [p̚, t̚, k̚, m̚, n̚, ɲ̚, ʔ, w, j]

Figure 2.10 - Syllable structure and the distribution of allophones within the syllable.

Note above that the syllable allows many more consonants in onset position than in coda position. All underlying consonants, except /ŋ/, are allowed in C₁ position. Syllable-finally, only unreleased stops, the nasal /ŋ/, and approximants are found. When a voiceless stop consonant appears word-internally, as in VCYYY, phonetically, it can optionally become VCᵢCᵢV, which is syllabified with the first Cᵢ forming the coda of the first syllable and the second Cᵢ being the onset of the second syllable.

According to the voicing of stops allowed in sequence of consonants, the language only allows a C₁ stop to be voiceless. In a sequence of consonants word-internally, such as in /pitkip/ ‘neck’/ or /titpe/ ‘fig.’ the stop consonant in coda position may be voiceless or voiced. Strictly speaking, the possible surface forms are: [pit’kɪp’] but never *[pit’kɪp’].

For the geminate consonants, there are cases attested morpheme-internally and across morpheme boundaries⁴⁶. Note that geminate consonants word-medially are always

⁴⁶ Across word boundaries, CᵢCᵢ tends to be glottalized Cᵢ#Cᵢ → Cᵢ'#/Cᵢ, as in for example: [tara ɛmɛn’na] ‘who is your husband?’
heterosyllabic. Voiceless stops and the nasals /m/ and /n/ geminate word-medially in slow or careful speech, where a single segment is syllabified as the coda of the first syllable and the onset of the next one.

The discussion above leads us to explain why the order for two stops can be $C_vvoiceless-C_vvoiced$ (as well as $C_vvoiceless-C_vvoiceless$), but not $C_vvoiced-C_vvoiced$. With syllabification in Akuntsú, it is possible to assume that when a voiceless-voiced consonant is produced, the voiceless one is re-syllabified and placed at the coda of the preceding syllable. The voiced consonant remains in the onset position. In this way, the voiceless consonant placed in coda position cannot alternate between voiceless and voiced when syllable-final; however, the consonant that occupies the onset position can become voiced.

Note that at an underlying phonemic level, sequences of $C_vvoiceless-C_vvoiced$ constitute single intervocalic consonants, at the onset of the second syllable; however, phonetically, they appear to have a different status, namely as both the coda of the preceding syllable and the onset of the following one, as in [ot`.'tat`] and [ot`.'dat`]. This means that the analysis of phonetic geminate consonants falls under the same process of syllabification shown above for the voiceless-voiced cluster, whereas the geminates are a sequence of two identical consonants with a syllable boundary placing them in two different syllables. In accordance with this discussion, it is reasonable to assume that the voiceless geminate consonant can alternate between [tt] ~ [td], with the [t] ~ [d] final part of these becoming the onsets of non-initial stressed syllables. However, as Akuntsú syllable structure does not allow a voiced stop in coda position, neither a voiced geminate consonant nor a voiced-voiceless consonant combination is allowed in this language.
Another note involving syllabification is the one that concerns unreleased consonants across word boundaries. Medial consonants that precede a vowel are syllabified as onsets rather than as codas. Some examples illustrating this are presented below:

\[(2.72)\]

a. /kip=erõm/  
   wood/stick=NEG  
   [ki.ɓɛ.ɾõm’]  
   ‘(There is) no wood’

b. /kem-atʃo/  
   breast-INT  
   [ki.ʃɛ.ma.tʃu]  
   ‘big breast’

c. /o=o-anâm atʃi/  
   1s=R-head  pain  
   [wa.nа.ma.tʃi]  
   ‘my head hurts’

d. /kijtptít-ʃo/  
   fish-INT  
   [kijt.pi.ʃa.tʃo]  
   ‘big fish’

e. /kip t-ep ei/  
   wood/stick R-leaf  blood  
   [kip.te.ɓe.ʔi]  
   ‘the blood of the wood's leaf’

2.4 Morphophonology

In this chapter, we give our attention to the remaining processes at the segmental level that involve, in particular, vowels and consonants across word boundary (§2.4.1 and §2.4.2 respectively), as well as reduplication processes (§2.4.3). Stress assignment under morphological processes and in compounds is accounted for on the suprasegmental level (§2.4.4).

2.4.1 Vowels

2.4.1.1 Vowel deletion

Two situations have been identified so far where vowels are deleted across word boundaries. The first case is when two sequences of identical vowels come together across a word boundary. The process is described in Rule 1.
Rule 1: vowel deletion

\[ V_1 \rightarrow \emptyset / \_\_\_\_\#V_1 \]

The examples below show that instead of coalescing to create underlying long vowels, two identical vowels are reduced to a single vowel, as shown in (§2.7.2):

(2.73) a. /e=ø-toa-ap/ \[ɛˈtoapˈ] \sim [ɛˈdoapˈ] ‘your place.of.lying’
2s=R-lay-NMLZ
b. /imimere etʃe/ \[ɛməɭeˈtʃe] ‘over the Omerê’
Omerê DIFF
c. /eme emo/ \[ɛˈmɛmu] ‘this too’
DEM also

The other identified case of vowel deletion is when two vowels that do not share all their articulatory features are encountered at a word boundary in non-slow speech.

Rule 2: vowel deletion

\[ V_1 \rightarrow \emptyset /C\_\_\_\#V_2 \] (fast speech or casual speech)

(2.74) a. /te=ø-boro etʃe/ \[te, bureˈtʃe] ‘It is over his back ’
3COR=R-back DIFF
b. /iki `apeka/ \[i, ɣapeˈka] ‘It drinks water’
water drink
c. /mō-atʃo-a/ \[mâ´dʒoa] ‘to cause someone to bathe’
CAUS-bathe-THV

However, in cases such as the one shown below, where the deletion of the vowel may affect the grammatical content, vowels with the same articulatory quality are not deleted by
the vowel deletion processes; rather, the quality of one of the vowels is shifted or a glottal stop is inserted, as in the following examples:

(2.75) a. /e=ø-ebapap/ [ɛ, ebaˈbap] ‘your eye’
   2s=R-eye
b. /te=æge/ [teˈæge] ‘She/he stands up’
   3COR=stand.up
c. /o=ø-ð/ [oˈð] ‘my tongue’
   1s=R-tongue

2.4.1.2 The effect of the thematic vowel -a

In Akuntsú, there is a thematic vowel -a (Aragon 2008). This thematic vowel attaches only to verb stems\(^{47}\), which tends to modify the original phonological form. With the addition of the thematic vowel -a, there are two phonological processes involved: (1) the deletion of the final vowel of the verb, if it is [-high]; (2) the deletion of the final consonant; and (3) vowel quality change to [+high] when it is [-high, -low].

(1) Deletion of the final vowel of the verb root
\(V_{[\text{-high}]} \rightarrow \emptyset / \_\#-a\)

(2.76) (a) /ko-a/ \(\rightarrow [ka] \)

/apara ko-a on/ [apara ka on]  
banana ingest-THV 1s  
‘I eat bananas’

Verbs with high vowels do not undergo the vowel deletion process, as illustrated in the example (2.77):

---

\(^{47}\) See details in section 5.12.
Now let us turn to the deletion of the final consonant of the verb root when the thematic vowel is applied (in boldface), as presented below:

(2) The deletion of the final consonant

\[C_{[\text{labial}]} \rightarrow \emptyset /C_{\text{CVC}}\] (only if the coda consonant is [+labial] and the syllable is CVC)

(2.78) a. /k'wep-a/ \rightarrow [k'ia]

/karow te=k'wep-a āka kota/ [karow tek'ia īga kuta]
Carol 3COR=climb-THV that.way go.up
‘Carol climbs, that way, (she) goes up’

b. /tʃop-a/ \rightarrow [tʃoa]

/konibu erek-k'wa k'wak tʃop-a on/ [Konibú erek'wa k'wak'dʒo ən]
Konibú speak-TR.PL sound see-THV 1s
‘I'm going to talk to Konibú’
Lit: I'm going to see the sound (that) Konibú speaks.

However, if the syllable is VC, the rule (2) above does not apply and the final consonant is not deleted after the addition of the thematic vowel to the verb.

(2.79) /ip-a/ \rightarrow [ipa]

/erep o=ip-a köm/ [erep oiba köm']
tomorrow 1s=come.back-THV PROJ
‘I will come back tomorrow’
As for alveolars, when in coda position, they become a flap\textsuperscript{48} when the thematic vowel is inserted, as in the following examples:

(2.80) a. /et-a/ → [era]

/ʃaruj te=et-a/ [ʃaruj te’ira]\textsuperscript{49}
Tʃaruj 3COR= sleep-THV
‘Tʃarúj sleeps’

b. /tʃet-a/ → [tʃira]

/ʃemaw te=tʃet-a/ [ʃemaw tʃira]
Alemão 3COR= leave-THV
‘Alemão left’

In addition, when the thematic vowel is added to the verbal root, vowels tend to become [\(+\)high], if the verbal root is (C)VC.

(3) Vowel quality changing

\[ V_{[-\text{high},-\text{low}]} \rightarrow V_{[+\text{high},-\text{low}]} / (C)\_\text{C#-a} \]

This can be seen, for example, in the verbs ‘to go away’ /tʃet-a/ → [tʃira] and ‘to climb’ /kwaep-a/ → [kwaia].

Rule 3 (vowel quality changing) counterbleeds rule 2 (deletion of final consonant), since if the deletion of consonant were to apply first, rule 1 (deletion of the vowel) would delete the [-high] vowel, and this is not what happens; compare table 2.14 on the right with the table 2.15 on the left (which shows wrong rule ordering):

\textsuperscript{48} See also section 2.2.2.1.6 where the obligatory flap rule is described.

\textsuperscript{49} It is also possible to find [ʃaruj te’era].
2.4.2 Consonants

2.4.2.1 Voicing

Unreleased consonants become voiced across word boundaries when followed by a vowel.

Rule:

\[ C_{[\text{+unreleased}]} \rightarrow [\text{+voice}] /\_\_\#V \]

(2.81) a. /mepit=erom/  [mē_pirēˈrōm]  ‘There is no son/daughter’
   son/daughter.of.woman=NEG

   b. /atap=erom/  [a,tābēˈrōm]  ‘bold’
   hair=NEG

   Lit: There is no hair

   c. /o=t-ek etfe/  [u,tēɡɛˈtʃɛ]  ‘over the house’
   ls=R-house DIFF

2.4.2.2 Consonant reduction

When two identical consonants are found across a word boundary, they are reduced to only one segment in normal or fast speech. Examples follow:

<table>
<thead>
<tr>
<th>Underlying form</th>
<th>/kʷep-a/ ‘to climb’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel quality changing</td>
<td>kʷipa</td>
</tr>
<tr>
<td>Deletion of the final consonant</td>
<td>kʷia</td>
</tr>
<tr>
<td>Phonetic Output</td>
<td>[kʷia]</td>
</tr>
</tbody>
</table>

Table 2.14 - Rules ordering.

<table>
<thead>
<tr>
<th>Underlying form</th>
<th>/kʷep-a/ ‘to climb’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deletion of the final consonant</td>
<td>kʷea</td>
</tr>
<tr>
<td>Deletion of the final vowel</td>
<td>kʷa</td>
</tr>
<tr>
<td>Vowel quality changing</td>
<td>----</td>
</tr>
<tr>
<td>Phonetic Output</td>
<td>*[kʷa]</td>
</tr>
</tbody>
</table>

Table 2.15 - Wrong ordering of rules.
2.4.3 Reduplication

Reduplication in Akuntsú marks plurality in nouns and aspectual function in verbs^51. It can be monosyllabic (involving the first or the second syllable of the stem) or dissyllabic (for the shape of these, see below). In monosyllabic reduplication, it is possible for the first syllable to be reduplicated, or the final syllable. Reduplication of the middle syllable does occur, but it is not as productive as the other types.

2.4.3.1 Monosyllabic

As mentioned above, monosyllabic reduplication can be CV or VC, or with complex syllables CVC. Examples of monosyllabic reduplication follow:

(2.83) a. CV
ābi ‘to pull’ → ābi-bi ‘to pull successively’
baoro ‘woodpecker’ → ba-baoro ‘many woodpeckers’
pi ‘foot’ → pi-pi ‘feet’

b. VC(VC)
mepit ‘daughter/son of woman’ → mepit-epit ‘grandchild of woman’
tfökín ‘small’ → tfökín-ín ‘very small’

^50 It is important to recall that $C_iC_i$ clusters also tend to be glottalized in slow speech $C_i#C_i \rightarrow C_i^\#C_i$, as in for example: [tara $ɛmɛn$’na] ‘who (turned into) your husband?’

^51 See more on sections 4.6 and 5.11.4 respectively.
c. CVC
baw ‘wind’ → baw-baw ‘windy’
kop ‘ripe’ → kop-kop ‘very ripe’

2.4.3.2 Dissyllabic

Dissyllabic reduplication in this language affects only words with the shape CV.CV; forms with complex syllables of the form CVC.CVC have not yet been found reduplicated. Some examples illustrating dissyllabic reduplication that does occur are:

(2.84) a. CV.CV
kapa ‘to tie’ → kapa-kapa ‘to tie repeatedly’
tiri ‘two’ → tiri-tiri ‘four (or many)’

2.4.4 Stress and morphophonological boundaries

In this language, suffixes and prefixes do not affect the stress pattern in the language — that is, they figure into stress placement just as syllables of roots do. However, proclitics do have an impact on stress placement. The primary stress in stems is restricted to final or penultimate syllables (see §5 for discussion of stress); clitics are never stressed in this language. The examples below illustrate the effect of dependent personal pronouns in word-level stress and how they are attached to the phonological word (PW), as follows:

Nouns

(2.85) a. /o=kado/ [kaˈro] → [uˈkaro] [uka.ro]PW ‘My necklace’
b. /i=pebo/ [peˈbo] → [iˈpebo] [ipe.bo]PW ‘Its feather’
c. /ki=pea/ [peʔa] → [kiˈpeʔa] [ripeʔa]PW ‘Our firewood’
2.4.5 Compounding

Compounds form one phonological word, and, as such, they are characterized by only one primary stress, which is illustrated in the following examples. The primary stress falls on the second component of the compound. There are cases of compounds composed of noun and adjective roots.

When two components of a compound come together, each of which would receive primary stress in isolation, the rightmost component of the compound is assigned the strongest (primary) stress, and stress on the other component is reduced (secondary). Note that stress assignment is the same also for compounds. It is not a surprising effect of stress assignment in Akuntsú, since most of the phonological words follow this same pattern of iambic stress.

Nouns + Nouns

(2.87) a. /kɛm/ ‘breast’ + /ki/ ‘liquid’ \[
\text{kɛm}' + [\text{k}_i] \rightarrow [.\text{kɛm}' \text{gi}] \]
‘milk’

b. /ororo/ ‘cotton’ + /pe/ ‘skin/peel’ \[
\text{oror}' + [\text{pe}] \rightarrow [\text{o}_r\text{oror}'\text{pe}]\]
‘clothes’

Nouns + Adjectives

(2.88) a. /otat/ ‘fire’ + /nîŋ/ ‘striped’ \[
\text{u}_t\text{at}' + [\text{n}_i\text{n}] \rightarrow [\text{u}_\text{ta}n'\text{n}] \]
‘smoke’

---

52 For more on compounds, see section 4.5
b. /otat/ ‘fire’ + /jēn/ ‘stinky/feces’ \[ o\text{'}tat\] \[ jēn'\] → \[ o\text{'},ta\text{'},jēn\] ‘ashes’

2.5 Prosody

In the linguistic literature, there are various different ways to analyze and represent the types of stress in world’s languages. Studies on prosodic systems have used the term ‘pitch accent’ to classify languages that either have a lexical accent system or a system in which tone and stress combine (though there is also considerable variation among scholars in how they define or characterize pitch accent). As noted by Halle & Idsaaerti (1995), the fundamental idea behind Liberman’s discussion (1975) of accent is that stress (accent) is not a distinctive feature of the segment, rather it is a phonetic manifestation to represent diverse modes of phonological grouping (1975:403), such as the relative prominence of syllables on the word level and the relative prominence of words on the phrase level. For versions from the metrical theory, such as in Halle & Vergnaud (1987), Kager (1995), and Hayes (1995), the rhythm constitutes the main cue to distinguish weak vs. strong characteristics among syllables.

Metrical theory is concerned with representing the metrical foot as a central theoretical element. According to Hayes (1995), metric structures can be divided into two sorts: iambic and trochaic. The hierarchical structure of stress is marked by bracketed grids, which illustrate (abstractly) the difference between the weak syllable and the strong one. A representation of the pattern proposed in Hayes (1995) is exemplified below, where each syllable are grouped in feet (higher metrical units). The dot marks light syllables and the x strong syllables. The moraic trochee differs from syllabic trochee, because the former counts the moras, where light syllables count for one mora and heavy syllables count for two moras,
and the latter count the syllable independent of syllable weight. As for iambic pattern, heavy syllable can make up a foot, as in (2.11).

\[
\begin{align*}
\text{Moraic Trochee:} & \quad (x .) \text{ or } (x) \\
\text{Syllabic Trochee:} & \quad (. x) \text{ or } (x) \\
\text{Iambic:} & \quad (. x) \text{ or } (x)
\end{align*}
\]

**Figure 2.11 - Foot types (Hayes 1995).**

### 2.5.1 Profile of Tupían Stress

The Tupían family consists of 35 languages, which are spoken from French Guiana to Paraguay. The descriptive literature on Tupían languages has shown that the main stress in Tupían languages is usually predictably on the final or penultimate syllable (cf. Wetzels and Meira 2010). In Araweté (in example (2.89a-c)) and Guajá (2.90d-f), the word-level stress is on the final syllable; however, in Chiriguano (2.91a-c), also a Tupí-Guaraní language, the word-level stress falls consistently on the penultimate syllable. Among the Tupían languages, there are cases of pitch-accent, as in Karitiana (Storto 1999), and of tonal languages, such as Karo (Gabas 1999) and Mundurukú (Picanço 2005). There is also the case of Suruí, a Tupí-Mondé language, in which word-level stress is unpredictable (Van der Mer 1982) (cf. Wetzels and Meira 2010).\(^53\)

---

**Final Syllable Stress**

(2.89) Araweté (adapted from Solano 2009:82)

a. /pane/ \[pa'ne\] ‘almost’
b. /haʔiwe/ \[haʔi βe\] ‘tomorrow’
c. /urukuku/ \[uruku’ku\] ‘snake sp. (surucucu)’

---

\(^53\) See this article for more on typology of stress of Tupían and other Amazonian languages.
(2.90) Guajá (Nascimento 2008:59)

a. /kaʔa/ [kaʔa] ‘jungle’
b. mutuwe/ [mutuwe] ‘morning’
c. /tamanawã/ [tamanaʔwã] ‘ant-eater sp.’

**Penultimate syllable stress**

(2.91) Chiriguano (Dietrich 1986:49)

a. /akwa/ [ˈakwa] ‘to hit’
b. /agwata/ [aˈgwata] ‘to walk’
c. /apisakwe/ [apiˈsakwe] ‘lost ear’

As for the Tuparí subfamily, Rodrigues (1999:114) argues, “in languages of the Tuparí subfamily there is salient pitch accent, but it is predictable from stress which is itself predictable from other phonological and morphological factors.” Besides Rodrigues’s analysis, there is also a preliminary analysis for the Wayoró language that says that there are pitch levels without lexical contrast identified (Moore 1999). Besides these cases, no other publication about the prosodic analysis for Akuntsú sister’s languages is known; rather, the prosodic constructions of the other Tuparían languages are yet to be determined.

### 2.5.2 Rhythmic pattern of words and phrases

In previous work, Aragon (2008) proposed that the main stress could occur either in the final or in the penultimate syllable. The questions to be addressed in this section are: (1) does the main stress fall on the penultimate or on the final syllable, and is it predictable?; (2) what are the arguments to justify the occurrence of word-level stress to be presented?; The
findings in this section are the first tentative analysis of stress assignment in Akuntsú, therefore there is room for further speculation.

Below, examples are divided up according to their number of syllables to further discuss stress patterns in this language.

A. Monosyllabic words

NOUNS

(a) /ti/ ['ti] ‘mother’
(b) /ek/ ['e̞k] ‘house’
(c) /ko/ ['ko] ‘hook’
(d) /kap/ ['kap] ‘wasp’

As for the verbs, they are not pronounced in isolation, i.e., without being included in a phrase, and, as such, verbal stress interacts with preceding and/or following function words. Some examples of verbs are illustrated in the following:

VERBS

(a) /nom tʃet/ [.nɒmˈtʃet] ‘(He) didn't leave’
(b) /te=ip/ [teˈip] ‘He came back’
(c) /apara o=i-ko/ [a,paraˈojo̞ko] ‘banana my food’
(d) /kora-kora nom aot/ [.kura,kura,nɒmaˈʔut] ‘the chicken doesn't go out’

B. Disyllabic

ULTIMATE
(a) /tawʃe/  [taw’dʒε]  ‘peccary’
(b) /niram/  [nɪɾ̩aɾ̩m]  ‘to defecate’
(c) /ek’it/  [ɛ’k’it’]  ‘honey’
(d) /k’ako/  [k’æ’ko]  ‘sweet potato’
(e) /kitap/  [ki’tap’]  ‘wax’
(f) /iki/  [i’ki]  ‘water’
(g) /kado/  [ka’ɾo]  ‘necklace’
(h) /nako/  [nã’ko]  ‘man’
(i) /ojtpe/  [ɔjt’be]  ‘hat’

**Penultimate**

(a) /bago/  [’bago]  ‘dry’
(b) /k’iri/  [’k’iri]  ‘day/clean/empty’
(c) /pera/  [’pera]  ‘to wake up’
(d) /tiri/  [’tiri]  ‘two (or more)’

**C. Trisyllabic**

**Ultimate**

(a) /birita/  [biri’ta]  ‘traíra (fish (sp.)’
(c) /komata/  [kumã’ta]  ‘beans (sp.)’
(d) /arak’i/  [ara’k’i]  ‘peanut’
(e) /kirito/  [kiri’to]  ‘spider (generic)’
(f) /ameko/  [õmẽ’ku]  ‘jaguar’
(g) /atiti/  [ati’ti]  ‘corn’
(h) /ebapa/  [eba’pa]  ‘moon’
(i) /ababa/  [aba’ba]  ‘fly (sp.)’
**Penultimate**

(a) /takirap/ [tɔˈkirap] ‘spider-monkey (sp.)’
(b) /tojítôna/ [tojˈtōna] ‘boss/Chief’
(c) /kapkaba/ [kɔpˈgaba] ‘flute (type)’
(d) /jônebo/ [jûˈnêbo] ‘lizard (sp.)’
(e) /kojôpe/ [kô.ˈjô.pe] ‘night’
(f) /amîna/ [a.ˈmî.nê] ‘knee’

**With clitics**

(a) /o=ø-kado/ [u.ˈka.dɔ] ~ [u.ˈka.ro] ‘my necklace’
   1s=R-necklace
(b) /i=ø-bitâ/ [i.ˈbi.ta] ‘its liver’
   3s=R-liver
(c) /o=ø-akôja/ [wa.ˈkû.jâ] ‘my beard’
   1s=R-beard
(d) /o=ø-akop-ka/ [waˈkopˈka] ‘my warming’
   1s=R-hot-TR

**D. Polysyllabic** (more than three syllables)

**Ultimate**

No polysyllabic lexical words were found with ultimate stress. See the behavior of nominal phrases with more than three syllables, as in the following examples:

(a) /kiakop etfe/ [kʰaˈkobe tʃe] ‘in the sun’
   sun DIFF
**Penultimate**

(a) /aramīra/ [araˈmɪra] ‘woman’
(b) /akataba/ [akaˈtaba] ‘tucum (palm fiber (sp.))’
(c) /torodita/ [tɔɾoˈrita] ‘rattlesnake (sp.)’

**Phrases**

(a) /őjpe ko-a-ra/ [,őjbeˈkara] ‘I am going to sniff snuff as usual’
(b) /o=eti ʃere-ka te/ [weˌtiˌʃereˈkate] ‘He is cutting my basket’

The stress will fall on the ultimate syllable or on the penultimate syllable, which means that it will fall on one of the last two syllables at the right edge of the lexical word, as shown in the examples. The discussion of how it falls on the penultimate or on the ultimate are presented further in this section.

 ✓ Stress is not sensitive to syllable weight.

(2.92) (a) /takirap/ [doˈkirap]’ ‘spider-monkey’
(b) /tojtōna/ [tojˈtōna] ‘boss’
(c) /kapkaba/ [kɔpˈgaba] ‘flute (four holes)’
(d) /tawtʃe/ [tawˈtʃe] ‘peccary’

 ✓ The stress will fall on the ultimate or on the penultimate syllable (predictable), which means that it will fall on one of the last two syllables at the right edge of the lexical word.

(2.93) (a) /ameko/ [omēˈku] ‘jaguar’
(b) /atiti/ [atiˈti] ‘corn’
(c) /aramīra/ [araˈmɪra] ‘woman’
(d) /akataba/  [akaˈtaba]  ‘tucum (palm fiber (sp.))’

✓ Content words tend to have more prominence in speech than function words, where the latter are often reduced.

The next sections will deal with the phonetics of stress patterns and the metrical structure of stress assignment in this language.

2.5.3 The phonetics of the rhythmic pattern

In this section, the rhythmic pattern of the language is discussed based on the phonetic characteristics of stress. The main cues to be analyzed are duration of vowels, pitch, and intensity. Based on Beckman (1986), stress here is viewed as “a phonological delimitation type of accent” (1986:1).

The duration of the vowels, the pitch, and the intensity for each syllable (table 2.16 below) were measured using the PRAAT speech analysis software. The default specifications of the program were used, a dynamic range of 60 dB and analysis window duration of five ms. (0.005 s). For pitch measurement, the pitch range setting was adjusted to 75-300Hz for male speakers and 100-500Hz for female speakers. Vowels were measured from their onset marked at the consonant release “indicated by the beginning of an increase of the amplitude and complexity of the wave” (Myers 2005:431). Initial-vowel duration was marked at the onset of the acoustic energy.
In summary, table 2.16 below shows samples of words where the values of each vowel for duration and the value of each syllable for pitch and intensity are provided\(^{54}\) (the stressed syllable of each word is in boldface).

![Table 2.16 - Sample of the phonetics of stress](image)

\(^{54}\) The pitch and intensity values for some syllables are difficult to measure due to the effect of creaky voice, hence words with no creaky voice (or minimal sign of creaky voice) were preferred for inclusion in this table.
§2.2.1.4 and §2.2.1.7), and (ii) the voicing of adjacent consonants which also tends to increase the duration of vowels (Ladefoged 2003:94).

Another phonetic characteristic to help to identify stress in this language is intensity and pitch. Pitch and intensity are related notions, and higher pitch, in most cases (with some exceptions, and the one presented in example (6) above), tends to be accompanied by higher intensity, where the higher sub-glottal pressure also causes the syllable to be louder.

In addition, there are also some phonological and morphological factors which characterize stress assignment in Akuntsú, such as: (a) the occurrence of [ɪ, ɔ, ʌ, e and ʊ] vowels is usually in unstressed position while [a, o, ɛ, æ, i, and u] in stressed position55; (b) alveolars tend to become a flap in unstressed word-final position; (c) voiceless stops tend to be lengthened in stressed syllables; and (d) the vowels in unstressed syllables in word final position tend to be devoiced when the stress falls on the penultimate syllable. These processes are exemplified in the following:

A. QUALITY SHIFTING IN UNSTRESSED POSITION

(a) /kapkaba/ [kəpˈgaba] ~ [kʌpˈgaba] ‘flute (type)’
(b) /taptot/ [tɔpˈdut] ~ [tʌpˈdut] ‘manioc’
(c) /otat/ [ɔˈtat] ~ [ʌˈtat] ‘fire’
(d) /ope/ [uˈpe] ~ [uˈpæ] ‘my skin’
(e) /kipek/ [kiˈbɛk] ~ [kiˈbek] ‘papaya’

B. FLAPPING

(a) /taptot/ ‘manioc’ + /-et/ ‘determinative’ [tɔpˈdụret] ‘the manioc’
(b) /mepit/ ‘son/daughter’ + /=erōm/ ‘negation’ [mɛpɨɾɛˈɾôm] ‘There is no son/daughter’

55 Note that this is a tendency, not a general rule.
C. STOP LENGTHENING

(a) /o=ô-pi/  
    \[ls=\text{R-foot}\]  
    \([\text{o}^\prime\prime\text{pi}] \sim [\text{o}^\prime\prime\text{bi}]\]  
    ‘my feet’

(b) /k^w\text{ato}/  
    \([\text{w}^\prime\prime\text{to}] \sim [\text{w}^\prime\prime\text{do}]\]  
    ‘alligator’

D. DEVOICING

(a) /jõnebo/  
    \([\text{j}^\prime\prime\text{nebô}]\]  
    ‘lizard (sp.)’

(b) /koboro/  
    \([\text{k}^\prime\prime\text{borô}]\]  
    ‘bowl (type)’

On the basis of those findings, it is possible to state that pitch is determined by the absence or presence of stress and the most prominent acoustic characteristic of stress in Akuntsú is high pitch, which interacts with such factors as duration and intensity.

2.5.4 Metrical analysis

An example of word-level stress in a metrical grid (Hayes 1995) is presented below. On line 1 (foot level), feet are organized where ‘x’ marks strong syllable and the dot ‘.’ marks weak ones; and on line 2 (PrWd-level) it is assigned the primary stress of the word based by the proposed rule described in (A) below:

(A) Conditions for foot formation in this language

- Foot type: iamb (\(.\ x\))
- Primary stress is on the right edge of the rightmost foot;
- No quantity-sensitivity;
- Parsing is left to right: L \(\rightarrow\) R;
• **Unparsed syllables**\(^{56}\) are allowed only if when peripheral syllables are unstressed. Syllables unparsed usually have short vowel.

• **Degenerate feet** are allowed if the foot is formed of a strong syllable, and this strong syllable carries the primary stress.

In **trisyllables** and **polysyllables** (words of more than three syllables), the stress may fall either on the second or on the first right most edge of the word. The predominant rhythmic pattern of trisyllables and polysyllables is the iambic and it is illustrated in metrical grids below. Note that ultimate unstressed syllables (usually short syllables) are unparsed and do not take part in the process of metricallity.

\[
\begin{array}{c}
( & x \\
( & . \ x) \\
\text{jò ne bo} \\
[\text{jù nebo}] \\
\text{‘lizard (sp.)’}
\end{array}
\]

\[
\begin{array}{c}
( & x \\
( & . \ x) \\
\text{ta kirap} \\
[tɔˈkɪɾap] \\
\text{‘spider-monkey’}
\end{array}
\]

In the examples below, for the first and second syllable a foot is formed according to the iambic pattern, the primary stress is assigned to the last syllable, and then the syllable is able to form a **degenerate foot**. For example, in (2.95b) the last syllable is unstressed, being **unparsed**. In (2.95b), the penultimate forms a degenerate foot, since it receives the

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\(^{56}\) Whether it is a case or not of extrametricality (syllables excluded from the metrical structure) is questionable. For now, we assume that extrametrical foot is not possible, since if we consider final unstressed syllables extrametrical, we would have to explain their behavior of forming a foot when extra elements are added to the phrase.
primary stress, and the last syllable is left apart as an extrametrical to keep the iamb pattern, as following:

(2.95) a.

\[
\begin{array}{c}
\text{( x )} \\
\text{. x) (x)} \\
\text{po ra ki} \\
\text{[pora’ki]} \\
\text{‘curassow (sp.)’}
\end{array}
\]

b.

\[
\begin{array}{c}
\text{( x )} \\
\text{. x) (x)} \\
\text{a ra mĩ ra} \\
\text{[ara’mĩra]} \\
\text{‘woman’}
\end{array}
\]

Words that have unparsed feet and degenerate feet allow optional initial-vowel or initial-syllable deletion. This allows the language to create a more symmetrical foot parsing. For example:

\[
[\text{ãɾa’mĩɾã}] \rightarrow [\text{ãnã’mĩɾã}] \rightarrow [\text{nã’mĩɾã}] \ ‘woman’.
\]

(2.96)

\[
\begin{array}{c}
\text{( x )} \\
\text{. x) } \\
\text{na mĩ ra} \\
\text{[na’mĩra]} \\
\text{‘woman’}
\end{array}
\]

Disyllabic words present either ultimate or penultimate stress, which means that they can be either iambic or trochaic. The stress pattern of disyllabic words may suggest a possible lexical stress (i.e., phonemic stress) in the language, even though the quantity of minimal pairs found may be not so convinced, as illustrated below:
However, note that there is a tendency in the language to prefer the iambic pattern\textsuperscript{57}. In cases where clitics are present, the stress assignment pattern is modified. The examples presented in (2.100) illustrate the effect of clitics in word-level stress.

\textsuperscript{57} Most of the dissyllabic words in my database have ultimate stress.
Another criterion to take into account is what happens to stress when a second word is added to a phrase, for example in the phrase /apara ka/ ‘(he/she) eats bananas.’ In this example, when the verb root is added, the rightmost syllable takes the primary stress; as a result, the final right syllable bears the stress, following an iambic pattern.

(2.101)

( x ) ( x )
( . x ) ( x ) + ( x ) → ( . x ) ( . x )
apa ra ka apa ra ka
[apəˈra] [ˈka] [aˌpaˈraːka]
‘banana’ ‘to ingest’ ‘(he/she) eats bananas’

When a word with a degenerate foot is in a discursive context, destressing takes place to form binary feet, whereas the iambic pattern is maintained. As a result, the syllable at the right edge can be extrametrical, as shown in 11(a-b). Example (11c) illustrates the metrical structure of words that do not present degenerate feet, as follows:

(2.102) a.

( x ) ( x )
( . x ) ( x ) + ( . x ) → ( . x ) ( . x )
apa ra a pe apa ra a pe
[apəˈra] [əˈpɛ] [aˌpaˈraʔapɛ]
‘banana’ ‘peel’ banana peel
‘banana’s peel’
In light of the data and discussion presented above, we can make the following generalizations about stress assignment:

- *This language has a strong tendency towards iambic patterning.*
- *Parsing is left-to-right* L → R.
- *Assign primary stress to the rightmost foot.*
- *Assign secondary stress to all other prominent foot heads on the left.*

**Figure 2.13** - Summary of stress in Akuntsų

**2.5.5 Overview of intonation**

Besides stress, another place where pitch and duration play important roles is in the domain of intonation. In this language, intonation is a cue to identify speech acts, e.g. whether an utterance is imperative, declarative or interrogative. Additionally, it is also a cue to identify focused constituents. In imperative clauses, when the imperative marker *-tfo* is not
present, the only difference between declaratives and imperatives is the intonational contour. Moreover, in yes/no questions, the intonation contour at the end of the phrase is the main cue to identify it as an interrogative utterance.

2.6 Summary

This chapter described several topics in segmental phonology, starting with a presentation of vowels, where five underlying oral and nasal vowels are present in the language. This study also includes a discussion on nasality in vowels and the process of nasalization. Nasal vowels in the language are contrastive only in stressed syllables, where underlying vowels can occur both in stressed and unstressed environments. Nasalization in the language can occur progressively or regressively.

Laryngealized vowels are then discussed. Data is presented to illustrate that creaky voice in the language is phonetically conditioned by the presence of glottal stops, stress and paralinguistic factors. In addition, this chapter also dealt with vowel length and its behavior in the language. It was found that vowel length is not contrastive. The formation of diphthongs is then presented along with the main analysis of glides. Finally, the vowels section concluded with an overview of how speech rate and stress affect vowel quality.

The description then turned to describing the distribution of consonants. A total of thirteen underlying consonants are found in this language. The glottal stop is considered a surface segment.

The distribution of syllables was also described. The syllable structure in Akuntsú has the pattern (C)V(C)(C). Structure types of CVC, CV, VC, and V are found in the language. Further on, the main topics in morphophonology were presented. Finally, the analysis of
rhythmic pattern of words and phrases was described, where Akuntsú was described as an iambic language, where primary stress is assigned to the right-most foot of a word or phrase.
CHAPTER 3
WORD-STRUCTURE AND GRAMMATICAL CATEGORY

3.1 Introduction

This chapter provides an overview of the word-structure and grammatical categories found in Akuntsú. It provides basic definitions used in the subsequent chapters and an overview of the grammatical categories available in this language.

Akuntsú is mostly a suffixing language, though its number of affixes and suffixes are relatively small if compared to some other South American languages. Words in this language tend to be composed of one single morpheme. Inflection, derivation and compounding are processes found in the language, and derivation and compounding are productive in word formation.

The first section discusses the morphological structure (§3.2), giving an overview of the morphological structure of the language, describing the main characteristics of clitics, affixes and particles. Next, a typological overview of the morphological processes among Tupían languages is described, with comparison to the morphological processes described in this study for Akuntsú. The relational prefixes are introduced, showing the main function of these prefixes in this language. The second section briefly presents an overview of the lexical classes in Akuntsú (§3.3), showing the main function of nouns, verbs, adjectives, adverbs, pro-forms, particles, postpositions, ideophones and interjections. A summary is provided at
3.2 Morphological structure

In this section, the definition of a phonological and grammatical word will be discussed based on the features and processes identified in Akuntsú. In addition, clitics, affixes and particles will be defined.

3.2.1 Overview of the phonological and grammatical word

In Akuntsú, a PHONOLOGICAL WORD needs to bear a foot at its right edge, i.e., needs to receive a primary stress that falls at the right-most edge of the word. Phonological word is then defined as a syntactic unit formed by the root and any grammatical affix integrated with the root; and as such, the phonological word can be identified by (a) prosodic features and (b) phonological processes (Dixon and Aikhenvald 2002).

(A) PROSODIC FEATURES: Each phonological word has a primary stress, and when words form a phonological phrase, the primary stress goes on the right-most word. Clitics are integrated into the phonological word, causing stress shift. Enclitics are usually unparsed while particles or affixes are usually parsed into the foot, depending on their syllabic position within the phrase. There is no difference in stress assignment between nouns and verbs. The stress assignment found in verbal and nominal constructions depends on their combination with the different grammatical morphemes found in the language (see §2.5 for stress assignment).

In a compound, two independent “words” are joined to form two phonological words that together form one semantic unit, a lexical entry. As with all other phonological phrases encountered in this language, the primary stress of compounds is assigned to the right-most
component in the compound and the main stress of other components is reduced to secondary. That is, the stress of the first conjunct of the compound is reduced to secondary stress level (see §2.4.5 for compounding).

(B) PHONOLOGICAL PROCESSES: The phonological traits used to identify phonological words are related to morphophonemic processes: for example, vowel deletion, voicing, and consonant reduction (see §2.4). In this language, these types of processes are restricted to phonological words and they can identify whether or not a root and the attached morphemes are integrated into the same phonological word.

The GRAMMATICAL WORD is composed of a root with or without other grammatical element. The grammatical element can be either a bound morpheme (affixes or clitics) attached to the root or can be a phonologically free morpheme, as in the case of particles. In other words, the root forms the basis of the grammatical word, taking one or more bound morphemes.

3.2.2 Clitics, affixes and particles

This language exhibits few bound morphemes when compared to other Amazonian languages. These bound morphemes can be divided into clitics and affixes. Clitics and affixes are distinguished in this language based upon the criteria proposed by Zwicky (1085), Zwicky and Pullum (1983), Anderson (2005) and Bickel and Nichols (2007).

By definition, clitics are phonologically and grammatically dependent on their roots (hosts). The phonological dependence is what differentiates clitics from particles, as well as
from non-cohering affixes\textsuperscript{58}. In addition, the main difference found between affix and clitic is that the latter is not limited to a specific part of the speech, i.e., it is not governed by the grammatical category of the stem to which it is attached. This means that clitics are not restricted to occurring when attached to a specific grammatical element as affixes are. For example, in Akuntsú, dependent personal pronouns, clitic-like morphemes, can be attached to any verb independently of their grammatical relation to that verb, as well as to nouns and postpositions. Besides personal pronouns, there are other clitics in the language, which express different grammatical functions. The possible clitics found in this language are: PROCLITICS (clitics that precede the root) and ENCLITICS (clitics that follow the root).

However, let us show in this section some of the characteristics of pronominal markers in the language. Based upon the criteria proposed by Zwicky and Pullum (1983) the personal pronouns\textsuperscript{59} in Akuntsú exhibit a clitic-like behavior. The Zwicky and Pullum's criteria are reproduced below:

A. Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection

B. Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups.

C. Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups.

D. Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups.

\textsuperscript{58} Cohering affixes, like clitics, are phonological dependent to a host (Booij 2007:166).

\textsuperscript{59} Note that in this chapter when I talk about personal pronouns as clitic-like, I only refer to the first, second and third person singular, as well as the third coreferential pronoun, which are the only pronouns that fit clitic characteristics.
E. Syntactic rules can affect affixed words, but not clitic groups.

F. Clitics can attach to material already containing clitics, but affixes cannot.

As described below only criteria A, B and C are conclusive:

**Criterion A:** In Akuntsú, personal pronouns can be attached to nouns and verbs. This means that the personal pronouns can be attached to words of different lexical categories and are not restricted to a specific element, as affixes are. Dependent pronouns in this language are freely attached to any lexical category. Thus, personal pronouns based on this criterion would be characterized as clitic-like rather than affix-like.

**Criterion B:** According to this criterion, dependent pronouns would be considered clitic-like, because they can be attached to any particular verb independently of its grammatical relation. This criterion means that clitics do not “refuse selectively to appear (in the case of gaps) (...) since they have no access to the internal properties of the specific lexical elements with which they combine” (Anderson 2005:34).

**Criterion C:** Affixes behave differently according to the element to which they are attached, whereas clitics do not. This difference is due to the fact that affixes are “introduced in the lexicon and are performed by word-formation rules” whereas clitics are introduced post-lexically (Anderson 2005:34). In Akuntsú, there are no cases where the association of personal pronouns with verbs or nouns shows an unexpected phonological form (3.1a). Affixes, on the other hand, are able to change the phonological form of their stems (3.1b).

(3.1) a. o=atʃo-a
1s=bathe-THV
‘I bathe’
b.  \( \text{on } i=ko-a \rightarrow [i\text{k}a] \)
    1s 3s=ingest-THV
    ‘I eat it’

The remaining criteria are not conclusive for determining whether personal pronouns are clitics or affixes. Besides the criteria proposed by Zwicky and Pullum (1983), there are other arguments that might help to understand the (morpho)syntactic status of the dependent personal pronominal markers in Akuntsú: for example, the fact that dependent pronouns have lexical properties, and that personal pronouns are not part of the noun phrase when a full nominal form can replace them. These dependent pronouns are therefore clitic elements due to the fact that, unlike affixes, they do not form morphological and syntactic units with their hosts; that is, they correspond to elements that can be expressed as independent words (see details in section 3.2.4 on relational prefixes).

On the other hand, particles are here considered phonologically and morphologically free forms, i.e., they can stand independently on their own. They may occur at the beginning or at the final position of a phrase. The template of how clitics, affixes and particles are attached to their roots is presented below. The figure 3.1 illustrates the nominal root template, as following:

\[
\text{Figure 3.1 - Nominal root template.}
\]

(3.2) a.  \( o=t-ek \quad \text{ete} \)
    1s=R-house REL
    ‘It is about my house’
b. \( e=\theta\text{-top} \quad te \quad Konibu \)
   \( 2s=R\text{-father} \quad FOC \quad Konibu \)
   ‘Your father is Konibu’

c. \( o=\theta\text{-ti} \quad te \quad Aramira \quad o=\theta\text{-ti} \quad jê \)
   \( 1s=R\text{-mother} \quad FOC \quad Aramira \quad 1s=R\text{-mother} \quad DEM \)
   ‘My mother is Aramira, my mother is this one’

The template of how clitics, affixes and particles are attached to the verbal root is illustrated here.

\[
\text{(particle) (proclitic)}=\text{(prefix)-ROOT-(suffix)}=\text{(enclitic) (particle)}
\]

**Figure 3.2 - Verbal root template.**

(3.3) a. \( o=t\text{het-a=}ra \quad kom \)
   \( 1s=\text{leave-THV-HAB} \quad PROJ \)
   ‘I will leave’

b. \( taw\text{tfe} \quad o=i\text{-mi} \)
   peccary \( 1s=\text{OBJ.NMLZ-kill} \)
   ‘my hunted peccary’

Literally: ‘peccary my killing (my hunted thing)’

### 3.2.3 Morphological processes

The morphological processes across Tupían languages, including Akuntsú, involve primarily inflection, derivation, and compounding (Rodrigues and Cabral 2012). Tupian languages also present iconic morphological processes involving reduplication, which is considered a productive process in some of the Tupian families, including Akuntsú (see
§5.11.4 for further details. Based on the discussion of morphological aspects of Tupian languages, it is possible to infer some general contributions that the Tupian languages have made to typology generally and to the description of Akuntsú itself.

**Inflectional Morphology** in Akuntsú includes relational affixes and modality. Modality markers occur with verbs (or verb phrases — they are often particles or suffixes), distinguishing among indicative, gerund, imperative, and subjunctive, though only indicative and imperative moods are presented in this study. Note that indicatives are often called declaratives (statements) in analyses of Tuparian languages.

I would like to recall that the pronominal markers are considered clitics in this language, and as such they fit into neither inflection nor derivation processes, though they have grammatical functions that affect the overall meaning of the pronominal and its host. Personal pronouns are divided into two classes, where one functions as absolutive markers, and the other as ergative markers. The coding of grammatical roles is indirect; core arguments are cross-referenced in transitive and intransitive verbs by pronominal markers.

**Derivational Morphology** involves markers of valence-changing and meaning-changing. In Akuntsú, derivational morphemes apply to nouns and verb classes, through suffixation or prefixation. There are some main types of derivational process found, namely: (a) derivations marked on verbs: reflexives, causative markers \( m\delta- \sim \delta- \), and nominalizer affixes, for instance object nominalizer \( i- \), and circumstance nominalizer \(-ap \) and; (b) derivations marked on nouns, for example the verbalizer suffixes.

---

60. Ablaut/apophony (change by vowel alternation) wasn’t found in this language.

At this point in the discussion, let us summarize the main differences found between inflectional and derivational process in Akuntsú\(^{62}\). However, note that there are few affixes in the language and the boundary between inflection and derivation is not always so straightforward. The main characteristics found in inflectional processes that differentiate them from derivational ones are described as following:

<table>
<thead>
<tr>
<th>INFLECTION VS. DERIVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) <strong>INFLECTION</strong> results in the same word with a different form (does not change its basic meaning);</td>
</tr>
<tr>
<td>(2) <strong>INFLECTION</strong> does not change the lexical category, i.e., it only adds specifications to a word or emphasizes certain characteristics of a specific meaning of the word. For instance, by adding the nominalizer <em>-ap</em> to the verb, it changes the lexical category of the stem from noun to verb, and is therefore a derivational affix, not inflectional.</td>
</tr>
<tr>
<td>(3) <strong>INFLECTION</strong> is obligatory in some situations (at least) while <strong>DERIVATION</strong> is optional.</td>
</tr>
</tbody>
</table>

**Figure 3.3** - Inflection versus Derivation.

**COMPOUNDING** is a word formation process that includes combinations of the free stems joined to create compound words: [**NOUN-NOUN**] and [**NOUN-ADJECTIVE**]. Among other Tupían languages, there are also compounds involving [**NOUN-INTRANSITIVE.VERB**], and [**NOUN-TRANSITIVE.VERB**]; the last is found only in four of the Tupían subfamilies: Mawé, Awetí, Tupí-Guaraní and Mundurukú (Rodrigues and Cabral 2012:539).

\(^{62}\) This discussion is based on Bickel and Nichols (2007).
ICONICITY refers in this study to ‘the phenomenon that the meaning of a linguistic expression is reflected by its formal structure’ (Booij 2007:314). An instance of word formation process that is often iconic is REDUPLICATION; this process is found in nouns and verbs. In Akuntsú verbs, this process also assigns aspect (see §5.11). An example of iconicity in Akuntsú is seen in their diminutive and augmentative markers. These two derivational markers are typologically often considered sound-symbolic, in the sense that “high closed vowels tend to be employed in diminutives, while augmentatives tend to use low open vowels” (Aikhenvald 2007:23).

3.2.4 Relational prefixes

Rodrigues used this notion for descriptions of the Tupían languages (Rodrigues 1981), especially for the Tupí-Guaraní languages in which the phenomenon is clearly observed in paradigms (Cabral 2001). This morphosyntactic process was described in many Tupían languages, including e.g. Mundurukú (Gomes 2006), Sateré-Mawé (Rodrigues 1990), Guajá (Magalhães 2007), and Araweté (Solano 2009). Note, however, that this is not found only in Tupían languages, but it was also noted in Cariban languages and in some languages of the Macro-Jean family (Rodrigues 1990, cf. Corrêa da Silva 2010:225)63.

The main function of relational prefixes is to indicate whether the dependent element is syntactically contiguous in a possession construction, marking the relation between the nucleus and its dependent. Thus, the relational prefixes indicate whether the possessed noun is or is not contiguous to its possessor or if the argument(s) of the verb is/are contiguous or not to its/their governing verb within a syntactic unit (Rodrigues 1999, Cabral 2001).

63 For Proto-Tupían, it was postulated three relational prefixes: **t~ Ø (R1'), **i~ c- (R2'), **m~ Ø~ t- (R4'), where R4 indicates that its determiner is generic and human (Rodrigues and Cabral 2012:511).
3.2.4.1 Relational prefixes in the Tuparían subfamily

Relational prefixes have been described in two of the five Tuparían languages: Makuráp (Braga 2005) and Tuparí (Caspar and Rodrigues 1957, Alves 2002, 2004).

In Makuráp, for example, there are two types of relational prefixes, which are responsible for dividing the nouns into two different classes according to their combination with relational prefixes. The possible relational prefixes in Makuráp are $R_1$ and $R_2$. The first is responsible for indicating whether or not the argument of the verb or the possessor of a noun is contiguous to its nucleus in a syntactic constituent; the second, $R_2$, is responsible for indicating that the dependent element does not form a syntactic unit with its nucleus — with its possessed noun or its verb. Makuráp's relational prefixes are divided into four classes: class I, class II, class III and class IV\(^\text{64}\).

The classes (not only in Makuráp but in other Tupian languages too) are organized according to the combination of the relational prefix with each nominal thematic class, varying according to the phonetic nature of the root that the relational prefix is attached to.

\(^{64}\)Braga calls the $R_1$-PRC and $R_2$-PRCN.
<table>
<thead>
<tr>
<th>Class</th>
<th>R¹</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>tf- [~ j-]</td>
<td>t-</td>
</tr>
<tr>
<td></td>
<td>o+j-aj-t</td>
<td>t-ay-en</td>
</tr>
<tr>
<td></td>
<td>1ps+PRC-tooth-GEN</td>
<td>PRNC-tooth-GEN</td>
</tr>
<tr>
<td></td>
<td>‘my tooth’</td>
<td>‘his/her tooth’</td>
</tr>
<tr>
<td>Class II</td>
<td>o-</td>
<td>i-</td>
</tr>
<tr>
<td></td>
<td>o+o-akare-t</td>
<td>i-akare-t</td>
</tr>
<tr>
<td></td>
<td>1ps+PRC.head-GEN</td>
<td>PRNC.head-GEN</td>
</tr>
<tr>
<td></td>
<td>‘my head’</td>
<td>‘his/her head’</td>
</tr>
<tr>
<td>Class III</td>
<td>w-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o+w-okap-et</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1ps+PRC-radio-GEN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘my radio’</td>
<td></td>
</tr>
<tr>
<td>Class IV</td>
<td>o-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o+o-kat-et</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1ps+PRC-body-GEN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘my body’</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.1 - Makuráp relational prefixes (adapted from Braga 2005)

Table X above shows how the relational prefixes are organized in Makuráp according to their noun class. Examples below help to identify the difference between R¹ and R² in this language:

**Makuráp (adapted from Braga 2005)**

(3.4) a. \([Mario \text{ tf-ek-et}]_{NP} \text{ tok-ng-a}\)

Mário R¹-house-GEN build-EFF-IMPERF

‘They have built Mário’s house’

b. \(Mario \text{ [t-ek-et]}_{NP} \text{ tok-ng-a}\)

Mário R²-house-GEN build-EFF-IMPERF

‘Mário has built his (somebody else’s) house’

---

65 Braga (2005:48-53) leaves blank the R² column of class III and IV. She affirms that for nouns grouped in these classes the difference between R¹ and R² is neutralized, and as a consequence it may create ambiguity readings.

66 I did not change the original abbreviations: GEN ‘génitif’ EFF ‘effective’ IMPERF ‘imperfectif’ (Braga 2005).
According to Alves (2004), in Tupari, there are two relational prefixes R¹ and R², divided into three thematic classes: Class I, Class II and Class III. These relations are described in the table below.

<table>
<thead>
<tr>
<th>Class</th>
<th>R¹</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>ø-</td>
<td>s-</td>
</tr>
<tr>
<td>koepa Ø-epa</td>
<td>moon R¹-eye</td>
<td>s-epa</td>
</tr>
<tr>
<td>‘eyes of the moon’</td>
<td></td>
<td>‘someone’s eyes’</td>
</tr>
<tr>
<td>Class II</td>
<td>ø-</td>
<td>i-</td>
</tr>
<tr>
<td>Pabit Ø-a:pe</td>
<td>Pabit R¹-path</td>
<td>i-a:pe</td>
</tr>
<tr>
<td>‘Pabit’s path’</td>
<td></td>
<td>‘someone’s path’</td>
</tr>
<tr>
<td>Class III</td>
<td>h-</td>
<td>i-</td>
</tr>
<tr>
<td>toto h-ayp</td>
<td>grandfather R¹-son</td>
<td>i-ayp</td>
</tr>
<tr>
<td>‘Grandfather’s son’</td>
<td></td>
<td>‘his son’</td>
</tr>
</tbody>
</table>

Table 3.2 - Tupari relational prefixes (adapted from Alves 2004).

### 3.2.4.2 Akuntsú relational prefix and noun phrases

Aragon (2008), by following the description suggested in Rodrigues (1996), described one type of relational prefix for Akuntsú: R with two thematic classes, namely class I and class II, which is cognate to relational prefixes found in other Tuparian languages, as illustrated in the above tables. The contiguity expressed by the relational prefix is structural. The relational R expresses the contiguity between the two elements within the same phrase. So far, only two thematic classes were clearly identified, the class I represented by a zero morpheme and the class II by t-.
Note that this study doesn't describe all the lexical classes that occur with each thematic class. To do so, it would need an accurate lexicographic investigation, which is not the purpose of the present work.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>ø-</td>
</tr>
<tr>
<td>Class II</td>
<td>t-</td>
</tr>
</tbody>
</table>

Table 3.3 - Akuntsú relational prefixes (Aragon 2008).

In Akuntsú, the main function of this prefix is to indicate contiguity between the possessor and the possessed element within a syntactic unit. Compare example (3.5a-b) where example (3.5a) illustrates a non-possessor relation, while example (3.5b) indicates the contiguity between possessor and possessed noun.

(3.5) a. jë ep  
     DEM  leaf  
    ‘this leaf’

b. jë t-ep  
    DEM  R-leaf  
    ‘this one's leaf’

Dependent pronouns always precede the relational prefixes in genitive (possessive) constructions. A noun phrase can also replace person markers and a dependent pronoun cannot co-occur with the NP, as shown in the phrase considered non-acceptable by the speakers:

(3.6) *[Pupák i=t-ek]NP  
Pupák 3s=R-house  
‘Pupák’s house’
The examples below provide more illustrations about the behavior of the R relational prefix in Akuntsú, both with class I and with class II.

**R CLASS I**

(3.7) a. \([o=\emptyset-anam]_{NP}\)  
1s=R-head  
‘My head’

b. \([e=\emptyset-mepit]_{NP}\)  
2s=R-son/daughter of woman  
‘Your daughter’

c. \([o=\emptyset-kado]_{NP}\)  
1s=R-necklace  
‘My necklace’

d. \([aw-aw \emptyset-arape]_{NP}\)  
baby R-sling  
‘baby’s sling’

e. *Konibu* \(\emptyset-ajfi\) *Arima*  
*Konibu* R-wife *Arima*  
‘Konibu's wife is Arimira’

f. \(o=\emptyset-atap\ \text{kop}\)  
1s=R-hair red  
‘My red hair’

**R CLASS II**

(3.8) a. \([Pupak \ t-ek]_{NP}\)  
Pupak R-house  
‘Pupak’s house’

b. \([i=t-ek]_{NP}\)  
3=R-house  
‘His/her house’
Among the Tupian literatures, there are some analyses that describe what are identified as relational prefixes in some Tupian languages, as a mark of third-person personal pronouns. The issue is that relational prefixes refer to third person elements, and the analyses can be trick.

When there is no contiguity element to form a syntactic unit of the possessor and the possessed noun, there is no need for the appearance of the relational prefix. Compare the word for ‘house’ (in bold) with no relational prefix to the following phrases where the word ‘house’ appears with R relational prefix (3.9):

(3.9)  ek  no  jẽrom  otfe  t-ek  no  jẽrom  ke  t-ek
       house  other  DEM  1EXCL R-house other  DEM  DEM R-house
       ‘The other house is there, our other house is there, that one’s house’

       o=t-ek  emo
       1s=R-house  also
       ‘and my house too.’

Compare the below example where the relational prefix occurs in the NP (3.10a) with that where the relational prefix is absent (3.10b).

(3.10) a.  ep  ko-a  jẽ
       leaf  ingest-THV  DEM
       ‘This one eats leaf’

See for example Galúcio (2001), Rose (2003), and Jensen (1999).
3.3 Overview of grammatical categories

The purpose of this section is to introduce the parts of speech (lexical categories) found in Akuntsú to give some insight into their distribution and organization in the language. The analysis of parts of speech in this language mostly follows Schachter and Shopen (2007) and Givón (2001).

The grammatical categories (parts of speech) are lexical classes, which have different grammatical functions in the language. They are divided into closed and open classes. The open word classes found in Akuntsú are nouns, verbs, adjectives and adverbs. The nouns and verbs are the major open class categories, and adjectives and adverbs are smaller ones. Thus, according to their pragmatic functions, nouns tend to function as arguments, verbs tend to function as predicates, and adjectives as attributes. On the other hand, according to their grammatical function, nouns tend to combine with grammatical categories that denote for example, case, while verbs tend to combine with categories that denote aspect, modality, and voice. Adjectives may follow certain categories of nouns or verbs, but not all them.

The closed classes are composed by pro-forms, particles, postpositions, ideophones, and interjections. The pronouns are divided into two main classes, the independent and dependent pronouns. The dependent pronouns are not morphologically free morphemes; they must be cliticized to either a member of the verbal category or of the noun category (or to postpositions). The demonstratives in this language express orientation with relation to the speaker or listener, expressing distance and position. Particles may convey aspectual, focus,
and negation meanings, and the way that events end up in the discourse. Ideophones\(^{68}\) are very common in the language and play an important function for communicative purposes between Akuntsú people and non-Indians. Interjections are words that express overflow of emotion and speaker attitude; unlike ideophones, the interjections cannot be used within syntactic constructions.

### 3.3.1 Nouns

The nouns are here considered the most time-stable class expressed as identifiable masses. They designate stable entities and they function as arguments or heads of arguments as shown in the bold words (3.11) below.

**Heads of Arguments**

(3.11)  
\[
\text{Konibu} \quad \text{apara} \quad \text{ko-a} \\
\text{Konibú} \quad \text{banana} \quad \text{ingest-THV} \\
\text{‘Konibú eats banana’}
\]

Furthermore, nouns can also function as predicates, as seen below in the boldfaced words:

**Nouns as Predicates**

(3.12)  
\[
\text{kitfe} \quad \text{aramira} \\
1\text{PL.INCL} \quad \text{woman} \\
\text{‘We are woman’}
\]

Nouns can also be the head of postpositional phrases (3.3a-b).

---

\(^{68}\) Ideophones are here described as "marked words that vividly depict sensory events" (Dingemanse 2011:83).
The categories of nouns included in Akuntsù are: proper, common, dependent (inalienable) and independent (alienable) nouns. Morphologically, common nouns differ from proper nouns. ‘Proper’ nouns do not take the determinative marker, as shown in (3.14).

COMMON

(3.14) \textit{taipik ø-ok"aj} \textit{t=ø-ok"aj-et} \\
{holler.monkey} \textit{R-tail} \textit{3s=R-tail-DEF} \\
‘Holler's monkey tail, its tail’

PROPER

(3.15) *\textit{Pupak-et} \\
\textit{Pupak-DEF} \\
‘the Pupak’

DEPENDENT (INALIENABLE) NOUNS

These are nouns that require a possessor, i.e., nouns that are morphologically dependent (inalienably possessed). See some examples of body parts, plant parts and kinship parts:

(3.16) \textbf{Body parts} \hspace{2cm} \textbf{Plant parts} \hspace{2cm} \textbf{Kinship terms} \\
\textbf{a.} \textit{o=ø-anâm} \hspace{2cm} \textit{apâra ø-pe} \hspace{2cm} \textit{ki=ø-ti} \\
\text{1s=R-head} \hspace{2cm} \text{banana R-peel} \hspace{2cm} \text{1PL..INCL=R-mother} \\
‘my head’ \hspace{2cm} ‘banana’s peel’ \hspace{2cm} ‘our mother’
INDEPENDENT (ALIENABLE) NOUNS

Alienable nouns are those where the inclusion of a possessor is not obligatory.

(3.17)  

a. \( k^wai \)  
\( 1s=R-stone \)  
‘my stone’

b. \( ororo \)  
‘cotton’

In certain pragmatic contexts these nouns may be possessed, though it is not obligatory. They may be possessed when they begin to be part of the speakers’ personal/daily activities. In (3.18a) the stone placed at the fireplace is used as a support for their pots, while in (3.18b) the cotton is part of the material used to weave their bracelets.

(3.18)  

a. \( o=\theta-k^wai \)  
\( 1s=R-stone \)  
‘my stone’

b. \( o/t\theta o-ororo \)  
\( 1\text{PL.EXCL} R-cotton \)  
‘our cotton’

3.3.2 Verbs

The verbs are classes of words that denote action, processes, or states. The arguments may codify a subject or an object. Verbs obligatorily receive pronominal clitic agreement markers, though some exceptions are found; for example, when the subject is third person or the subject was cited earlier in the discourse, the verbs in such cases do not take overt
pronominal markers. Verbs may have only one argument (intransitive verbs), two arguments or they may have three arguments: a subject, a theme, and a recipient (transitive verbs).

**INTRANSITIVE**

The intransitive verb below takes one obligatory argument, the subject pronoun \textit{ki=1PL.INCL}' as shown in boldface:

(3.19) \textit{ki=ts{\textacute}et-a=ra} \quad \textit{kom}
\begin{tabular}{l}
\textit{1PL.INCL}=leave-THV=HAB \quad \textit{PROJ}
\end{tabular}

‘We will leave (as usual)’

**TRANSITIVE**

**TWO-ARGUMENTS**

The verb below requires two arguments: the subject \textit{Pura} and the object pronoun \textit{i=3s}, as following:

(3.20) \textit{Pura i=ko-a} \quad \textit{te}
\begin{tabular}{l}
\textit{Pura 3s=ingest-THV} \quad \textit{FOC}
\end{tabular}

‘Pura eats it’

**THREE-ARGUMENTS**

In the example below, the verb \textit{\textbar} ‘to give’ may allow three arguments: the subject \textit{T\textbar\textbaruj}, the object \textit{kijtpit} ‘fish’, and an indirect object (not obligatory) \textit{Kani}:

(3.21) \textit{T\textbar\textbaruj kijtpit} \textit{\textbar}a-\textit{a} \quad \textit{te} \quad \textit{Kani=b\textbar}\textit{b\textbar}
\begin{tabular}{l}
\textit{T\textbar\textbaruj fish} \quad \textit{give-THV} \quad \textit{FOC} \quad \textit{Kani=DAT}
\end{tabular}

‘T\textbar\textbaruj gave fish to Kani’

Verbs can be nominalized, and as such, they can occupy the position of arguments in the sentence:
(3.22) Karow et-ap t-ek iw  
    Carol sleep-NMLZ R-house rotten/ugly/bad  
    ‘Carol's bed is damaged’

3.3.3 Adjectives

The class of adjectives includes words that describe attributes or qualities. This class is here defined as a class that modify nouns — a notional definition that was proposed for other languages as well. Additionally, adjectives can also function as predicate complements. Examples of adjectives modifying nouns and adjectives as predicate complements follow:

**ADJECTIVE AS NOUN MODIFIERS**

(3.23) a. potsek niŋ  
    thing striped  
    ‘Striped notebook’

    b. pero ø-okʷaj t=ø-okʷaj perek  
    macaw R-tail 3S=R-tail long  
    ‘Macaw's tail, its long tail’

**ADJECTIVES AS PREDICATES**

(3.24) a. Tjarúj ten te  
    Tjarúj strong FOC  
    ‘Tjarúj is strong’

    b. t=akop te  
    3S=hot FOC  
    ‘It is hot’  
    Context: after touching the hot pan.
A list of adjectives encountered in the language is given in table 3.4 below.69

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tfokîn</td>
<td>‘small’</td>
<td>ika</td>
</tr>
<tr>
<td>perek</td>
<td>‘wide/long’</td>
<td></td>
</tr>
<tr>
<td>aôn</td>
<td>‘round/square’</td>
<td></td>
</tr>
</tbody>
</table>

There are also two morphemes that express dimension -atfo ‘big’ and -tin ‘small’.

<table>
<thead>
<tr>
<th>AGE</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pagop</td>
<td>‘new (thing)’</td>
<td></td>
</tr>
<tr>
<td>pagop</td>
<td>‘young.man’</td>
<td></td>
</tr>
<tr>
<td>kēm toka</td>
<td>‘young.woman’</td>
<td></td>
</tr>
<tr>
<td>papa</td>
<td>‘woman (after having a child, middle-aged)’</td>
<td></td>
</tr>
<tr>
<td>kipi</td>
<td>‘elder/worthless’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLOR</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kop</td>
<td>‘red’</td>
<td>tierep ‘green’</td>
</tr>
<tr>
<td>kʷerep</td>
<td>‘black/dark’</td>
<td></td>
</tr>
<tr>
<td>tfaro</td>
<td>‘yellow’</td>
<td></td>
</tr>
<tr>
<td>pak</td>
<td>‘white’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHYSICAL PROPERTY</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ten</td>
<td>‘hard/heavy/strong’</td>
<td>nîŋ ‘striped’</td>
</tr>
<tr>
<td>kipitîkʷ/pekâ</td>
<td>‘cold’</td>
<td>tip ‘soft’</td>
</tr>
<tr>
<td>akop</td>
<td>‘hot’</td>
<td>tōm ‘deep’</td>
</tr>
<tr>
<td>it</td>
<td>‘unripe’</td>
<td>tjôbe ‘delicious’</td>
</tr>
<tr>
<td>jên</td>
<td>‘stinky’</td>
<td>kire ‘not delicious/bad’</td>
</tr>
<tr>
<td>kop</td>
<td>‘ripe’</td>
<td>kon ‘sweet’</td>
</tr>
<tr>
<td>ereeto</td>
<td>‘skinny’</td>
<td>pekâj ‘bitter’</td>
</tr>
<tr>
<td>ko</td>
<td>‘wet’</td>
<td></td>
</tr>
<tr>
<td>bago</td>
<td>‘dry’</td>
<td></td>
</tr>
<tr>
<td>tâm</td>
<td>‘full’</td>
<td></td>
</tr>
<tr>
<td>kʷiri</td>
<td>‘empty/clean’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VALUE</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>petfe</td>
<td>‘good (non-human)’</td>
<td></td>
</tr>
<tr>
<td>iw</td>
<td>‘ugly/rotten/bad’</td>
<td></td>
</tr>
<tr>
<td>tʃame</td>
<td>‘beautiful/good (human)’</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.4 - Sample of semantic types of adjectives roots

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69 The semantic division below follows Dixon (2004:3)

70 The word kipitîk may be considered a lexicalized word formed from ki ‘liquid’ + pîtîk ‘cold’.
In Akuntsú, there are few true adjective words (as presented in the above table), in comparison to the number of nouns and verbs found in this language. They would be considered a closed class due to its finite number of words; however, I will keep them into the open class, since they share some characteristics with nouns and verbs (see chapter 6 for further details).

3.3.4 Adverbs

The adverbs, like the adjectives, form a small class, diverging from the other prototypical open classes, the noun and verb classes. Adverbs are characterized as modifiers of verbs, adjectives, and other adverbs. Besides adverbial roots, the language uses reduplication and ideophones to express some adverbial notions, especially manner and degree. Morphologically, adverbs do not differ from adjectives, especially those called manner adverbs and locative adverbs. However, they are included into a separate class by means of syntax, since only nouns and adjectives can function as arguments of verbs. See examples below where the adverbs are in bold font.

**ADVERB ROOT CODING TEMPORAL POINT**

(3.25) a. *erape* o=kʷat-a *kom*
    tomorrow 1s=leave-THV PROJ
    ‘Tomorrow I will leave’

b. *Adriano* te=ita *kirē*
    Adriano 3COR=arrive today/now
    ‘Adriano arrives today’

---

71More on adverbs in chapter 6.
REDUPLICATION AND IDEOPHONES - MANNER ADVERB

(3.26)  \( iki \ k’at-k’at-ka \)
        water boil-boil-TR
        ‘The water os boiling (vigorously)’

In addition, locative expressions also present adverbial function, such as place, direction, and manner. An example of this case is seen in (3.27) below:

LOCATIVE MEANING

(3.27)  \( potfek \ mo-mo \ te=jä \ o=t-ek \ etfe \)
        thing IDEO-RED 3COR=sitting 1s=R-house DIFF.
        ‘The notebook stayed for long time in my house’

3.3.5 Pro-forms

There are pro-forms used in this language to replace nouns or noun phrases. The pro-forms are divided into personal pronouns and demonstratives. The pro-forms refer to the arguments of a predicate grammatically, and not lexically as the nouns do.

3.3.5.1 Personal pronouns

The personal pronouns are divided into two sets: dependent and independent pronouns. There is also a set of emphatic pronouns for first and second person (only). Below some of the pronouns are exemplified in their syntactic positions.

SUBJECT OF TRANSITIVE

(3.28) a.  \( kitfe \ tawtfe \ ko-a \)
        1PL.INCL peccary ingest-THV
        ‘We eat peccary’
b.  **en**  \( i=korom-ka \)
2s  3s=cut-\text{TR}
‘You cut it’

**SUBJECT OF INTRANSITIVE**

(3.29)  \( o=et-a-ra \quad o=toa \)
1s=sleep-\text{THV-HAB}  1s=lying
‘I am going to sleep’

**OBJECT**

(3.30)  \( k'\text{a} \quad te \quad i=pit-ka \)
pot  3s  3s=scrape-\text{TR}
‘The pot, she is scraping it’

**GENITIVE RELATION**

(3.31)  \( o=\text{o-kere} \quad \text{petfe} \)
1s=R-rib  good
‘My good rib’

**EMPHATIC**

(3.32)  \( \text{er}\text{e} \quad e=\text{o-po} \quad tf\text{oga} \quad \text{er}\text{e} \)
2s.\text{EM}  2s=R-hand  bite  2s.\text{EM}
‘You bite your hand’

### 3.3.5.2 Demonstratives and indefinite pronoun

The demonstratives in this language express their deictic reference point, showing their space location in relation to the speech act (distance/person-oriented). The demonstratives also indicate the position (laying, sitting or standing) of the referent point. Demonstratives can occur as noun specifiers or as predicate complements (more on demonstratives in §4.8.2). Some examples are described below:
DEMONSTRATIVE PRONOUNS

(3.33) a.  otfi t-ek  no  jërom  tfok
     1PL.EXCL R-house  other  DEM  build
     ‘Our other house, they built that one’

   b.  jë  kem+ki  jë  kem+ki=rõm
     DEM  breast+liquid  DEM  breast+liquid=NEG
     ‘This one has breast-milk, this one doesn’t have breast-milk’

In Akuntsú, there is also the indefinite pronoun no ‘other’ (more on this pro-form in §4.8.3)

INDEFINITE PRONOUN

(3.34)  e=t-et  no?
     2s=R-name  other
     ‘What is your other name?’
Lit: Is there your other name?

3.3.6 Particles

The particles in Akuntsú are classified as phonologically independent words. The particle can be linked up in broader constituents with different sorts of predicates according to their function. Particles are defined here as a free-standing morpheme that do not undergo any derivational or inflectional process. Semantically, it is hard to define them because they are a heterogeneous class. The particles can be divided up among discursive, negation, focus, interrogative, and modality, among others. Some examples are provided below.

(3.35)  o=ø-atap  âka  ê  ê  o=ø-atap  ōk’w  on
     1s=R-hair  that.way  IDEO  IDEO  1s=R-hair  wash  1s
     ‘My hair, that way, I wash my hair’
3.3.7 Postpositions

Postpositions are a closed class. It contains a very small number of morphemes that cannot undergo derivational or inflectional processes. Postposition phrases may function as adverb phrases syntactically. The postpositions differ from nouns, adjectives, verbs, adverbs and particles, as following:

(1) verbs take the thematic vowel and postpositions don't;
(2) the main difference from particles is that postpositions give peripheral status to the noun phrase that they are linked to. In addition, postpositions are a class that does not combine with any inflectional morphology, distinguishing them from nouns, adjectives and verbs;
(3) postpositions differ from adverbs mainly because the latter cannot not go together with nouns, as postpositions do.

These and other discussions on postpositions are presented in further chapters (see §4.3.1.1). A sample postposition is presented below:

(3.36) \textit{te=ø-ti puru-ru aj imimere etfè}  
\hspace{1cm}3\text{COR}=\text{R-mother IDEO-RED stay Omerê DIFF}  

‘His mother comes and stays around Omerê’

3.3.8 Ideophones

Ideophones are very common in Akuntsú. The ideophones and their representation of iconicity illustrate the speaker's life experience. Ideophones are used in narratives, natural conversations among themselves, and with non-Indians (more on ideophones and communicative purposes in chapter 7). A few examples of ideophones used in sentences are illustrated in the following:
(3.37) a. \( on \ i=ta \ tfok-tfok \)
1s 3s=plant IDEO-RED
‘I am planting it, planting, planting’

b. \( tfok-tfok \ atiti \ ta \)
IDEO-RED corn plant
‘planting, planting, (I am) planting corn’

3.3.9 Interjections

Interjections in Akuntsú are words that reflect the speakers’ reaction and emotion to different situations. They may express surprise, agreement, and other reactions related to attitude, feelings, etc. There is no gender distinction in the use of interjections - interjections are gender-neutral; all speakers may use them when convenient.

3.4 Summary

The purpose of this chapter was to provide a definition of clitics, affixes and particles employed during this chapter. In addition, it provided an overview of the inflectional and derivational processes in this language.

It was also demonstrated that there is only one class of relational prefix in this language, and unlike Tupí-Guaraní languages, the occurrence of these prefixes in Akuntsú is limited to nouns. Also presented was an overview of the grammatical classes in this language and a brief description of the lexical classes: (a) open classes — nouns, verbs, adjectives and adverbs — and (b) closed classes — including the remaining lexical words found in this language.
Some of the main findings are presented below:

<table>
<thead>
<tr>
<th>MORPHEMES</th>
<th>CLASSIFICATION</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oblique markers; pronouns; negation.</td>
<td>Clitic</td>
<td>• Bound morphemes&lt;br&gt;• Attached to NPs and VPs</td>
</tr>
<tr>
<td>Inflection: imperative marker, relational prefix, aspectual markers. Derivation: causative markers, nominalizers, verbalizers.</td>
<td>Affix</td>
<td>• Bound morphemes&lt;br&gt;• Attached to NPs and VPs&lt;br&gt;• Inflection/Derivation</td>
</tr>
<tr>
<td>Negation, focus, discoursive markers.</td>
<td>Particle</td>
<td>• Independent morphemes</td>
</tr>
</tbody>
</table>

Table 3.5 - Sample of types of morphemes.

Below, the table summarizes the main classes in this language and the possible morphological processes that each lexical class can be involved in:

<table>
<thead>
<tr>
<th>LEXICAL CLASSES</th>
<th>(POSSIBLE) MORPHOLOGICAL PROCESSES</th>
<th>TYPE: FREE OR BOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nouns</td>
<td>• Inflection/Derivation&lt;br&gt;• Reduplication&lt;br&gt;• Compounding</td>
<td>Free</td>
</tr>
<tr>
<td>Verbs</td>
<td>• Inflection/Derivation&lt;br&gt;• Reduplication</td>
<td>Free</td>
</tr>
<tr>
<td>Adjectives</td>
<td>• Reduplication</td>
<td>Free</td>
</tr>
<tr>
<td>Adverbs</td>
<td>• Reduplication</td>
<td>Free</td>
</tr>
<tr>
<td>Pronouns</td>
<td>None</td>
<td>Clitic and Free</td>
</tr>
<tr>
<td>Demonstratives</td>
<td>None</td>
<td>Free</td>
</tr>
<tr>
<td>Particle</td>
<td>None</td>
<td>Free</td>
</tr>
<tr>
<td>Postposition</td>
<td>None</td>
<td>Free</td>
</tr>
</tbody>
</table>

Table 3.6 - Summary of lexical classes and their allowed morphological processes.
CHAPTER 4

NOMINAL MORPHOLOGY

4.1 Introduction

This chapter aims to describe nouns in Akuntsú, focusing on their structural and functional properties. Nouns can be simple or complex: the complex nouns are the derived nouns and the compounds. The primary function of the nouns is as the nucleus of nominal phrases, as arguments, i.e. as subject/agent, object of transitive verbs, or the complement of postposition. Nominal phrases can also function as predicates where no overt copula is found.

This chapter describes the nominal classes, which are grouped into dependent, independent, proper and common (§4.2). Nominal morphology is discussed in (§4.3). Firstly, a discussion on oblique clitics and postpositions is presented, showing the difference between them, and then a brief discussion of the determinative morpheme. After that, the derivational processes are presented (§4.4). In addition, this chapter presents the possible compound forms (§4.5), as well as addressing the types of nominal reduplication (§4.6), the structure of the noun phrase (§4.7), the function of pro-forms (§4.8), and numeral quantifiers (§4.9). Next, the behavior of genitive constructions is addressed with their relation to noun phrases (§4.10). Finally, the last section gives a summary of the chapter (§4.11).
4.2 Nominal class

In Akuntsú, the nouns are morphologically divided into independent (alienable) and dependent (inalienable) nouns. By “independent nouns” is meant those nouns that represent independent entities where no possessor is required, for example, elements of nature, human beings, animals, plants (though not their parts), artifacts, and generic names (see §4.2.1). Dependent nouns are inalienable nouns (that is, inalienably possessed nouns) and include elements that form part of a whole, such as parts of plants or parts of the human body (see §4.2.2). The difference between dependent and independent nominal classes is seen in the morphology and semantics of those nouns\(^\text{72}\). In other Tupían literature, different terminology is sometimes used to describe dependent and independent nouns: for example, “relative” and “autonomous” nouns. Some also distinguish among relative (alienable), autonomous, and absolute nouns (both of the latter two representing independent/alienable nouns)\(^\text{73}\).

In Akuntsú, besides the distinction between dependent and independent nouns, there are also morphological differences between proper and common nouns. Common nouns can be either independent or dependent nouns, while proper nouns can only refer to individuals and places names.

Gender and classifier markers are not expressed in the morphology of this language. The notion of plural is expressed through numerals, particles and reduplication processes, where the absence of these morphemes usually conveys the singular.

\(^{72}\) More on nominal classes and the terminologies employed to describe Tupían languages see, for example Rodrigues (1981, 1996), Cabral (2001), Seki (2001), and Queixalós (2005).

\(^{73}\) See, for example, the description of Praça (2007) for Tapirapé, a Tupí-Guaraní language and the description of Guajá nouns found in Magalhães (2007). Magalhães (2007) differently from Praça (2007) uses the term \textit{determiner}, distinguishing three subclasses of nouns: one with obligatory determiners, another with optional determiners and the other that do not allow determiners directly associated with the noun.
Table 4.1 illustrates types of nouns according to their specific classes. In the left column, types of nouns found in the language are described, and examples of nouns are listed in the column of the nominal class that they belong to. Note, however, that common nouns and proper nouns are not included in this table.

<table>
<thead>
<tr>
<th>TYPES OF NOUNS</th>
<th>MORPHOLOGICAL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent class</td>
</tr>
<tr>
<td><strong>Kinship</strong></td>
<td>( e = o - a p a t f o )</td>
</tr>
<tr>
<td></td>
<td>2s = r-grandfather</td>
</tr>
<tr>
<td></td>
<td>‘Your grandfather sleeps’</td>
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<tr>
<td><strong>Parts of a whole</strong></td>
<td>( i = o - k i t ) piri</td>
</tr>
<tr>
<td></td>
<td>3s = r-seed throw</td>
</tr>
<tr>
<td></td>
<td>‘Throw its seed’</td>
</tr>
<tr>
<td><strong>Human properties</strong></td>
<td>( o = t - e k ) pagop</td>
</tr>
<tr>
<td></td>
<td>1s = r-house new</td>
</tr>
<tr>
<td></td>
<td>‘my new house’</td>
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<td><strong>Artefacts</strong></td>
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<td><strong>Nature</strong></td>
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<td><strong>Animals</strong></td>
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</tbody>
</table>

Table 4.1 - Types of Nouns
Dependent nouns

Semantically, dependent nouns (inalienable nouns) are characterized as elements that are part of a whole, kinship terms, and certain social terms, where their existence implies on the existence of other elements with which they are inherently associated. Dependent nouns are exemplified below (the dependent nouns are in bold):

(4.1) a. no t-et eni ø-âm-k’a on
other R-name hammock R-rope-TR 1s
‘The other (thing's) name I (say is) rope of the hammock’

b. Kani ø=ø-kipi kem+ki=rom
Kani 1s=R-younger sister breast+liquid=NEG
‘Kani, my younger sister, doesn't have breast-milk’

c. karâ t-ep =na
brazil.nut R-leaf =ESS
‘It's for the brazil nut's leaf’
Context: Talking about the leaf that will serve to store the brazil nuts.

Dependent nouns are different from independent nouns because the former form a syntactic unit with a possessive pronoun (or other type of noun), P + N (as in (4.1b)) or N + N (as in (4.1a and 4.1c)).

Independent nouns

The independent nouns (alienable nouns) do not require a possessor, however depending on the pragmatics, they may optionally take another lexical noun, a pronoun or another deictic element as their possessor. When a possessor is present, the syntactic construction formed requires a relational prefix (t- or ø-). See examples 4.2 (a-c)), as following:
(4.2) a. o=ø-ko o=ø-ko te iw
ls=R-hook ls=R-hook FOC ugly/rotten/bad
‘As for my hooks, they are damaged’

b. o=ø-k”ako i-ko=na
ls=R-guan OBJ.NMLZ-ingest=ESS
‘It is my guan’s food’

c. erê e=ø-koro nôm
2s.EM 2s=R-bowl NEG
‘You don’t have a bowl’

In cases where the noun is used without a possessor (4.3 (a-c)), it is seen as an element with no semantic connection to any other existential element, being totally independent from a possession construction.

(4.3) a. ko-tîn eme peka
hook-ATEN DEM bring
‘The small hook, bring this one’

b. k”ako kipek ko-a
guan (sp.) papaya ingest-THV
‘The guan is eating papaya’

c. koro o=ere-k”a
bowl ls=speak-TR
‘Bowl, I say’

4.2.3 Proper Nouns

Proper nouns are understood as names that refer to unique entities that the community identifies. The proper names can also be derived from words for common nouns, depending on: (1) whether the intended referent in a given utterance is intended to be one of the members of the community, and (2) when the speakers want to give nicknames to people that
they know. Konibú’s name\textsuperscript{74} is an example of a proper name that originated from a common noun. Konibú explains that in fact his name is $k^w\text{at}in-atfo$, which means ‘big rattlesnake’ in his own language, and that Konibú is what they started calling him after contact with FUNAI. His name comes from the fact that he almost died when one of these snakes bit him.

One of the main reasons that they like to use nicknames is so that the person named in that way won’t know they are talking about him/her in conversations. Usually, the nicknames are from animals, fruits, or any other relevant attribute that the speakers think that the person may have.

In addition to first names, there are also other names that belong to the class of proper nouns: names of rivers and cities that they know or have heard about. Some well-known river names are: \textit{ikifte} ‘River of the arrows,’ \textit{imimere} ‘Omerê,’ \textit{ikipiton} ‘Deeper River,’ \textit{tfarap ki} ‘River of rays,’ \textit{moë} ‘Moë’ and \textit{kawra ki} ‘Kawra River.’

Proper nouns neither occur under the scope of demonstratives (see example (4.4)) nor appear with determinative markers (compare the proper name with no marker and the common name with determinative marker in (4.5)). These are the main morphological characteristics that distinguish proper nouns from common nouns.

\begin{footnotesize}
\begin{tabular}{l}
(4.4) \quad \textit{o=ø-kip atap=erom ke o-kip atap} \\
& \text{1s=R-leg hair=NEG DEM R-leg hair} \\
& \text{‘My leg doesn't have hair, this one's leg has hair’} \\
\end{tabular}
\end{footnotesize}

\begin{footnotesize}
\begin{tabular}{l}
(4.5) \quad \textit{Karow o=ø-mepirêpit-et $k^w$ep te} \\
& \text{Carol 1s=R-grandchild.of.woman-DEF climb FOC} \\
& \text{‘Carol, my granddaughter, climbs’} \\
\end{tabular}
\end{footnotesize}

Proper nouns cannot form a single constituent with a determinant, as in \textit{[DET + }

\textsuperscript{74} Konibú /ko\textipa{îpo}/ means ‘snake’ in Mekéns language (Galucio 2001:207).
PROPER NOUN. They are, rather, found in clauses where demonstratives form a single NP followed by another NP, which is filled by a proper noun, as indicated below:

(4.6) ke Kani
    DEM Kani
    ‘This is Kani’

4.2.4 Common nouns

Common nouns are those that, morphologically, are optionally marked by the determinative morpheme. Common nouns can be either dependent (4.7) or independent (4.8).

(4.7) o=ø-ei-t
    1s=R-blood-DEF
    ‘(the) my blood’

Context: She was referring to the blood on the floor.

(4.8) ameko-t kwe rep
    jaguar-DEF black/dark
    ‘the black jaguar’

Context: Distinguishing cats; there were two cats at the FUNAI house — one black and the other yellow.

Common nouns can co-occur in the same NP with demonstratives. However, unlike proper nouns, the common nouns can enter into a constituent with the demonstratives, as in the following:

(4.9) ke t-ek
    DEM R-house
    ‘That one’s house’

See section 4.3.2 for more on determinative.
4.3 Nominal morphology

The language employs specific derivational morphemes, compounding, and reduplication strategies to derive and inflect nouns. In this section, oblique clitics and postpositions are presented (§4.3.1), followed by a description of determinative morphemes (§4.3.2).

4.3.1 Oblique clitics and postpositions

The bound (non-clitic) oblique markers are here called case markers, while the term “postposition” is reserved only for cases of independent words, not bound forms which come after the word that they are grammatically related to. This view differs from some Tupian literature that calls fully bound affixes “postpositions.” Thus, the main difference between cases and postpositions as used in this study is whether the form referred to is attached (case markers) or whether it is an unbound word, i.e., postposition. Core arguments marked by case markers are not found in Akuntsú—i.e. there are no nominative, ergative or absolutive case markers as affixes on nouns, though this language has non-core arguments that are signaled by a specific clitic in Akuntsú.

Another term used in this section is “oblique marker,” i.e. clitics that have an oblique function; they can either be attached to nouns or to phrases. Note that clitics are defined as functional word-like entities, which have to be attached to a host (phonologically), and which can be attached to hosts that belong to different grammatical categories. Clitics are placed on a continuum scale in the middle between affixes and free (unbound) forms, where the free

---

76 This is also the case of other Tupían languages, as described by Rodrigues (1999:115).

77 Some Tupían languages behave similar to Akuntsú, including for example: Mekéns (Galucio 2001), Mundurukú (Crofts 1973), Tupaí (Caspar and Rodrigues 1957, Rodrigues 1999), and Karitiana (Everett 2007).
forms can include, for example, the postpositions. A morpheme is only called an affix when it is found in a stable location - when it is attached only to a specific lexical class (see more on clitics and affixes in §3.2.2). Figure (4.1) indicates the position of clitics on a continuum.

![Figure 4.1 - Continuum of postpositions, clitics and case markers.](image)

Historically, nominal case-markers across languages (core and non-core arguments) might come from either locational nouns or from serial verbs (Givón 2001:95). Looking back to Proto-Tupian, Rodrigues and Cabral (2012) postulated that "Proto-Tupian probably lacked inflectional nominal cases for marking grammatical relations (...) the morphological cases found in some Tupian families are traceable from the Proto-Tupian postpositions" (2012:517).

The main oblique clitics and postpositions found in the language are described in the chart below. Note that all types of nouns (dependent, independent, proper and common nouns) can be bear oblique clitics or can be linked to postpositions, with no restrictions found so far. The glosses of each morpheme will be explained along this section.
Types | Morphemes | Glosses
--- | --- | ---
Postposition | etfe | Diffuse
 | ete | Relative/Comitative
 | pi | Inessive
Clitic | =(b)ō | Allative/Dative/Instrumental
 | =(e)ri | Ablative
 | =na | Essive/Translative
 | =pe | Locative

Table 4.2 - Summary of oblique clitics and postpositions.

Semantically, the above morphemes may indicate the following meanings: locative, associative and/or temporal meanings. Note that some morphemes can be associated with more than one meaning. The discussion below will be organized according to the type of morpheme: first will be a description of postpositions, followed by a description of oblique clitics.

4.3.1.1 Postpositions

a. *etfe*

The postposition *etfe* corresponds to a diffuse locative. This postposition expresses a non-precise location ‘through/over/at/along.’ With the diffuse locative the speakers refer to a location, but do not specify the exact location. For instance, in (4.10a) the speaker is talking about a thorn that got into her own thigh, but she is not sure exactly where it is.

(4.10) a. *koni tfe o=o-kip etfe*
   thorn come 1s=R-leg DIFF
   ‘The thorn gets into my leg’
b.  
\[ e=\sigma-\text{boro} \quad \text{ete} \]
\[ 2s=R-\text{back} \quad \text{DIFF} \]
‘It is along your back’

c.  
\[ k^{\text{w}} \text{ako} \quad aj \quad ek \quad \text{ete} \]
\[ \text{guan (sp.)} \quad \text{stay} \quad \text{house} \quad \text{DIFF} \]
‘Guan stays at home’

d.  
\[ ek \quad \text{ete} \quad i=\text{ma\d{a}} \]
\[ \text{house} \quad \text{DIFF} \quad 3s=\text{store/wear} \]
‘Store it in the house’

b.  
\[ \text{ete} \]
There are two semantic meanings related to the postposition \text{ete}: (1) the first meaning marks a noun as the point of reference; the meaning is associated with the notion ‘in relation to/about;’ and (2) the third meaning is the comitative postposition that expresses the idea of ‘together with.’ The examples below indicate a noun or a situation as the point of reference, indicating the subject matter that the speaker is talking about, meaning ‘about’ or ‘in relation to’, as shown:

(4.11) a.  
\[ te=\sigma-\text{atap} \quad \text{n\d{a}}-\text{ap} \quad \text{ete} \]
\[ 3\text{COR}-R-\text{hair} \quad \text{weave-NMLZ} \quad \text{REL} \]
‘It is the braided of her hair’

b.  
\[ i=\sigma-\text{toa-ap} \quad \text{atfoa-ap} \quad \text{ete} \]
\[ 3s=R-\text{lying-NMLZ} \quad \text{wet-NMLZ} \quad \text{REL} \]
‘His place of sleeping is wet’

c.  
\[ te=\text{potfek} \quad \text{at-a-k\d{a}} \quad \text{ete} \]
\[ 3\text{COR}=\text{thing} \quad \text{catch-THV-TR.PL} \quad \text{REL} \]
‘It is to take her things (for the second time)’
d. *aparabia t-et ete?*
   non-Indian R-name REL
   ‘What about the non-Indian's name?’

e. *o=o-mapi ete?*
   1s=R-arrow REL
   ‘What about my arrow?’

   It can also express an associative meaning (see example 4.12).

   (4.12) *en baj ete*
   2s buriti REL
   ‘You are with the buriti’

   The comitative postposition *ete* is attached to nouns. It semantically expresses the idea of ‘together with.’ It indicates that the subject of the verb phrase is doing an event accompanied by someone.

   (4.13) *te=k’at-a Buko ete*
   3COR=leave-THV Buquá COM
   ‘He leaves with Buquá’

c. *pi*

   The inessive postposition indicates the location where the element is immersed, or inserted in. It provides the sense of ‘interior’, as in the example (4.14a) that indicates that the subject is going to see the interior part of the house, as follows:

   (4.14) a. *o=o-mepit t-ek pi tfop-a on*
   1s=R-daughter/son.of.woman R-house interior see-THV 1s
   ‘I am going to see the interior of my daughter's house’
b. \( o=\partial-j\ddot{e} \ \ pi \ \ \partial k^w a \)
\( 1s=r \)-mouth \ interior \ wash \n\( \text{‘I am washing the interior of my mouth’} \)

c. \( poga \ \partial-pe \ \ pi \ \ ameko \ \ i=kora \ \ tf\dot{e} \)
\( \text{tortoise } r \)-skin \ interior \ jaguar \ 3s=\text{look for coming} \n\( \text{‘The interior of tortoise's skin, jaguar comes to look for it’} \)

The clitic \( =b\ddot{o} \) can also be attached to the postpositional phrase, indicating the

directionality of the element to the interior of something as in (4.15).

\[
(4.15) \quad o=\partial-kere \ \ at\dddot{i} \ \ pi=b\ddot{o} \\
1s=r \)-rib \ pain \ interior=\text{ALL} \n\( \text{‘I have pain into my ribs’} \)

More examples of oblique clitics are presented in the next subsection.

4.3.1.2 Oblique clitics

a. \( =(b)\ddot{o} \)

The clitic \( =(b)\ddot{o} \) covers two separate meanings: (1) an allative meaning ‘towards/to/up
to’ and a dative one ‘for;’ and (2) an instrumental one. The morpheme \( =\ddot{o} \) occurs after
consonants while \( =b\ddot{o} \) occurs after vowels. Below, examples with allative/dative meaning are
presented:

\( =\ddot{o} \)

\[
(4.16) \quad o=\partial-ts\ddot{ip}ap \ \ tabit=\ddot{o} \ \ ka \\
1s=r \)-grandmother \ garden=\text{ALL} \ go \n\( \text{‘My grandmother went to the garden’} \)
b. *aparapia kʷ amoa t-ek=ô*
   non. Indian doctor/shaman R-house=ALL
   ‘to doctor's house’

c. *ek=ô ka*
   house=ALL go
   ‘(He's) going to the house’

   =bō

(4.17) a. *erē=bō i=kij*
   2s. EM=DAT 3s=take
   ‘For you to take it’

b. *orē=bō karā*
   1s. EM=DAT brazil nut
   ‘It is brazil nut’
   Lit. For me, it is brazil nut.

c. *te=bō kite puru-ru-ru ke=bō nom*
   3COR=DAT oneIDEO-RED-RED DEM=DAT no
   ‘For him (there is) one coming back, for that one there isn't’

d. *kopiba i=t-ek pi=bō*
   parrot 3s=R-house interior=ALL
   ‘Parrot got into his house’

This clitic can also be attached to adverbs, as shown:

(4.18) a. *kojōpe=bō kijtpit at kom*
   night=ALL fish catch PROJ
   ‘I will fish up to (until) the night’

b. *erase te=kʷ at-a kirē=bō nôm*
   tomorrow 3COR=leave-THV today/now=ALL no
   ‘Tomorrow he'll leave, today he doesn't’
The second idea expressed by these morphemes is instrumental. The instrumental clitic is attached to the noun given the role of instrument used to achieve a goal, as shown in the example below:

(4.19) a. \textit{pabape=bõ  iki  kiram-ka  en}  
gourd=INS  water  pour-TR  2s  
‘You pour the water with the gourd’

\begin{itemize}
  \item[b.] \textit{mapi=bõ  dow}  
arrown/gun=INS  IDEO  
‘(He) killed with a gun [...]’
\end{itemize}

b. \textit{=(e)ri}

The ablative clitic \textit{=(e)ri} has two variations: \textit{=ri}, which occurs after vowels, and \textit{=eri}, which occurs after consonants. The ablative case expresses the meaning ‘away’ or ‘from,’ as in the following example:

(4.20) \textit{i=o-men=eri  tfotfe}  
3s=R-husband=ABL  José  
‘From her husband, José’

The examples below show the ablative case functioning as the reason, source or cause of an event. For instance, in (4.21a) the papaya is the cause that motivates the event of staying home. In (4.21b) the reason for storing the kitchen is because of the jaguar, which may come to kill them. In (4.21c) shows that the parrot may die due to the hot weather. Example (4.21d) shows that the person is going to the forest with the purpose of killing wild pig and not fishing.
(4.21) a. kipek atfì=ri aj
    papaya pain=ABL stay
    ‘Because of the pain from the papaya, she stays’

b. ameko=ri i=maã
    jaguar=ABL 3s=store/wear
    ‘Because of the jaguar, she stores them’

c. kiakopatfì=ri pap
    hot=ABL die
    ‘Because of the hot weather, it may die’

d. tawtfe=ri mi-a kijpit nom
    peccary=ABL kill-THV fish no
    ‘It's to kill the peccary, not fish’

In addition, the ablative also indicates the moment that an event starts, giving the point in time where the event begins. The ablative is attached to an adverb in the example below:

(4.22) kirê=ri ta baj-a kiw-kiw
    Today=ABL DEM clean-THV IDEO-RED
    ‘From now one, that one cleans it, ripping, ripping’

c. =na

The semantic function of =na is primarily to indicate an essive meaning, i.e., what something is, how it functions, or reporting what something's state is. This morpheme is often used to indicate how the speaker considers the existing state of things.

(4.23) a. k’we poket-ap=na
    game roast-NMLZ=ESS
    ‘Game animal for roasting’
b.  *pow-pow*  *i-ko*=na
    *owl*  OBJ.NMLZ-ingest=ESS
    ‘It will be owl's food (the bird that they killed)’

c.  *kʷe*=na  *tawtfε*=na  *takirap*=na  *tawpik*=na
    *game*=ESS  *peccary*=ESS  *spider.monkey*=ESS  *black.monkey*=ESS
    ‘As for game animal, peccary, spider-monkey, black-monkey’

    *tato*=na  *tato  kʷakʷa  takirap  kʷakʷa*  [...]
    *armadillo*=ESS  *armadillo*  *grab*  *spider.monkey*  *grab*
    ‘armadillo, (he) grabbed an armadillo, (he) grabbed a spider-monkey [...]’

A change in the state of a noun is also represented by this morpheme, which seems to collapse two semantic meanings, i.e., the essive and the translative. The translative meaning indicates the results of a change, ‘becoming X’ or ‘changing X’. The examples below express more directly the idea of changing state. For instance, the example (4.24a) shows that the man, the one who became her husband, made the bracelet she was wearing.

(4.24) a.  *i*=o-men  *i-Ō*  *i*=o-mepit  *men*=na
    3s=R-husband  OBJ.NMLZ-give  3s=R-son/daughter.of.woman husband=ESS
    ‘Her husband's given (thing), her daughter's husband (the one who became here daughter’s husband)’

    b.  *iki  pekā a*=na
        *water*  *cold*  *exist*=ESS
    ‘There is cold water’
    Lit: It turned into cold water.

d.  =*pe*

    The meaning of the clitic =*pe* is to express the location of a noun with more precision,

---

78 The word *tato* ‘armadillo’ is not a loan from Portuguese ‘tatu’. The word reconstructed for the Proto-Tupí is **t’a(j)’u** (Rodrigues 2007b).
or to show exactly where it is placed. This clitic is semantically opposite to the diffuse locative postposition *etfe*.

With respect to the semantic locational function of *=pe*, in example (4.25a), for instance, the speaker is telling someone to go to the river to get water, specifying what part of the bank river one should go to (by pointing to the direction). The same happens in the examples (4.25b-c) below:

(4.25) a. *iki at-a en iki=*pe
    water catch-THV 2s water=LOC
    ‘You get water at the river’

    b. *tiero k"iro=*pe
    chicha container=LOC
    ‘Chicha is at the container’

    c. *kip t-ep e=o-anam=*pe
    tree R-leaf 2s=R-head=LOC
    ‘The leaf of the tree is on your head’

4.3.2 Determinative

The determinative is a nominal morpheme that can indicate the idea of specificity or familiarity of the noun. When the determinative morpheme expresses the idea of familiarity, both speaker and listener understand which element is being referred to (Dryer 2011)\(^79\). Note that it is not an obligatory marker and speakers tend to use it depending on the pragmatics of the situation. There are three allomorphs found so far: -t (before vowels), -et (before consonants), and -n (before nasal vowels), as seen in the following examples:

(4.26) a. *Enotej o-ei-t βuh*
   *Enotej R-blood-DEF IDEO*
   ‘Enotej's blood fell’

b. *Kawra ki-t*
   *Kawra liquid-DEF*
   ‘Kawra River’

c. *tsarínë o-okwaj t=ø-okwaj-et […]*
   *hummingbird R-tail 3S=R-tail-DEF*
   ‘Hummingbird's tail, its tail […]’

d. *akop te e=t-ek-et*
   *hot FOC 2s=R-house-DEF*
   ‘Your house is hot’

e. *mepit-et jë jërom tiri*
   *woman/son.of.woman-DEF DEM DEM two*
   ‘These are the daughters, there are two there’

f. *aramíra-n-atfo*
   *mulher-DEF-INT*
   ‘The big female’

g. *aparabia-t kë amoa o=iri-ka*
   *non.Indian-DEF shaman 1s=heal-TR*
   ‘The doctor healed me’

   In addition, the determinative morpheme presents a case of argument tracking through the discourse. That is, in discourse, when a previously introduced NP is repeated later in the clause, the same NP may be repeated but with the determinative marker attached to the repeated NP. In (4.27c), it is used to refer back to some previously mentioned referent, however the referent is known only for the speaker but not for the listener, as illustrated below:
(4.27) a. te aj ko-a aj-et ko-a [...] 
3s cajá ingest-THV cajá-DEF ingest-THV
‘He eats cajá, (he) eats the cajá [...]’

b. on i=kiram-ka iki tʃoo ʃ ikipitʃik iki-t āka [...] 
1s 3s=pour-TR water IDEO cold water-DEF that.way
‘I poured the water, I poured water, the cold water, that way [...]’

c. [...] aramira nom aramira aparabia dow 
woman no woman non.Indian IDEO
‘woman no, woman, the Non-Indian shot’

nako at-a āka iki o-ape dow aparabia-t [...] 
man catch-THV that.way water R-path IDEO non-Indian-DEF
‘[...] (they) caught men, that way, the river's path, the non-Indian shot [...]’

The morpheme -(e)t described in this section was also analyzed in two other Tuparian languages: Tuparí (Rodrigues and Caspar 1957, Alves 2002, Seki 2002) and Makuráp (Braga 2005). Seki (2002:304-305) analyses the morpheme as a nominative suffix for the Tuparían language, while Rodrigues and Caspar (2007) and Alaves (2004) it as a determinative morpheme. Braga (2005), on the other hand, analyses it as a genitive morpheme. By looking at the occurrence of the determinative morpheme in Akuntsú, it is possible to affirm that the behavior of this morpheme in this language is similar to one analyzed for Tuparí language (Cabral, Raul Tuparí, Isaias Tuparí and Barros (forthcoming)). Briefly stating, the authors present the morpheme -et in Tuparí as a suffix that specify the noun as the main topic of the discourse, which is familiar to the speaker (only)\textsuperscript{80}.

\textsuperscript{80} The authors of this study and I keep the same label given for Rodrigues and Caspar (1957).
4.4 Derivational Morphology

Derivational morphology affects both verbs and nouns. In this section, only derivational morphemes responsible for deriving nouns are discussed. Nominal derivation is formed through affixation onto verbal roots, creating derived nouns. Next, the augmentative and diminutive affixes will be described. These affixes derive nouns whose meaning changes, but whose lexical class does not change.

4.4.1 Derived nouns

The morpheme -ap derives nouns from transitive verbs (4.56-4.57) and intransitive verbs (4.58). A cognate suffix of the same shape and meaning is also described for languages related to Akuntsú (Alves 2004:67; Braga 2005:72; Galucio 2001:101 and Nogueira 2011:107). The nominalizer is known as NAME OF CIRCUMSTANCE, a term used by Rodrigues (2001:112, cf. also Braga 2005:78) to refer to a morphosyntactic phenomenon characteristic of Tupían languages. The morpheme derives nouns from verbs giving them a meaning of place, time, instrument, means, cause or the product of the verbal action.81

NAME OF CIRCUMSTANCE

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81 There is also the suffix -at, which has a similar behavior to one found in Tuparí, called AGENT NOMINALIZER (as proposed by Rodrigues and Caspar (1957)). This suffix derives nouns from transitive verbs, giving them a semantic status of agent. This nominalizer does not occur as frequently in the data as the nominalizer cited above, and it was only found with the verb ‘to ingest’ ko. However, I decided to not include in this dissertation due to the number of examples attested so far.

\[ e=\emptyset \text{men} \quad \text{pitoa} \quad \text{ko-a-at} \]

\[ 2S=R\text{-husband tobacco ingest-THV-AG.NMLZ} \]

‘Your husband is smoker’
(4.28) a. ömpe paj-ap =na
snuff clean-NMLZ =ESS
‘It is for snuff-brush’

b. ömpe ko-ap
snuff aspire-NMLZ
‘Sniffer’

c. tokej et-ap
ant (sp.) sleep-NMLZ
‘Ant’s sleeping place’

d. tʃop-a te parã-ap
see-THV FOC overthrow-NMLZ
‘She will see the overthrow’

e. tawtfə tfoga-ap
peccary bite-NMLZ
‘Peccary’s bite’

The other affix that derives nouns is the OBJECT NOMINALIZER i-. Unlike the suffix -ap, the prefix i- is only attached to transitive verbs. It always occurs after a noun or a pronoun in a possessive syntactic relation with the derived noun.\[82\]

OBJECT NOMINALIZER

(4.29) a. taptot te=i-ko
manioc 3COR=OBJ,NMLZ-ingest
‘Manioc is his own food’

b. kopkap o=i-at
Annatto 1s=OBJ,NMLZ-catch
‘Annatto my caught (thing)’

Lit: Annatto of catching.

---

\[82\] The other related languages also present a cognate prefix: -i for Akuntsú, Mekéns and Tuparí and -i for Makuráp language, which according to Rodrigues, Cabral and Corrêa-da-Silva (2006:29) resulted from the Proto-Tupí **.imí.
c. *niam Tʃaruj=i-mokʷa*
   bracelet Tʃaruj=OBJ.NMLZ-make
   ‘Bracelet of Tʃaruj's making’

d. *o=i-ko tok-kʷa o=jâ*
   1S=NMZL-INGEST IDEO-TR.PL 1S=SI NMLZ-IN
   ‘I am punching my food’

### 4.4.2 Diminutive and augmentative

Akuntsú employs a diminutive morpheme `-tin` and an augmentative `-atʃo`. The origin of these morphemes can be traced back to the Proto-Tupian **-ʔin** and **-atʃu** (Rodrigues and Cabral 2012:521). These morphemes refer to the size of something or the expansion of an event (if it is big or not). They are analyzed here as derivational morphemes (see also the difference between inflection and derivation in section 3.2.3) because of their semantics, changing the meaning of the noun, though the class is not affected.

#### Diminutive

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4.30) a. <em>kipe ‘machete’</em></td>
<td>→ <em>kipe-tin ‘knife’</em></td>
</tr>
<tr>
<td>b. <em>apara ‘banana’</em></td>
<td>→ <em>apara-tin ‘small banana’</em></td>
</tr>
<tr>
<td>c. <em>iki ‘river’</em></td>
<td>→ <em>iki-tin ‘stream/small tributary’</em></td>
</tr>
<tr>
<td>d. <em>tawtʃe ‘peccary</em>[^83] (<em>Pecari tayassu)</em></td>
<td>→ *tawtʃe-tin ‘caititu (<em>Pecari tajacu)</em></td>
</tr>
<tr>
<td>e. <em>mepit ‘son/daughter.of.woman’</em></td>
<td>→ <em>mepit-tin ‘offspring’</em></td>
</tr>
<tr>
<td>f. <em>kʷako ‘rusty-margined guan</em> <em>(Penelope superciliaris)</em></td>
<td>→ <em>kʷako-tin ‘black-fronted guan (Pipile jacutinga)</em></td>
</tr>
</tbody>
</table>

The diminutive is used to talk about something with affection. In example (4.31), the

[^83]: Knowing also as ‘queixada’ in Brazil.
speaker is reporting a story in which he is talking to his granddaughter.

\[(4.31)\]  
\[o=\omega-toj\_\text{epit-tin} \quad \text{è} \quad \text{tow} \quad \text{è} \quad \text{tow}\]  
\[ls=\text{r-grandchild.of.man-DIM} \quad \text{DEM} \quad \text{dark} \quad \text{DEM} \quad \text{dark}\]  
‘My dear granddaughter (little granddaughter) this is dark, this is dark,’

\[\text{ebapap} \quad \text{iro} \quad \text{toj\_epit-tin}\]  
\[\text{eye} \quad \text{dimmish} \quad \text{grandchild.of.man-DIM}\]  
‘the eyes are shrinking, my dear granddaughter’

The diminutive -\text{tin} can also be attached to the noun \text{mepit} ‘son/daughter.of.woman’ expressing the meaning of small (or a very small thing) (4.32a-c) and offspring (4.33), forming a complex word.

\[(4.32)\] a.  
\[\text{tap} \quad \text{t-ep} \quad \text{mepit-tin}\]  
\[\text{manioc} \quad \text{R-leaf} \quad \text{small}\]  
‘Small leaf of manioc’

b.  
\[\text{k\_i} \quad \text{mepit-tin}\]  
\[\text{tree} \quad \text{R-leaf} \quad \text{small}\]  
‘Small leaf of a tree’

c.  
\[\text{k\_wi} \quad \text{mepit-tin}\]  
\[\text{ax} \quad \text{small}\]  
‘Small ax’

\[(4.33)\]  
\[\text{j\_okora} \quad \text{mepit-tin}\]  
\[\text{bird (sp.)} \quad \text{offspring}\]  
‘Bird’s offspring’

Besides the affix -\text{tin}, the notion of small size is also expressed by the adjective \text{tfok\_i} (4.34a). The adjective can be reduplicated to indicate the degree of smallness (4.34b). \text{tfok\_i} can also express a meaning of ‘little/few’ as in illustrated in (4.34c).
(4.34) a.  \textit{en tfo\text{"i}n te}  \\
\text{2s small FOC}  \\
‘You are small’

b.  \textit{Aramira o-toa-ap tfo\text{"i}n-\text{"i}n}  \\
\text{Aramira R-toa-ap small-RED-RED}  \\
‘Aramira's hammock is very small’

c.  \textit{tfo\text{"i}n i=ko-a}  \\
\text{little 3s=ingest-THV}  \\
‘(He) eats little (of) it’

In addition, the diminutive can be attached to nouns indicating the amplitude of some event, as for instance in (4.35) where \textit{-tin} indicates that the cracking of the hands was not louder, giving to the phrase an attenuative meaning.

(4.35)  \textit{or\text{"e}=b\text{"o} po o-ak\text{"a} pia-tin \text{"a}ka piiii}  \\
\text{1s.EM=DAT hand R-bone crack-DIM that.way IDEO}  \\
‘For me, there is small cracking of hand bones, that way, cracking’

\textbf{Augmentative}

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4.36) a.  \textit{kip ‘leg’}</td>
<td>\textit{kip-atfo ‘wide leg’}</td>
</tr>
<tr>
<td>b.  \textit{apara ‘banana’}</td>
<td>\textit{apara-atfo ‘big banana’}</td>
</tr>
<tr>
<td>c.  \textit{iki ‘river’}</td>
<td>\textit{iki-atfo ‘big river’}</td>
</tr>
<tr>
<td>d.  \textit{k\text{&quot;at}in ‘snake (generic)’}</td>
<td>\textit{k\text{&quot;at}in-atfo ‘rattlesnake’}</td>
</tr>
</tbody>
</table>

The suffix \textit{-atfo} conveys the meaning of ‘big size,’ ‘tall,’ and ‘wide’, as illustrated in the following examples:
(4.37) a.  on o=o-po-atfo en te tfokiŋ
   1s 1s=R-hand-INT 2s FOC small
   ‘My hand is big, you have a small (one)’

b.  kip-atfo
   tree-INT
   ‘Wide tree’

c.  Pupak kijtpit-atfo at-a kom
   Pupák fish-INT catch-THV PROJ
   ‘Pupák will get big fish’

In addition, speakers also make use of the ideophone tfo to represent the meaning of
big size, and the vowel is often lengthened (more on ideophones in chapter 7).

(4.38)  ke borote-atfo=ri tfooo jērom baro-baro
   DEM star-INT=ABL IDEO DEM star
   ‘That star is getting bigger, there it is the star (another type of)’

The word tfoke carries the feature of big size and also adds the sense of a person or
thing growing up:

(4.39) a.  o=o-eo tfoke
   1s=R-belly big
   ‘My belly is big’

b.  i=tfoke tfop en
   3s=big see 2s
   ‘See the big one!’

c.  [...] ko-a ko-a tfoke
   ingest-THV ingest-THV big
   ‘[...] he ate a lot and he got big!’
4.5 Compound forms

The noun in Akuntsú can consist of two or more elements that together form a lexical unit. Compound forms can be combined of two or three forms, including nouns and adjectives. This creates one lexical unit of two (or more) juxtaposed nominal or adjectival components. Juxtapositions are combinations of two independent words, which have their own stress, functioning syntactically as unit. Juxtaposed elements form a noun that has one of the meanings associated with one of the combined elements. On the other hand, compound nouns (also labeled exocentric compounds by the literature) are the combination of two elements where the semantic result of such combination is a noun completely semantically different from the combined parts. Compound nouns also have independent stress, as juxtaposed nouns do. Thus, juxtaposition here relates to what are called endocentric compounds, where the meaning of the compound corresponds to the meaning of one of the components. The exocentric compounds are those whose meaning denotes "something which is different from either of their free forms" (Aikenvald 2007:30).

According to Payne (1997:92-93), there are two criteria used to refer to something as a compound: (1) **FORMAL CRITERIA**: stress, unusual word order, morphophonemic processes — which are not the case in the Akuntsú language; (2) **SEMANTICS**: the meaning of a compound is either more specific or entirely different from the combined meanings of the word that make up the compound — this criterion is the one that most fit compounds in Akuntsú.84

---

84 Among the related languages, Mekéns has an unusual word order of noun and adjective when they form a compound. In compound words, the adjective comes first while in a noun phrase the adjective always follows the noun (Galucio 2001:105).
However, one useful test to check for compound status is by checking whether or not combined elements allow the insertion of an extra element between them. This type of evidence has been the most efficient to differentiate noun phrases (that allow adjectives after the noun) and compound forms (where an adjective is not allowed among the elements in a compound).\(^\text{85}\)

\[(4.40)\]  
\[\text{kijtpit \ pepo \ kop \ perek}\quad \text{But not} \quad \text{*kijtpit \ perek \ pepo \ kop}\]

fish \ wing/fin \ red \ long

‘long fish (sp.)’

Each element of the compound carries its own stress. Besides the semantic criteria and the inserted element test, there are no other efficient formal criteria to differentiate compounds from noun phrases.

From the three patterns described in section 3.2.3 for the Tupían languages, Akuntsú compounds consist of only \([\text{NOUN} + \text{NOUN}]\). The cross-category compound of \([\text{NOUN} + \text{INTRANSITIVE.VERB}]\) and \([\text{NOUN} + \text{TRANSITIVE.VERB}]\) were not identified in Akuntsú. The other compound patterns found in Akuntsú are the forms \([\text{NOUN} + \text{ADJECTIVE}]\) — since in this language adjectives are considered an independent (open) class — \([\text{NOUN} - \text{NOUN} - \text{ADJECTIVE}]\), and \([\text{NOUN} + \text{NOUN} + \text{NOUN}]\). Note that the opposite order of \([\text{ADJECTIVE} + \text{NOUN}]\) is not found in compounds (it does not occur in other morphosyntactic contexts either).

\(^{85}\) This type of test is not uncommon. It was used to identify compounds in others languages too, as for example in Karo (Gabas 1999:114), a Tupían language that like Akuntsú there are no formal criteria to differentiate compounds and noun phrases.
JUXTAPOSITION

The nouns in juxtaposition form a syntactic unit of [DETERMINANT + DETERMINER], where the head of the juxtaposed elements is on the right. The examples below are semantically compositional in the sense that the meaning of the compound is a sum of the meanings of its the components in the compound. A juxtaposed noun never refers to a specific item, but only those items generically, i.e., it does not denote a particular referent but the entire class — that is, in koro + am ‘rope of the bowl,’ the element rope does not refer to a particular bowl, but rather to ropes of bowls in general.

Some of these compounds are formed with alienable nouns, which can occur without any other element, forming a complete noun phrase; others are formed with inalienable nouns that cannot occur by themselves as a complete noun phrase, e.g. jāj ‘tooth’ and am ‘rope’.

[N₁ + N₂]

MODIFIER + HEAD

(4.41) a. āpita + kʷak
   nose + sound
   ‘snoring’

   b. koro + am
   bowl + rope
   ‘rope of the bowl’

   c. boro + kip
   back + wood
   ‘spine’

   d. pi + ape
   foot + skin
   ‘foot's nail’
Note that when there are more than two elements forming the juxtaposed noun, the head is still the right-most element. The examples in (4.42 a-d) present nouns with more complex formations than those presented above:

(4.42) a.  \( o=\text{o-}j\tilde{a}+k\text{ip}+\text{pe} \)
\( 1\text{s}=\text{r-tooth}+\text{stick}+\text{skin/bark} \)
‘my gum’

b.  \( \text{aw-aw}+j\tilde{a}+\text{pe} \)
child + sitting + skin/bark
‘uterus’

c.  \( \text{ko}+j\tilde{a}+\text{pe} \)
ingest + sitting + skin/bark
‘stomach’

d.  \( \text{eni}+\text{am}+\text{kip} \)
hammock + rope + stick
‘hook of the hammock’

Other types of compounds with different lexical classes are exemplified below.

[NOUN + ADJECTIVE]

(4.43) a.  \( iki+\text{tfaro} \)
river + yellow
‘Yellow River (name of river)’

b.  \( \text{tedo}+\text{pak} \)
rubber + white
‘Candle’

---

\(^{86}\) Talking about the non-Indian's hook.
c. tapit + pit
garden + old
‘capoeira’

[NOUN + NOUN + ADJECTIVE]

(4.44) kitpit + pepo + kop
fish + wing/fin + red
‘fish (sp.)’

COMPOUNDS

Compounds here are treated as a combination of elements which has a different semantic meaning from the sum of the combined elements. The resulting meaning is not predictable from the two (or more) constituents of the compound, as seen in the following examples:

(4.45) a. ebagap + pi + tfop-ap
eye + interior + see-NMLZ
‘mirror’

b. otat + niŋ
fire + striped
‘smoke’

c. ororo + pe
cotton + skin/bark
‘clothes’

87 According to wikipedia http://en.wikipedia.org/wiki/Capoeira, the word capoeira in Portuguese "may have come from Tupi words ka'a ('jungle') e pùer ('it was'); it is used to refer to an old part of the jungle that has been burned and being used as a garden for Indians or non-Indians.
d. *toa-ap + t-ep*
   lie-NMLZ + R-leaf
   ‘mattress’

There are also examples of lexicalized compounds that form complex words. Some of them are illustrated below:

(4.46) a. $te=(a)kat-a-ap$
   3COR=fall-THV-NMLZ
   ‘rain’

   b. $epa + kɨ$
   eye$^{89} + \text{liquid}$
   ‘tear’

4.6 Nominal reduplication

Nominal reduplication signals the semantic meaning of plurality. Either the stem can be reduplicated (4.47) or the syllable can be reduplicated (4.48), where (4.48a) is a lexicalized form.

\[
\begin{array}{c|c|c}
\text{(4.47) a.} & \text{REDUPLICATED FORM} & \text{UNREDUPLICATED FORM} \\
pi & pi & maã \text{ en} \\
foot & foot & \text{store/wear 2S} \\
‘You wear the feet’ & ‘You wear the foot’ \\
\text{REDUPLICATED FORM} & \text{UNREDUPLICATED FORM} \\
aw-aw & aw-aw & \text{wen-a} \\
child & child & \text{finish-THV} \\
‘Children are gone’ & ‘The child is talking’ \\
\end{array}
\]

$^{88}$ Note that the phonological form of the verb ‘to fall’ is *akat*, however, the first vowel of the verb is deleted to form the compound. The compound is always pronounced as [te’karap].

$^{89}$ *epa* is part of the radical of the word for ‘eye’ *epapap*. 

188
(4.48) a. \[ \text{REDUPLICATED FORM} \quad o=mepit-\text{\textit{e}pit} \quad \text{UNREDUPLICATED FORM} \quad o=mepit \]

‘my granddaughter’ ‘my daughter’

b. \[ \text{REDUPLICATED FORM} \quad ba.baoro \quad \text{UNREDUPLICATED FORM} \quad baoro \]

‘many woodpeckers’ ‘woodpecker’

c. \[ \text{REDUPLICATED FORM} \quad iri-iribo \quad \text{UNREDUPLICATED FORM} \quad iribo \]

‘many locusts (sp.)’ ‘(one) locust (sp.)’

Numeral quantifiers can also be reduplicated, as shown:

(4.49) \[ \text{REDUPLICATED FORM} \quad \text{UNREDUPLICATED FORM} \]

\[ \text{tiri-tiri} \quad \text{apara} \quad \text{tiri apa}ra \quad \text{two-RED banana} \quad \text{two banana} \]

‘four (or many) bananas’ ‘two bananas’

Note that the language also has reduplicated stems that are fully lexicalized; some examples are given below:

(4.50) \[ \text{tfa-tfakop} \quad \text{‘ant (sp.)’} \]

\[ k^\text{\textit{w}} \text{\textit{e}}-k^\text{\textit{w}} \text{\textit{e}} \quad \text{‘scissors’} \]

\[ \text{baw-baw} \quad \text{‘wind’} \]

\[ \text{beri-beri} \quad \text{‘mat’} \]

\[ \text{wêro-wêro} \quad \text{‘European bee’} \]

\[ \text{iro-iro} \quad \text{‘bird (sp.)’} \]

\[ \text{kora-kora} \quad \text{‘chicken’} \]

4.7 Structure of the Noun Phrase

An obligatory noun is the central constituent of noun phrases. The noun that forms the head of the NP can be attached to personal pronouns (pron) (with the exception of the
proper nouns); it can be modified by demonstratives (dem), numeral quantifiers (quant), and adjectives (adj).

The NP functions as an argument when used as subject or object of a predicate. The order of the constituents is basically the one provided below. However, the order is not rigid for quantifiers and demonstratives. The basic noun phrase template is presented here:

\[ \text{[(Dem) (quant) (pron) (rel prefix) Noun (Adj)]}_{\text{NP}} \]

**Figure 4.2 - Noun phrase template.**

**NPs - Genitive (Possessive)**

Possessive noun phrases occur with pro-forms or with nouns. The noun phrase has a fixed order where the pronoun always precedes the possessed element. When there is no pronoun to determine the possessive relation, a noun is used in a genitive construction \([N + N]\) (details in section 4.10).

**NPs - With Demonstratives**

The demonstrative appears in a noun phrase coding spatial orientation and position of the element in discussion with respect to the hearer and speaker. They do not have a fixed order; they may appear before or after the noun. Note, however, that demonstratives can also appear as the head of a NP (see details in section 4.8.2).

\[(4.51) \text{a. } jē jōkora} \]

\[\text{DEM bird} \]

\[\text{‘This bird (sp.)’}\]
b.  jõkora jē
   bird    DEM
   ‘This bird (sp.)’

NPs - WITH QUANTIFIERS

Numeral quantifiers can modify a noun phrase. As with demonstratives, the numbers can appear on their own, functioning as the head of the NP.

(4.52) Patsò Patsë tiri t=ə-ajʧi
   Patsò Patsë two 3s=R-wife
   ‘Patsò and Patsë were his two wives’

(4.53) Pura te kite
   Pura   FOC one
   ‘Pura is alone’

Lit: Pura is one.

NPs- WITH ATTRIBUTIVE

This type of noun phrase contains a noun as its head and an adjective as its modifier. The adjective baba can form a possessive (genitive) construction with the noun, as in (4.54) or the adjective can form a predicate by itself, as in (4.55).

(4.54) en  aramira  [aramira baba]  Genitive construction
   2s  woman  woman  woman (after having a baby)
   ‘You are woman, (a) middle-aged woman’

(4.55) erè  [baba]  predicate   o=erek-kʷa
   2s  woman (after having a baby)  1s=speech-TR.PL
   ‘You are middle-aged woman, I say’
4.8 Pro-forms

The pro-forms described in this section are personal pronouns, demonstrative pronouns and indefinite pronouns.

4.8.1 Personal pronouns

Akuntsú has three sets of personal pronouns: independent, dependent and emphatic. The pronouns function as arguments of the predicate. The arguments can be expressed by both dependent (bound forms) and independent pronouns (free forms). The dependent forms represent the reduced form of their counterparts' free forms (with exception of first person exclusive, second and third person plural).

Dependent (bound) pronouns are attached to nouns, indicating the possessor of the phrase, and to verbs, indicating the arguments of the verb. The first person plural is divided into two categories: the exclusive and inclusive persons. Among the dependent pronouns, there is only one coreferential pronoun to indicate third person. The dependent pronouns are clitics that function as pro-clitics in the clause. Bound pronouns can function as object or subject when attached to verbs or as the possessor when attached to nouns.

On the other hand, independent (free) pronouns only function as subjects of transitive verbs. In verbs, there is only one pronoun attached directly on the verb, which is also the case of most Tupian languages (Rodrigues 1999). The below table shows all three types of pronominal forms in this language:

---

90 More on coreferentiality in section 5.10
91 Details in section 5.4
The personal pronouns, independent and dependent forms, can be fully replaced by full nominal phrases (NP), as illustrated below:

(4.56) a. Tʃarui kʷako poro-ka
    Tʃarui sweet, potato dig-TR
    ‘Tʃarui is taking out the sweet potato’

    b. on i=poro-ka
    1s 3s=dig-TR
    ‘I am digging it up’

(4.57) on eni erepe on t=erepe
    1s hammock tie 1s 3s=tie
    ‘I tie the hammock, I tie it’

In light of the data presented above, it might be important to ask: is it possible in Akuntsú for personal pronouns and NPs to co-occur in the same utterance? The co-occurrence of NPs and pronominal markers in the same utterance will depend on whether the

92 Note that otʃe, iat, and kejat are not considered clitics. These pronouns carry their own word-level stress and as such are not considered phonologically bound to their hosts. That some dependent pronouns of the language are considered clitic-like while others are not suggests that Akuntsú pronouns are still in transition from independent words to clitics.
full NP is in topic position or not, i.e., whether it is left-dislocated and placed outside of the phrase. Personal pronouns, which behave as the subject of intransitive clauses, are in complementary distribution with full NPs. However, the personal pronouns in object position can optionally co-occur with full NPs when the full NP is placed in topic position. The example below shows the noun *kʷiro* ‘recipient’ and the *i=* third person pronoun (both objects) in a non-complementary distribution:

(4.58) a. kʷiro on i=kita
    recipient 1s 3s=cover
    ‘Recipient, I cover it’

b. pea en i=poka
    firewood 2s 3s=burn
    ‘Firewood, I burned it’

The structures above illustrate that the object noun in these cases is not an argument but an adjunct; thus, the dependent pronouns can co-occur with a noun in the same clause. The relation between the object noun and the object clitic is an anaphoric one, where the personal marker is the internal argument and the noun is merely an adjunct. The data above is similar to what is discussed, for instance, by Arregi (2003) for Spanish. In Spanish, Arregi (2003:33) calls the same situation found in Akuntsú a left-dislocation clitic (see also Payne 1997).

The main syntactic characteristics of independent and dependent pronouns are summarized in the table below and discussed further in this section.
**Table 4.4 - Syntactic characteristics of pronouns.**

<table>
<thead>
<tr>
<th><strong>INDEPENDENT PRONOUNS</strong></th>
<th><strong>DEPENDENT PRONOUNS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Free word-order</td>
<td>• Fixed word-order</td>
</tr>
<tr>
<td>• They can appear at the beginning or end of the utterance</td>
<td>• OV for transitive or SV for intransitive</td>
</tr>
<tr>
<td>• Agent of transitive verbs</td>
<td>• Subject of intransitive verbs</td>
</tr>
<tr>
<td>• Anaphoric topic of intransitive utterance</td>
<td></td>
</tr>
</tbody>
</table>

**DEPENDENT PRONOUNS**

Dependent pronouns function as the subject markers of intransitive predicates (4.59), the object markers of transitive predicates (4.60), and the subject markers of stative predicates (4.61). Dependent pronouns also mark the possessors of possessed nouns (4.62).

(4.59) \( e=neme-\emptyset \)
2s=run-\text{THV}
‘You ran’

(4.60) \( kap \ e=\text{pit-}ka \)
wasp 2s=hole-\text{TR}
‘Wasp stung you’

(4.61) a. \( e=\text{pip} \)
2s=be.afraid
‘You are afraid’

b. \( t=\text{akat-}a \)
3s=fall-\text{THV}
‘It fell’

(4.62) a. \( e=\emptyset-\text{ampita} \ t\text{äm} \)
2s=\text{R-nose} full
‘Your nose is congested (Lit. Your nose is full)’
b. \( \text{te}=\sigma\text{-men} \quad \text{te}=\sigma\text{-kijt} \quad \text{at-a} \)
\(3\text{COR}=\sigma\text{-husband} \quad 3\text{COR}=\sigma\text{-salt} \quad \text{catch-THV} \)
‘Her husband got his salt’

INDEPENDENT PRONOUNS

The independent pronouns assume the semantic function of agent (A) in transitive clauses, as follows:

\[(4.63)\]

a. \( \text{on} \quad i=\text{mi-a} \)
\(1\text{s} \quad 3\text{s}=\text{kill-THV} \)
‘I killed it’

b. \( \text{en} \quad i=\text{at-a} \quad \text{ka} \)
\(2\text{s} \quad 3\text{s}=\text{catch-THV} \quad \text{go} \)
‘You (go and) get it’

c. \( \text{te} \quad \text{kit} \quad \text{ko} \)
\(3\text{s} \quad \text{seed} \quad \text{ingest} \)
‘He ate the seed’

d. \( \text{kits}e \quad \text{kip} \quad \text{boja} \)
\(1\text{PL}.\text{INCL} \quad \text{wood} \quad \text{cut} \)
‘We cut the wood’

Note that in intransitive constructions the occurrence of independent pronouns is optional, as indicated by the parentheses.

\[(4.64)\]

a. \( e=\text{neme} \quad (\text{en}) \)
\(2\text{s}=\text{run} \quad (2\text{s}) \)
‘You ran’
b. \( o=\text{atfino} \) (on)
   1s=sneeze (1s)
   ‘I sneezed’

Independent pronouns can also be attached to oblique markers, as exemplified below:

\[(4.65)\]  
\( en=\tilde{o} \quad ki \quad pi? \)  
\( 2s=\text{ALL} \quad \text{liquid} \quad \text{interior} \)  
‘Is there liquid inside you?’

**Emphatic Pronouns**

Besides the dependent and independent pronouns, there is another set of pronouns that are used to emphasize the subject of a sentence; this class is called emphatic pronouns.

\[(4.66)\] a.  
\( o=\text{erek-k}^w a \)  
\( 1s.\text{EM} \quad 1s=\text{speech-TR.PL} \)  
‘I speak’

b.  
\( o=\text{ə-tojêpit} \)  
\( 2s.\text{EM} \quad 1s=\text{r-grandchild-of.man} \)  
‘You are my grandchild’

Emphatic pronouns can also be attached to oblique clitics, as provided below:

\[(4.67)\]  
\( kir=\tilde{b}o \quad ki=\text{pera} \)  
\( 1\text{PL.INC.EM}=\text{DAT} \quad 1\text{PL.INCL}=\text{wake.up} \)  
‘We woke up’

### 4.8.2 Demonstrative Pronouns

The demonstratives in Akuntsú form a closed class. They express a deictic notion, serving as pronouns, and can also appear with some oblique clitics. The demonstratives
semantically indicate the spatial location of a referent (speaker or hearer), give it meaning as ‘there/here’, and indicate its position (standing, sitting, laying). So far, eleven demonstratives have been attested in this language, and a tentative summary of their functions in the language is presented in the table 4.5 below:

<table>
<thead>
<tr>
<th>Orientation with respect to hearer/speaker</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close to speaker</td>
<td>Close to hearer</td>
</tr>
<tr>
<td>ene</td>
<td>x</td>
</tr>
<tr>
<td>ê</td>
<td>x</td>
</tr>
<tr>
<td>êrom</td>
<td></td>
</tr>
<tr>
<td>jê</td>
<td>x</td>
</tr>
<tr>
<td>jêrom</td>
<td></td>
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<tr>
<td>õ</td>
<td>x</td>
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<td>ta</td>
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<td>tarom</td>
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<tr>
<td>ke</td>
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<tr>
<td>êne</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5 - Demonstratives

93 Demonstrative pronouns that can indicate the meanings ‘there/here’ can be also classified as adverbial demonstratives.

94 Aragon (2008:95) identified ene, jê, jeñom, and tejke. The demonstrative tejke presented in Aragon is not included in the class of demonstratives here.
From a pragmatic point of view, the demonstratives function to direct the hearer to the element mentioned in the present situation. In addition, the demonstratives also function as anaphoric and discursive deictics.

a. **eme** ‘close to the speaker, lying’

(4.68) a.  

```
ororo +pe  eme  eme  pi+kapa-kapa
  cotton+skin  DEM  DEM  foot+roll-RED
```

‘This shirt, this shoes’

b.  

```
koro+am  eme  t-et  =na  (Aragon 2008:96)
bowl+rope  DEM  R-name=ESS
```

‘Rope's bowl, it is this one's name’

c.  

```
eme  maã  eme
DEM  cover  DEM
```

‘This one, cover this one!’

b. **jê** ‘close to the speaker and the hearer, sitting’

(4.69) a.  

```
[...]  i=no  t-et  jê  t-et
  3s=other  R-name  DEM  R-name
```

‘[...] his other name, this one's name’

b.  

```
e=o-toa-ap  jê
2s=R-lying-NMLZ  DEM
```

‘Your hammock is this one’

c.  

```
en  e=o-kem  ki  pi  jê=bô  nom
  2s  2s=R-breast  liquid interior  DEM=DAT  no
```

‘You have milk inside, for this one there isn't’

d.  

```
jê  aw-aw  (Aragon 2008:96)
DEM  baby
```

‘This is a baby’
c. jërom ‘far from speaker/hearer, sitting’

(4.70) a. jërom tfe bok
   DEM COMING stay
   ‘It is coming to stay there’
   Context: Showing the place where they are going to build the house.

b. jërom tfe tope
   DEM COMING disappear
   ‘From there it disappeared’
   Context: where the fish moved and disappeared.

c. jërom õpa en
   DEM beat 2s
   ‘You hit that’

d. pero jërom te aj
   macaw DEM FOC stay
   ‘Macaw stays there’

d. ē ‘close to speaker, suspended’

(4.71) ē apara
   DEM banana
   ‘This is banana’

e. ērom ‘far from speaker/hearer, suspended’

(4.72) a. ērom apara
   DEM banana
   ‘That is banana’

b. ebapa ērom
   moon DEM
   ‘That is the moon’
f. *ke* Default demonstrative\(^95\)

\[(4.73)\] a. *ke amon*
   DEM soap
   ‘This is soap’

b. *ke itipope*
   DEM liana (sp.)
   ‘This is liana (sp.)’

c. *ke jô*
   DEM here
   ‘This was here’

d. *Pupak ko at-a ke=bô*
   Pupâk fishhook catch-THV DEM=DAT
   ‘Pupâk catches the fishhook for this one’

e. *ke=bô niram*
   DEM=DAT stand
   ‘For that one, (she) is standing’

f. *ke=bô*
   DEM=ALL
   ‘To/for that one’

g. *ke tfe*
   DEM coming
   ‘Coming from this (part)’
   Context: Showing where he should cut the game animal.

h. *ke=bô nom t-et*
   DEM=DAT no R-name
   ‘For this one there is no name’

---

\(^95\) In Mekéns *ke* is analyzed as a pro-uninflected verb, which is used as an anaphoric element to reference information that occurred previously in the discourse (Galucio 2001:51). In Makuráp, *ke* is seen as a particle that reports someone’s words, reinforcing what the person is saying or the word of someone else that is reported by the speaker (Braga 2005).
i. \[ ke=b\text{ô} \nom \]
\[ \text{DEM}=\text{DAT} \quad \text{no} \]
‘That is not’
Context: Answering if the thing is hers.

There is also the demonstrative \( ke=t\text{fa} \) which was found in only two examples:

(4.74) a. \[ ke=t\text{fa} \quad \beta\text{uh} \]
\[ \text{DEM}=\text{HIGH} \quad \text{IDEO} \]
‘This one fell’

b. \[ ke=b\text{ô}=t\text{fa} \]
\[ \text{DEM}-\text{ALL-HIGH} \]
‘To this one’
Context: the one sitting on the rail.

g. \( \ddot{\text{o}} \) ‘close to the hearer, suspended’

(4.75) \[ \ddot{\text{o}} \]
\[ \text{DEM} \]
‘This one’
Context: showing which banana’s stem I should get.

h. \( \ddot{\text{orom}} \) ‘close to the hearer, lying’

(4.76) \[ \text{orom} \quad a \]
\[ \text{DEM} \quad \text{exist} \]
‘There is one there’
Context: Talking about the bowl on the floor.

i. \( \text{tarom} \) ‘far from hearer and speaker, standing’

(4.77) \[ kir\text{ê}=r\text{i} \quad ta \quad paj-a \quad kiw-kiw \]
\[ \text{Today}=\text{ABL} \quad \text{DEM} \quad \text{clean-THV} \quad \text{IDEO-RED} \]
‘From now one, that one cleans it, ripping, ripping’ (repeated from (4.22))
**j. tarom** ‘close to the hearer, standing’

(4.78)  
\[
\text{tarom \ o=ð-\text{kipe}} \\
\text{DEM \ ls=R-machete}
\]

‘That one is my machete’

Context: There were two machetes: one standing and the other lying on the floor.

**k. êne** ‘invisible’

(4.79)  
\[
\text{êne \ at} \\
\text{DEM \ catch}
\]

‘Catch it!’

Context: It is to the hearer catch the thing that he was asking for.

(4.80)  
\[
\text{êne} \\
\text{DEM}
\]

‘This’

Context: In the conversation, he was pointing to the direction of the river which was not visible.

**4.8.3 Indefinite pronoun**

There is also the pro-form no ‘other’ that can function as the head noun of the phrase. However, it doesn't appear alone in the NP; that is, it needs to be specified by a noun, another demonstrative or by a personal pronoun.

**NOUN + no**

(4.81) a.  
\[
\text{ebapa \ no \ ebapa \ no \ te=ita} \\
\text{moon other \ moon other \ 3COR=arrive}
\]

‘other moon, other moon, he arrives’

b.  
\[
\text{ek \ no} \\
\text{house \ other}
\]

‘other house’

**DEM + no**
4.82 a. *tojēpit jē no i=at*
   grandchild.of.man DEM other 3s=catch
   ‘Granddaughter, this other one, catch it’

   b. *kʷako œ-okʷaj ke no œ-okʷaj*
   guan R-tail DEM other R-guan
   ‘Guan's tail, this other one's tail’

PRONOUN + NO

4.83 a. *i=no i=ko-ra en*
   3s=other 3s=ingest-HAB 2s
   ‘the other one, you ate it (as usual)’

   b. *i=no te=ita*
   3s=other 3COR=arrive
   ‘The other one is arriving’

4.9 Numeral quantifiers

In this section, I present the numeral quantifiers identified in Akuntsù. This class is composed of only two lexical words: *kite* ‘one’ and *tiri* ‘two’ or ‘more than two.’ The numbers operate as modifiers of the head noun or as the head noun of the phrase. They can appear before or after the noun; however the latter is not as frequent as the former in my data

*kite* ‘one’

4.84 a. *kite tea*
   one exist
   ‘There is one’

   b. *kite babape at*
   one gourd catch
   ‘Catch one glass!’
c.  *Buko kite kora-kora mi*
   Buquá one chicken kill
   ‘Buquá killed one chicken’

   The numeral *kite* may also code the meaning ‘alone’ or ‘by one self’ (4.85).

   (4.85) a.  *orê=bô kite*
      1s.EM=DAT one
   ‘I am alone
   Lit. For me, there is one.

   b.  *Konibu kite ip-a ka*
      Konibú one return-THV go
   ‘Konibú (goes and) comes back alone’

   *tiri* ‘two’ or ‘more than two’

   (4.86) a.  *tiri no te=tjét*
      two other 3COR=leave
   ‘Two other (days), he leaves’

   b.  *tiri o=ø-tak o=ø-tak o=ø-tak tiri*
      two 1s=R-daughter.of.man 1s=R-daughter.of.man 1s=R-daughter.of.man two
   ‘[...] my two daughters, my daughter (and) my daughter, two’ (pointing to the daughters).

   c.  *tiri pero a*
      two macaw (sp.) exist
   ‘I have two macaws’

   d.  *tiri-tiri-tiri tfê ma i=ma en*
      two-RED-RED coming keep/put/spill 3s=keep/put/spill 2s
   ‘You come and put it, many of it’

   Note that when the numbers operate as the head of a NP, they function like a noun, and no distinction is found between numerals and nouns. A possible reason explaining why numbers can occur in a sentence without a noun or a demonstrative may be because the noun
or demonstrative is not overtly expressed, and as such, the numeral is not really functioning
as the head, but rather as a modifier. That is, they may just be serving their anaphoric
function, as in example (4.87) below; the conversation is about people who use wooden
labrets, and for the last person mentioned in the discourse the word $k'ajta$ ‘wooden labret’ is
not mentioned. Part of the discourse is described, as follows:

(4.87) $k'ajta\ e=b\tilde{o}\ nom\ or\tilde{e}-b\tilde{o}\ k'ajta\ kite\ ke=b\tilde{o}\ tiri\ [...]$

wooden labret 2s=DAT no 1s=DAT wooden labret one DEM=DAT two

‘Labial wood, you don't have, I have one labial wood, this one has two [...]’

4.10 Genitive constructions and the NP

Genitive (or possessive) constructions refer to two nouns, a pronoun and a noun, or a
demonstrative and a noun in a juxtaposition, which have a possession interpretation. There is
no morphological marker to indicate the genitive construction. The order is [POSSESSOR +
POSSESSED]$^{96}$. The three patterns found in the language are illustrated below:

(4.88) a. $kopiba\ o=ok'aj$

parrot (sp.) R-tail
‘Parrot's tail’

b. $ke\ o=pebo$

DEM R-feather
‘This one's feather’

c. $o=pi$

1s=R-foot
‘my foot’

It is also possible to have a complex genitive construction, where the noun possessor

$^{96}$ Dryer (1992, 2008) observed that [OBJECT + VERB] languages tend to have [POSSESSOR + POSSESSED] order.
is attached to a pronoun \([\text{pro}=\text{N}]\) possessor juxtaposed to another noun \([\text{N}]\) possessed as follows:

(4.89) a. \(o=\text{o-kipi} \quad t-ek\)
    \(1s=\text{r-young.sister} \quad \text{R-house}\)
    ‘My sister’s house’

b. \(\text{poraki} \quad \text{pebo} \quad t-ek\)
    \(\text{curassow feather} \quad \text{R-house}\)
    ‘house of feathers of curassow’

In Makuráp (Braga 2005) and Mekéns (Galucio 2001), a pronoun and an independent noun in a genitive construction are usually combined with a mediator of possession, indicated by the word \(\text{pet}\) in these languages. As presented in Aragon (2008:112), Akuntsú lacks this type of genitive construction with independent nouns. The Akuntsús’ relatives were all killed and they now raise animals as if they were their surrogate children. The women raise their pets as children, carrying them everywhere, chatting with them. When I ask what they are, the women immediately refer to them with a kinship term. Thus, the Akuntsú do not use the same linguistic construction (genitive classifier construction) found in Makuráp and Mekéns, but instead use the possessed kinship term ‘son/daughter of woman’ for these possessed animals as follows:

(4.90) a. \(o=\text{o-mepit} \quad \text{pow-pow}\)
    \(1s=\text{r-son/daughter.of.woman} \quad \text{owl}\)
    ‘My son owl’

b. \(\text{pero} \quad \text{Aramira o-mepitépit}\)
    \(\text{macaw Aramira R-grandchild.of.woman}\)
    ‘Aramira’s grandson macaw’
4.11 Summary

This chapter presented the nominal classes in Akuntsú, including a description of the noun morphology found in this language, the difference between oblique clitics and postpositions where no core case markers are described for this language, a survey of the derived noun morphemes, and the behavior of diminutive and augmentative in Akuntsú.

<table>
<thead>
<tr>
<th>TYPES OF NOUNS</th>
<th>MORPHOLOGY</th>
<th>EXAMPLES AND/OR NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple nouns</td>
<td>• Attached to oblique clitics and linked to postpositions; • Undergo reduplication and compound processes; • Can receive the determinative morpheme; • Can receive two derivational morphemes: diminutive and augmentative</td>
<td>Alienable nouns; Inalienable nouns Common nouns</td>
</tr>
<tr>
<td>Complex Nouns</td>
<td>• Can be attached to oblique clitics or linked to postpositions</td>
<td>Juxtaposition; Compound</td>
</tr>
<tr>
<td>Numerals</td>
<td>• Undergo reduplication</td>
<td>One; two (or more than two)</td>
</tr>
<tr>
<td>Personal Pronouns</td>
<td>• Can be attached to oblique clitics</td>
<td>Only free pronouns and emphatic pronouns may be attached to oblique clitics.</td>
</tr>
<tr>
<td>Demonstratives</td>
<td>• Can be attached to oblique clitics or linked to postpositions</td>
<td>They are classified according to location and position from the hearer/speaker's perspective.</td>
</tr>
</tbody>
</table>

Table 4.6 - Summary of nominal morphology.
In relation to word formation processes, compounds and reduplication were presented, and particular attention was given to possible types of compound forms and nominal reduplication. Later in the chapter, a noteworthy point includes the pro-forms in the language, divided into bound and free pronouns, which play an important role in the understanding of the alignment system\(^{97}\). In addition, a description of demonstratives and numeral quantifiers was also presented.

\(^{97}\) More on alignment system in chapter 5.
5.1 Introduction

This chapter describes the verb phrase template (§5.2), followed by a discussion of the basic structure of verbs and the morphology that affects them in this language (§5.3). Also presented are the verbal formatives and other morphemes that are attached to verbs, the organization of the verbal arguments in the clause, the animacy hierarchy (§5.4), and the verb alignment system (§5.5).

The auxiliaries are presented in section (§5.6); morphemes characterized as transitivizers (§5.7 and §5.8), middle voice (§5.9), reciprocal and reflexive (§5.10) and the main aspectual forms related to verbs (§5.11) are also provided. Finally, the thematic vowel (§5.12) and an overview of mood and modality (§5.13) are described. A summary of this chapter is provided in section (§5.14).

5.2 Verb phrase

In Akuntsú, the verbal construction may contain: (i) a subject, which can be a full NP, a bound or free pronoun (depending on the type of verb); (ii) an object (in transitive clauses); and (iii) a verb. Depending on the type of the clause and its semantics, different morphemes are added to the verb. Also attested are adverbs, which can add complementary information
to the VP, and the focus particle te, besides other verbal particles. A template of the verb phrase is presented below:

\[
[(\text{NOUN or PRON}) (\text{FOC}) (\text{PREF}) \text{stem} (\text{SUFF}) (\text{PART}) (\text{AUX})]\text{VP}
\]

Figure 5.1 - Template of verb phrase.

The NPs function as the object and the subject of transitive verbs and as the subject of intransitive verbs — the NPs in subject function are outside the verb phrase constituent. The prefixes found in the VP are causative mð- ð-, middle voice e-, and the object nominalizer i- (see details in chapter 4). The suffixes that may attach to the verbal stem include the thematic vowel -a, the habitual -ra, nominalizer -ap (described in chapter 4), the auxiliaries, and the suffixes -ka and -kw. The aspectual particles include the projective kom and the iterative ekwa. Depending on the type of clause, it may take an interrogative words, negative particle or imperative marker (more on §8.4, §8.5 and §5.13.1.2 respectively).

5.3 The lexical category verb

Verbs in Akuntsú consist of a verb root and affixes or clitics. The most important classification of verbs is according to their transitivity: (1) verbs that allow two or three arguments, including at least one obligatory direct object — transitive verbs, and (b) verbs that require only one obligatory argument — intransitive verbs. The differences between the two are determined by morphological and semantic factors, as described in this chapter.
5.3.1 Intransitive verbs

Intransitive verbs are differentiated from transitive verbs by the following key morphological and syntactic characteristics (among others described in this subsection):

<table>
<thead>
<tr>
<th>TRANSITIVE VS. INTRANSITIVE VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TRANSITIVE VERBS employ the set of independent personal pronouns as the subject of the clause, while intransitive verbs employ the set of clitic personal pronouns to represent their subjects;</td>
</tr>
<tr>
<td>• INTRANSITIVE VERBS only require one obligatory argument, i.e., the subject, while transitives require at least two obligatory arguments, i.e., the subject and the object;</td>
</tr>
<tr>
<td>• INTRANSITIVE VERBS can bear the causative prefixes mõ- ~ õ- while transitives cannot;</td>
</tr>
<tr>
<td>• TRANSITIVE VERBS can bear the object nominalizer i-, intransitives cannot.</td>
</tr>
</tbody>
</table>

**Figure 5.2** - Transitive vs. intransitive verbs.

Verbs that exemplify intransitives include ‘to fall,’ ‘to dance,’ ‘to throw up,’ ‘to climb’ and ‘to come back,’ as seen in the following examples:

(5.1) a. \( o=akat-a \)
1s=fall-THV
‘I fell’

b. \( ki=amojā \)
1PL.INCL=dance
‘We dance’

c. \( o=k^wira \)
1s=throw.up
‘I threw up’
d. $o=k^wep-a$
   $1s=climb-THV$
   ‘I climb’

e. $o=o-kipi$  
   $te=ip$
   $1s=r-young.daughter$  
   $3cor=come.back$
   ‘My young daughter came back’

Intransitive verbs can bear the causative prefixes $mō-$ ~ $ō-$. The structure is [CAUS-INTRANSITIVE.PREDICATE], which results in a transitive predicate, as in the following. Note that for some examples below, when vowel deletion rule is applied, the surface form is presented.

(5.2) a. $kopiba$  
   $te=aot-a$
   parrot (sp.)  
   $3cor=go.out-THV$
   ‘The parrot has left’

b. $eti$  
   $mō-aot-a$  
   [ɛ,ti mäʔora]
   basket  
   CAUS=go.out-THV
   ‘She caused the basket to leave’

(5.3) a. $on$  
   $o=atfo-a$
   $1s$  
   $1s=bathe-THV$
   ‘I bathe’

b. $kopiba$  
   $mō-atfo-a$  
   $on$  
   [kup,piba mäʔdzoa]
   parrot (sp.)  
   CAUS=bathe-THV  
   $1s$
   ‘I make the parrot bathe’

(5.4) a. $o=a-mepit-et$  
   $te=et-a$
   $1s=r-son/daughter.of.woman-def$  
   $3cor=sleep-THV$
   ‘My daughter sleeps’

---

98 The investigation of whether or not all intransitive verbs are allowed to take this causative morpheme will be undertaken in future studies.

99 See vowel deletion rule in section (3.1.1).
b. o=ø-mepit-et  ø-et-a 
1s=R-son/daughter of woman-DEF  CAUS= sleep-THV 
‘I make my daughter sleep’

(5.5) a.  iki  te=akat-a 
water  3COR= fall-THV 
‘Water is falling’

b.  iki  mō-akat-a on  [i, ki māˈkardɔn] 
water  CAUS= fall-THV  1s 
‘I make the water fall’

5.3.2 Transitive verbs

The transitive verbs are defined as the verbs that require two arguments: the object (O) and the subject (S), where the former semantically indicates the patient (P) and the latter the agent (A). The transitive only allows one morpheme to be marked directly on the verb: the pronoun, which functions as a substitute for a noun. Note that in transitive verbs, the pronominal prefixes can co-occur with an overt independent NP only when the full NP is placed in topic position (see section (4.8.1)). Examples of transitive verbs are provided below:

(5.6) a.  kibapi  poka on 
bush  burn  1s 
‘I burned the bush’

b.  atiti  tfajä-ka on 
corn  thresh-TR  1s 
‘I’m threshing corn’

c.  eni  + am  tfop-a en 
hammock  + rope  see-THV  2s 
‘You see the rope of the hammock’
There are also some types of transitive verbs that may allow more than two arguments: a subject, direct object and indirect object. The indirect object is marked by an oblique clitic. Examples of this type of verbs is illustrated below:

\[(5.7)\quad Tʃaruj\ kijtpit\ ð-a\ te\ Kani=bð\]
\[Tʃarúj\ fish\ give-THV\ FOC\ Kani=DAT\]
\[‘Tʃarúj gave fish to Kani’ (repeated from (3.14))\]

However, the indirect object is not obligatory, as shown:

\[(5.8)\ a.\quad Tʃaruj\ kijtpit\ ð-a\]
\[Tʃarúj\ fish\ give-THV\]
\[‘Tʃarúj gave fish’\]

\[b.\quad e=ø-ti\ eti\ ð-a\ te\]
\[2s=R-mother\ basket\ give-THV\ FOC\]
\[‘Your mother gave the basket’\]

The transitive verbs differ from intransitives in the morphological markers they are able to take: for example, the object nominalizer \(i\)- that is only attached to transitive verbs (5.9 a-b).
(5.9) a.  
\begin{align*}
\text{abat} fo & \quad \text{i-mi} \quad \text{ko-a-ra} \\
\text{grandfather} & \quad \text{OBJ.NMLZ-kill} \quad \text{ingest-THV-HAB}
\end{align*}

‘She is going to eat grandfather\'s prey’

Lit: ‘She is going to eat grandfather\'s hunting/killing’

b.  
\begin{align*}
o=\emptyset-mepit & \quad \text{i-}\ddot{o} \quad \text{ma} \\
1s=R-\text{son/daughter.of.woman} & \quad \text{OBJ.NMLZ-give} \quad \text{keep/spill/put}
\end{align*}

‘Put my daughter\’s given thing!’

Lit: ‘Put my daughter\’s giving (the thing that she gave)’

c.  
\begin{align*}
e=i-at & \quad \text{at-a} \quad \text{mä} \\
2s=\text{OBJ.NMLZ-catch} & \quad \text{catch-THV} \quad \text{CERT}
\end{align*}

‘He caught your thing’

Lit: ‘He caught your caught thing’

Of the two arguments required by transitive verbs, only one is marked on the verb, which will then follow the participant hierarchy of this language. Even though only one argument is marked on the verb, it is still possible to identify both the agent and the patient due to the semantic roles of the participants involved in the discourse, which determine the identity of the agent and patient.\(^{100}\)

5.4 Animacy hierarchy on verbs

As described in Foley (2007:414, cf. Silverstein 1976), there is a hierarchy regarding speech-act participants across languages, which involves a natural hierarchy for marking the topic in clauses where third person is usually subclassified according to humanness or animacy:

\[
\text{SPEAKER} > \text{ADDRESSEE} > \text{THIRD PERSON}
\]

\(^{100}\) It is also a well-known characteristic of other Tup\'i\'an languages (Cabral and Rodrigues (2001)).
For the Tupian languages, Monserrat and Soares (1983) proposed the same hierarchy presented above for these languages, suggesting a 1 > 2 > 3 hierarchy for pronouns for Proto-Tupí-Guaranian. In the Tupian languages analyzed for their study, the authors showed that only one pronominal marker can be attached directly on the verb. For intransitive verbs, the authors state that the marking is systematic and clear; for transitive predicates, whether the A (agent) and P (patient) are marked on the verb will depend on the animacy hierarchy, which means that the one which is higher on the hierarchy scale will be marked on the verb.\textsuperscript{101}

For instance, in the scenario 2 > 1 (a second-person agent acting on a first-person patient), the first person patient is higher than the second person agent, and therefore the 1\textsuperscript{st} (patient) is procliticized/prefixed to the transitive verb while the 2\textsuperscript{nd} (agent) is marked by an independent pronoun and placed outside of the verb proper.

Among Tuparian languages, Mekéns was described as a language with 1/2 > 3 person hierarchy, where the first and second person are analyzed as higher than the third person based on a "non-deletability" argument: the third person is optionally omitted as the overt subject of transitive verbs, where first and second person subjects are not omitted in this way (Galucio 2001:80).

### 5.4.2 Animacy and transitive verbs

In Akuntsú, when both the agent and patient are pronouns, the object pronoun is always attached to the verb (in boldface), as in the following:

**Third person object pronoun**

\textsuperscript{101}See also Zwicky (1977) for the participant hierarchy.
(5.10) a.  on $i=fiop-a$
    1s  3s=see-THV
    ‘I see it’

                             b.  en $i=fiop-a$
    2s  3s=see-THV
    ‘You see it’

FIRST AND SECOND OBJECT PRONOUN

(5.11) a.  en $o=fiop-a$
    2s  1s=see-THV
    ‘You see me’

                             b.  on $e=fiop-a$
    1s  2s=see-THV
    ‘I see you’

The following depicts a scenario where third person is a full NP and the patient a
pronoun, where the latter (the object) is marked on the verb (as occurs in the examples
above):

(5.12) a.  Konibu  e=fiop-a
    Konibú  2s=see-THV
    ‘Konibú sees you’

                             b.  aparabia  o=fiop-a
    non.Indian  1s=see-THV
    ‘the non-Indian saw me’

                             c.  tawtfe  i=fioga
    peccary  3s=bite
    ‘The peccary bit her’
In certain scenarios, both the subject and object may be third person nouns. In this situation, it is possible to find OSV, SVO\textsuperscript{102} or OV order with no morphological marker on the verb to assign agreement either with the object or with the subject. The change in the word order is only possible due to the animacy hierarchy where animate nouns act on inanimate nouns, as shown\textsuperscript{103}:

**THIRD PERSON NOUN AGENT AND PATIENT**

\[
\begin{array}{cccccccc}
O & S & V & S & V & O & O & V \\
\text{etì} & \text{Ururu} & \text{nì}-a & \text{Ururu} & \text{nì}-a & \text{etì} & \text{etì} & \text{nì}-a & \text{nì}-\text{nì}-\text{nì}-a \\
\text{basket} & \text{Ururu} & \text{weave-THV} & \text{Ururu} & \text{weave-THV} & \text{basket} & \text{weave-THV} & \text{weave-RED-RED-THV} \\
\end{array}
\]

(5.13) ‘Ururu is weaving the basket, Ururu is weaving the basket, she is weaving the basket, weaving, weaving’

However, a different situation occurs when the patient is an inanimate third person noun. When the patient is a non-animate third person noun and the agent is a pronoun, the marker on the verb will be the one higher on the hierarchy scale, following the 1 > 2 > 3 hierarchy, as shown below. The sentences below were extracted from natural conversation.

**SCENARIO:**

1 (AGENT) > 3 (NON-ANIMATE PATIENT)

(5.14) a. \textit{kipkap} \textit{o} = \textit{paj-a}  \\
\textit{annatto} \textit{l}s = \textit{clean-THV}  \\
‘I clean the annatto (by removing the leaves from the fruit)’

---

\textsuperscript{102} When the object is placed after the verb, the object is usually preceded by the focus marker \textit{te}. The type of example seen above is not frequent in my data. I also would like to note here that the word \textit{etì} ‘basket’, in the SVO clause, carries a high pitch level.

\textsuperscript{103} Note that when both subject and patient are proper nouns or animate nouns the object precedes the verb, and when it is placed after it, the focus marker is obligatorily inserted in the clause.
b. *kora*¹⁰⁴ ṧ-ōpita  o=kaw-kʷa
   chicken r-egg  1s=split-TR.PL
   ‘I split the chicken's egg’

c. *kip*  t-ep  o=t-i-a
   tree  r-leaf  1s=smell-THV
   ‘I smell the leaf of the tree’

2 (AGENT) > 3 (NON-ANIMATE PATIENT)

(5.15) a.  o=ǔ-jà + po  e=ô-a
   1s=r-teeth + hand  2s=give-THV
   ‘You gave my spoon’

   b. *komāta*  e=at-a
      bean  2s=catch-THV
      ‘You caught beans’

   In the cases described in the above scenario, we identify a hierarchy involving the
   semantic roles, where the agent is hierarchically superior to the patient—that is, the agent is
   the one marked on transitive verbs. In light of this discussion, we may conclude that the
   agent is only marked on transitive verbs when the patient is an inanimate full NP, following
   the hierarchy proposed by Foley (1976). However, note that the speakers may choose either
   to mark the agent on the verb or to express the agent as a full pronominal form, without any
   apparent change in the semantics. Compare the examples below (further discussion in section
   5.4 below):

¹⁰⁴ Note that the noun ‘chicken’ is not reduplicated in this example. Usually the speakers refer to ‘chicken’ as
*kora*-kora.
(5.16) a. komâta e=at-a
    bean 2s=catch-THV
    ‘You caught bean’

    b. komâta at-a en
    bean catch-THV 2s
    ‘You caught beans’

In Akuntsú, the nominal hierarchy outranks the semantic roles only when a first or second person is the agent and the patient is a non-animate noun. This may lead me to posit that the first and second person are preferred for marking on the verb, and that they are higher in the nominal hierarchy than the third person, demonstrating a hierarchy of 1/2 > 3 for this language.

5.5 Alignment system

In Akuntsú, the person markers that indicate the subject of intransitive verbs and the object of transitive verbs are coded in the same way, and these two differ from the coding for subjects of transitive verbs. Thus, Akuntsú has an ergative-absolutive verb alignment system (Aragon 2008); the subject of intransitive verbs and the object of transitive verbs are coded as Absolutive, while the subject of transitive verbs is coded as Ergative (cf. Comrie 1989). However, when the transitive clause has an inanimate noun as the patient of the verb, there are two options of alignment in the language: (1) ergative-absolutive and (2) neutralized ergative-absolutive, as follows:

(1) ERGATIVE-ABSOLUTIVE PATTERN

The agent of transitive clauses (when pronominal) is coded by independent personal pronouns and placed before or after the verb phrase (5.17a); the patient (when signaled by a
pronominal marker) is coded by clitic pronouns (5.17b). In intransitives, the subject (when pronominal) is coded by clitic personal pronouns (5.17c).

(5.17) a. **en** t=akima at-�能 (A of transitive)
   2s 3s=cob  catch-THV
   ‘You caught its cob’

   b. **e**=et-a (S of intransitive)
   2s=sleep-THV
   ‘I sleep’

   c. **Aramira** e=tfop-a (O of transitive)
   Aramira 2s=see-THV
   ‘Aramira sees you’

(2) NEUTRALIZATION OF THE ERGATIVE-ABSOLUTIVE PATTERN

When there is an inanimate noun playing the role of the object and a pronoun functioning as the agent, the ergative-absolutive system may be neutralized—that is, the clitic pronouns can assume the function of agent and then be marked on the verb. In that sense, the nominal hierarchy is responsible for signaling the grammatical relations, and there is no overt marker in the NP or in the VP to indicate the role played by the NPs.

In other words, NPs ranked lower on the nominal hierarchy are inherently more likely to be patient than, for instance, humans, which are higher on the scale; i.e., it is more likely for humans to outrank non-human nouns, or, in other words, "it is 'natural' for a higher being to act or impinge on a lower being" (Song 2001:167). This suggests that there is no need to mark the A differently from P since the nominal hierarchy indicates the syntactic function of the NP, and thus, the difference between A and P being distinguished by pronouns is not obligatory. Among the Tuparían languages, this has been described only for Akuntsú. Future investigation will be undertaken to obtain more information on this structure.
Figure 5.3 below summarizes the main notions presented in this section:

<table>
<thead>
<tr>
<th>EXAMPLES</th>
<th>ALIGNMENT SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPTION 1 - ERG. ABS. SYSTEM</strong></td>
<td></td>
</tr>
<tr>
<td>(I) <strong>TRANSLITIVE</strong> - P LOWER IN THE ANIMACY</td>
<td></td>
</tr>
<tr>
<td><em>en t=akima at-a</em></td>
<td></td>
</tr>
<tr>
<td>2s 3s=cob catch-THV</td>
<td></td>
</tr>
<tr>
<td>‘You caught its cob’</td>
<td></td>
</tr>
<tr>
<td>(II) <strong>INTRANSITIVE</strong></td>
<td></td>
</tr>
<tr>
<td><em>e=tjel-a</em></td>
<td></td>
</tr>
<tr>
<td>2s=leave-THV</td>
<td></td>
</tr>
<tr>
<td>‘You left’</td>
<td></td>
</tr>
<tr>
<td><strong>OPTION 2 - NEUTRALIZATION</strong></td>
<td></td>
</tr>
<tr>
<td>(I) <strong>TRANSLITIVE</strong> - P LOWER IN THE ANIMACY</td>
<td></td>
</tr>
<tr>
<td><em>t=akima e=at-a</em></td>
<td></td>
</tr>
<tr>
<td>3s=cob 2s=catch-THV</td>
<td></td>
</tr>
<tr>
<td>‘You caught its cob’</td>
<td></td>
</tr>
<tr>
<td>(II) <strong>INTRANSITIVE</strong></td>
<td></td>
</tr>
<tr>
<td><em>e=tjel-a</em></td>
<td></td>
</tr>
<tr>
<td>2s=leave-THV</td>
<td></td>
</tr>
<tr>
<td>‘You left’</td>
<td></td>
</tr>
<tr>
<td>(III) <strong>TRANSLITIVE WHEN P IS HIGHER IN THE ANIMACY</strong></td>
<td></td>
</tr>
<tr>
<td><em>on e=kʷakʷa</em></td>
<td></td>
</tr>
<tr>
<td>1s 2s=grab</td>
<td></td>
</tr>
<tr>
<td>‘I grabbed you’</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5.3 - Alignment system.**
5.6 Auxiliary

There are in Akuntsú auxiliaries that express the notion of ‘sitting,’ ‘lying,’ ‘standing,’ ‘walking,’ ‘moving,’ ‘coming’ and ‘going,’ as presented in the table below. In sentences with an auxiliary verb, a combination of main verb and auxiliary is often attested, though there are some exceptions to be found, as discussed later in this section.

<table>
<thead>
<tr>
<th>AUXILIARY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>standing (upright position)</td>
<td>ãm</td>
</tr>
<tr>
<td>sitting</td>
<td>jâ</td>
</tr>
<tr>
<td>lying</td>
<td>toa</td>
</tr>
<tr>
<td>in movement</td>
<td>ko</td>
</tr>
<tr>
<td>coming</td>
<td>tfê</td>
</tr>
<tr>
<td>going</td>
<td>ka</td>
</tr>
</tbody>
</table>

Table 5.1 - Auxiliary.

The auxiliary represents a dynamic or static position of the subject, providing information about the subject's posture or movement that is not included in the semantics of the verb—for example, instances of the verb ‘to sleep’ are found where the subject sleeps lying, sitting or standing. The choice of auxiliary depends on the subject's position at the moment of the event expressed by the main verb (5.18a-b). Some examples of this construction are presented below:

(5.18) a.  

(5.18) a.  

<table>
<thead>
<tr>
<th>(5.18) a.</th>
<th>e=et-a</th>
<th>e=toa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2s=sleep-THV</td>
<td>2s=laying</td>
<td></td>
</tr>
</tbody>
</table>

‘You are sleeping (laying down)’
b. \textit{te}=\textit{et-a} \quad \textit{te}=\textit{j\ddot{a}}
\textit{3COR}=\textit{sleep-THV} \quad \textit{3COR}=\textit{sitting}
‘You are sleeping (sitting)’

A pronominal marker is attached to the auxiliary, where there is a cross-referential marker between the main verb and the auxiliary.

**COMBINATION OF MAIN VERB + AUXILIARY**

\textit{-j\ddot{a}} ‘sitting’

(5.19) a. \textit{t}=\textit{\textalpha}-\textit{anam} \quad \textit{ko-a} \quad \textit{e}=\textit{j\ddot{a}}
\textit{3s=R-head ingest-THV} \quad \textit{2s=sitting}
‘You are eating its head’ (while in a sitting posture)

b. \textit{\textalpha{jpe}} \quad \textit{ko-a} \quad \textit{o}=\textit{j\ddot{a}}
\textit{snuff ingest-THV} \quad \textit{1s=sitting}
‘I am sniffing snuff (while sitting)’

c. \textit{kora-kora} \quad \textit{nom} \quad \textit{aot} \quad \textit{te}=\textit{j\ddot{a}}
\textit{chicken} \quad \textit{no go.out} \quad \textit{3COR}=\textit{sitting}
‘Chicken is not going out (sitting there)’

\textit{-ko} ‘moving’

(5.20) a. \textit{e}=\textit{\textalpha-fet-a} \quad \textit{e}=\textit{ko}
\textit{2s=leave} \quad \textit{2s=MOV.}
‘You are leaving’

b. \textit{Aramira} \quad \textit{pitoa} \quad \textit{at-a} \quad \textit{i}=\textit{ko}
Aramira \quad \textit{tobacco catch-THV} \quad \textit{3s=MOV.}
‘Aramira is catching tobacco’

c. \textit{tabit} \quad \textit{tfop-a} \quad \textit{i}=\textit{ko}
garden \quad \textit{see-THV} \quad \textit{3s=MOV.}
‘He is going to see the garden (moving to see the garden)’
-toa ‘lying’

(5.21) \[ ki=et-a-ra \quad ki=toa \]
\[
\text{1PL.INCL=sleep-THV-HAB} \quad \text{1PL.INCL=lying} \\
\text{‘We are going to sleep once again’} \\
\]

-ãm ‘standing’

(5.22) \[ ameko \quad te=et-a \quad i=ãm \]
\[
\text{jaguar}^{105} \quad \text{3COR=sleep-THV} \quad \text{3s=standing} \\
\text{‘Jaguar sleeps (standing there)’} \\
\]

The positional verbs usually occur in a construction with a main verb. However, a positional verb can also occur independently without a separate main verb\(^{106}\), but only in the case of -jã ‘sit, stay’ and the directional morpheme ka and tʃe (as seen in further sections). In cases where positional verbs occur without a main verb, they function as the main predicate, as in the following examples:

(5.23) a. \[ Enotej \quad te=jã \]
\[
\text{Enotej} \quad \text{3COR=sitting} \\
\text{‘Enotej stays’} \\
\]

b. \[ imimere \quad etʃe \quad o=jã \quad tʃiramãti \quad erek-k”a \]
\[
\text{Omerê DIFF} \quad \text{1s=sitting} \quad \text{Txiramanty speech-TR.PL} \\
\text{‘Over the Omerê, I stay, (I) talk to Txiramanty’} \\
\]

Similar constructions in other Amazonian languages are often analyzed as ‘serial verbs’\(^{107}\). Here, we prefer to analyze them as auxiliary verb constructions, given that the set

---

\(^{105}\) They use the same word for ‘jaguar’ to call domestic cats.

\(^{106}\) This is also attested in Mekêns (Galucio 2001:56).

\(^{107}\) Aikhenvald (2006:1) defines serial verbs as a "sequence of verbs which act together as a single predicate,"
of possible verbs in this languages (which can occur in combination with others in the
correction) is limited to just the six auxiliaries cited in table 5.1 above.

5.6.1 Auxiliary and Aspect

The auxiliaries (positional morphemes) express progressive aspect, showing an on-
going event, which occurs at the time referenced in the discourse event. The auxiliary
provides information on the duration of the action, expressing the continuity of the event.

(5.24) a. o=et-a-ra      o=toa
    1s=sleep-THV-HAB    1s=laying
    ‘I am going to sleep’
    Context: He was talking while he was lying in the hammock.

b. jêrom Moê k’iri boja jô ape o=jâ
    DEM Moê açai cut here path 1s=sitting
    ‘There, it is Moë where I cut açai (the tree), here is the path [...]’

c. o=tʃop-a te Enotéj te=ko o=tʃop-a tʃe
    1s=see-THV FOC Enotéj 3COR=MOV. 1s=see-THV come
    ‘Enotéj sees me, she is came to see me’

The auxiliaries were found co-occurring with aspectual forms at the same phrasal
level, as with the projective kom (5.25). That is, the construction has two verb roots, the
auxiliary and the main verb, where the aspect markers appear only once and apply to the
whole construction (a single aspect marker modifies the entire construction).

(5.25) mapi at-a kom i=ko
    arrow catch-THV PROJ 3S=MOV.
    ‘He is going to get the arrow’

without any overt marker of coordination, subordination or syntactic dependency of any other sort.”

108 River name
5.6.2 Directionality

Directional auxiliaries occur to assign movement to the nucleus of the noun or verb phrase. They are used according to the events with reference to the deictic centers: (1) with relation to the speaker, or (2) with relation to the speaker's selected viewpoint. The auxiliary \textit{tfe} is used when the target point is moving to the deictic center; however, if the opposite holds, the speakers use the auxiliary \textit{ka}. The morpheme \textit{ka} can function as a full verb (5.26) an auxiliary, as seen in (5.27), or as a transitivizer, as explained in the next sections.

(5.26) a. Konibu \textit{iki=bô \ ka}
Konibu river=all go
‘Konibu is going up to the river’

\textit{b. o=\textit{tufipap} tabit=\textit{d} \ ka}
\textit{lS=r-grandmother garden=all go}
‘My grandmother went to the garden’ (repeated from (4.15))

(5.27) a. \textit{en i=at-a \ ka}
\textit{2s 3s=catch go}
‘You (go and) get it’ (repeated from (4.63b))

\textit{b. \textit{erê=bô atfo-a \ ka orê=bô nom atfo=rom}}
\textit{2s.EM=DAT bathe-THV go I.S.EM=DAT no bathe=NEG}
‘You (go and) bathe, I don’t bathe’

The directional \textit{tfe} can occur either as a full verb or as an auxiliary. First, its occurrence as a full verb is exemplified below, followed by examples of the directional as an auxiliary:

\textbf{FULL VERB}
(5.28) a. \( i=\text{o-atap} \ tfe \ te \)
\[ 3s=r\text{-hair} \text{ come} \ 3s \]
‘She is pulling her hair’
Lit: She is coming with the hair.

b. \([...]\ ebapa \ ê \ tfe \ [...]\]
\[ \text{moon} \ \text{DEM} \text{ come} \]
‘[...] The moon, that moves [...]’
Context: Explaining the lunar movement.

Within the verb phrase, the morpheme \( tfe \) can appear before the main verb as in (5.29) or after the verb as in (5.30). In both examples (5.29) and (5.30), the directional morpheme functions as an auxiliary.

**AUXILIARY**

(5.29) a. \( Pupak \ tfe \ i=ko-a \)
\[ \text{Pupák come} \ 3s=\text{ingest-THV} \]
‘Pupák comes to eat it’

b. \( pitoa \ tfe \ ko-a \text{ on} \)
\[ \text{tobacco come} \ \text{ingest-THV} \ 1s \]
‘I am coming to smoke’

(5.30) a. \( kijtpit \ at-a \ tfe \)
\[ \text{fish catch-THV come} \]
‘(He) came to catch fish’

b. \( Pupak \ i-mi \ tfop-a \ tfe \)
\[ \text{Pupak OBJ.NMLZ-kill see-THV come} \]
‘(He) is coming to see Pupák’s hunting (hunted thing)’

These directional morphemes, when they fulfill the auxiliary function, behave differently from the positional auxiliary presented in the section above, due to two main
factors: (i) the former do not bear personal clitic pronouns; and (ii) they do not indicate aspect.

5.7 Functions of the morpheme -ka

A feature that is common among some verbal affixes in this language is their tendency to be polysemous, assuming different semantic meanings and functions. For example, the morpheme \( ka \)\(^{109} \) can function as verbalizer/transitivizer, as a full verb, as an auxiliary, and as a transitivizer. Whether the morpheme is bound or not and its semantics will be crucial to determine the function of the morpheme.

It may have different meanings according to its function in the clause. One of them is when it functions as a derived suffix, attaching to nouns and adjectives. This suffix, when added to nouns and adjectives, derives verbs (5.31).

(5.31) a. \( ameko\ tʃaro\ erek-ka\ kete \)
    jaguar yellow speech-TR there
    ‘The yellow jaguar meows there’

    b. \( pero\ t-et-ka \)
    macaw R-name-TR
    ‘Call the macaw's name!’

    c. \( i=i-ka \)
    3s=liquid/genipap-TR
    ‘It boils’

    d. \( ororo\ ø-pe\ te=akop-ka \)
    cotton R-skin/bark 3COR=hot-TR
    ‘Clothes are drying’

\(^{109}\) All the Tuparían languages have a morpheme cognate to this.
5.7.1 -ka on verbs

Another occurrence of the morpheme -ka is with verbs. The verbs that occur with the morpheme -ka are those that: (1) can be used with or without the morpheme -ka; (2) require two obligatory complements; and (3) are those where -ka does not semantically affect the primary function of the stem that it attaches to.

(5.32) a. nako k'iri tjā-ka
   man açai knead-TR
   ‘Men are kneading (with a powder) the açai’

b. aparā jōmaj-ka
   banana knead-TR
   ‘I am kneading (with the hands) the banana’

c. takirap o-jēn poro-ka
   spider.monkey R-feces/stinky dig-TR
   ‘(I'm) taking out the spider monkey's feces’

Context: She was cleaning the inside of the spider monkey.
d. \textit{akataba ataba-ka}
tucum\textsuperscript{110} shred-TR
‘(I'm) shredding the tucum (palm tree sp.)’

e. \textit{baj korō-ka}
palm fiber cut-TR
‘He is cutting the palm fiber\textsuperscript{111}’

f. \textit{on i=kerja-ka}
1s 3s=split-TR
‘I am splitting it (the firewood)’

When the morpheme -\textit{ka} is attached to intransitive verbs (or to verb ideophones, as in (5.33c)), that is, to elements that only require one obligatory argument, it makes the verb transitive, adding to its semantic value a \textit{causative} reading, as in the below examples:

(5.33) a. \textit{en i=wip-ka}
2s 3s=slide-TR
‘You dropped it’
Lit: You made it slide (from the hammock to the floor).

b. \textit{kip kerē-ka}
wood get in-TR
‘The wood was inserted (into my leg)’

c. \textit{te=eti βuh-ka}
3COR=basket IDEO-TR
‘Her basket fell’

d. \textit{Aramira kani wip-ka}
Aramira kani slide-TR
‘Aramira gave birth to Kani’
Lit: Aramira made Kani slide.

\textsuperscript{110} \textit{Astrocaryum vulgare}

\textsuperscript{111} \textit{Mauritia flexuosa} (palm sp.)
e. *pero morã-ka*
   macaw jump-TR
   ‘Macaw is jumping’
Lit: (I) make the macaw jump.
Context: She was swinging the macaw which was on a piece of wood, playing with it.

### 5.8 Functions of the morpheme -kwa

The morpheme -kwa has similar functions when compared to the morpheme -ka: *(i)* it also derives verbs from nouns; *(ii)* in addition, it can be also attached to transitive and intransitive verbs. The main difference between -kwa and -ka is related to the semantics of repetition/continuity of the action. The suffix -kwa occurs with intransitive verbs, adding to its semantics the idea of continuity/repetition of the action\(^{112}\). For example, in (5.34) the act of sneezing is continuous.

(5.34) a. *o=atšíno-kwa*
   1s=sneeze-TR.PL
   ‘I sneezed’

b. *te=keto-kwa*
   3COR=laugh-TR.PL
   ‘He is laughing’

c. *o=aaw-kwa*
   1s=yawn-TR.PL
   ‘I yawned’

d. *Aiga niram-kwa*
   Aiga defecate-TR.PL
   ‘Aiga defecated’

Similarly, when it occurs with transitive verbs, the morpheme -kwa also refers to the continuity/repetition of the action (doing the same event repeatedly), as shown below:

\(^{112}\) Galucio (2001:107) defines its function as a morpheme that provides the plurality of the action. In Akuntsú, it seems to function like it does in Mekêns and Wayoró (Nogueira 2011:105, 119).
(5.35) a.  *Enotej iki kiram-*k\^wa
    Enotéj water pour-TR.PL
    ‘Enotéj is pouring water’

c.  *o=ø-po tfoga-*k\^wa
    1s=R-hand bite-TR.PL
    ‘(She's) biting my hand’

c.  *k^wiri perop-ka tip i=tjâ-*k\^wa
    açai cooked-TR soft 3s=knead-TR.PL
    ‘She cooks the açai, (when it is) soft, she kneads it (with a powder)’

The suffix *-k\^wa* also occurs with nouns, deriving verbs from nouns (5.36), providing a sense of the action’s continuity. The morpheme may also occur with auxiliaries as seen in (5.36d).

(5.36) a.  *koro + am-*k\^wa on
    bowl + rope-TR.PL 1s
    ‘I am putting the rope (folding repeatedly)’

b.  *apaw i=t-et-*k\^wa
    grub (sp.) 3s=R-name-TR.PL
    ‘I call it grub (sp.) (after saying the word for ‘grub’ two times)’

c.  *Konibu kopkaba-*k\^wa
    Konibú flute-TR.PL
    ‘Konibú is playing flute (over and over)’
    Lit: He is fluting.

d.  *te=poratfi-*k\^wa  te=jâ-*k\^wa
    3COR=shamanism-TR.PL 3COR=SITTING-TR.PL
    ‘He is doing shamanistic activity’

e.  *kibapi k^wiri-*k\^wa
    bush clean/day-TR.PL
    ‘He is cleaning the bush (the path into the forest)’
There are some verbs that have \(-k^w a\) as part of their lexical entry. It is not sufficiently clear from a synchronic point of view whether they are lexicalized forms that contain the suffix (because they always appear with this morpheme) or whether they do not have any morphological connection to the morpheme \(-k^w a\), where \(-k^w a\) may just be part of the phonological segments that make up the verb root. Examples are presented below in boldface:

\[(5.37)\]

a. \(ororo + pe \quad ãk^w a\)
cotton + skin/peel wash

‘(She) is washing the clothes’

b. \(Enotej \quad o-po \quad ãk^w a\)
Enotej R-hand wash

‘(She) washes Enotej’s hand’

c. \(o=ø-po \quad tfiĩk^w a \quad on\)
1s=R-hand kiss 1s

‘I kiss my hand’

d. \(o=i-ko \quad mõk^w a \quad on\)
1s=OBJ.NMLZ-ingest make 1s

‘I prepare my food’

5.9 Middle voice

The morpheme \(e-\) attaches to the verb and indicates an event in which the semantic agent and the object are coreferential (Givón 2001:95), activating a reflexive reading (e.g. I cut myself). It can also be attached to a verb encoding actions where the subject is semantically affected by the event — i.e., the subject is the beneficiary of the action — activating a middle voice reading, where the referent of the subject is affected by the action and also has some participation in the action, i.e., the "participant has patient-like
characteristics as well, in that it sustains the action's principal effects” (Klaiman 1991:3)\textsuperscript{113}. The middle morpheme e- can be attached to both transitive verbs (5.38a), where e- indicates that the semantic agent is the beneficiary of her/his own action; and to intransitive verbs (5.38b), which yields a middle voice reading that, in combination with the transitivizer -ka, also conveys an indirect causation, i.e., the causee and the causer (which are the same person) have some relative control of the event.

(5.38) a. \textit{en i=e-kij puru-ru}  
\textit{2S 3S=MID-take IDEO-RED}  
\textit{‘You yourself take it there, go!’}

b. \textit{o=e-wip-ka puru-ru-ru buh}  
\textit{1s 1s=MID-slide-TR IDEO-RED-RED IDEO}  
\textit{‘I slide, (I) go and fall’}

Lit: I make myself to slide, I go and fall.
Context: She was acting out her fall.

The other use of e- is with the self-act reading attaching to intransitive verbs, indicating that the subject is doing some action to its own benefit; that is, the subject is the one who undertakes the action and at the same time is affected by it, as seen below in (5.39)\textsuperscript{114}.

\textsuperscript{113} Middle voice was also described in earlier literatures as for example Kemmer (1993) and Shibatani (2006). Sanskrit grammarians (such as Panini) also presented the middle voice as a term to express actions that affect their sources or express self-actions.

\textsuperscript{114} In Akuntsú, there is an expression in which the morpheme -e may be grammaticalized to the verb \textit{o=epago} ‘good morning’ (Lit. ‘I woke up’). This expression is used to say that the person has woken up, which is different from the verb ‘to wake up’ \textit{o=pera} ‘I woke up’. The expression is similar to the one found in Mekéns and Wajoró (Wj):

\begin{verbatim}
mb-e-pa-g-a-t õn (Wj)
1s-INTR-wake.up-g-V.T-PASS 1s
‘I woke up’ (Nogueira 2011:100).
\end{verbatim}
(5.39) a.  ke  ð-a  o=e-kota  ðn  
DEM  give-THV  1s=MID-climb  1s  
‘Give this (that) I myself climb’

5.10 Reflexives and reciprocals

5.10.1 Third person reflexive pronoun

The morpheme te has several functions; some are closely related to one another. As seen in the section on pro-forms (3.3.5), te can be employed as an independent pronoun, syntactically functioning as the subject of transitive sentences. Besides this function, it can also assume a reflexive, reciprocal and focus function in a clause. In this section, I discuss te as a reflexive and reciprocal morpheme. In order to discern the function of the morpheme te in any given circumstance, it is important to investigate: (1) the type of verb (transitive or intransitive); (2) its morphophonological characteristics (i.e. if it is an independent word (particle) or a clitic); and (3) the number of arguments (subjects) involved.

The only reflexive pronoun encountered in the language was the one for third person. The third person coreferential pronoun carries a reflexive reading, indicating that the subject is the one who undergoes the event expressed by the verb, as exemplified below:

(5.40)  Aramira  te=ø-po  kini-ka  
Aramira  3COR=R-hand  cut/rip-TR  
‘Aramira herself cut her hand’

Note that when the subject is third person, it is frequent in my data that the third coreferential (reflexive) pronoun (3COR) te= is attached to the verb, as following:

(5.41) a.  Konibu  te=et-a  
Konibú  3COR=sleep-THV  
‘Konibú is sleeping’
b. *kip te=aka*-
   ‘The tree fell’

c. *Aiga te=tfe*-
   ‘Aiga leaves’

d. *ei te=ao*-
   ‘Blood got out’

However, it is important to be aware that the presence of the third person coreferential pronoun is not always attested, as shown in (5.42a-b).

(5.42) a. *o=*-ike pita *o=*-ike k*-
   1s=R-older.brother walk 1s=R-older.brother leave  
   ‘My older brother walked, my older brother went away’

   b. *o=*-ti te=ip ofte=*-ti ip  
   1s=R-mother 3COR=come.back 1PL.EXCL=R-mother come.back  
   ‘My mother is coming back, our mother is coming back’

5.10.2 Reciprocal

Additionally, the reflexive pronoun *te* can also have a reciprocal reading. The reciprocal *te*, unlike the reflexive, reduces the valence of transitive verbs, and only one syntactic argument is expressed in the clause. It involves plural arguments, whereas no explicit syntactic object is found.

(5.43) a. *pero te=opa*
   ‘The macaws are fighting’  
   Lit. They are beating each other.
b. *aparabía te=erek-kʰa*
   non-Indian 3COR=speech-TR.PL
   ‘[…] the non-Indians are talking to each other’

5.11 Aspectual forms

In Akuntsú, manner is indicated by aspectual morphemes, by other morphological processes such as reduplication, or by the pragmatics of the clause. Aspect encodes how an event is understood according to its internal process. The only marker that clearly encodes temporal information is the projective aspectual marker, which shows that the event will occur at a future time. Aside from this, the language does not mark the present or the past morphologically. In talking about "temporal spaces," we may affirm, then, that Akuntsú has a basic tense distinction of future versus non-future (which includes past and present)\(^\text{115}\).

Among the other Tupárian languages, Mekéns (Mk) and Wayoró (Ww) have been analyzed as having a past marker -t. In Mekéns, this past marker is attached directly to transitive and intransitive verbs, to the transitivizer -ka, or to the thematic vowel -a\(^\text{116}\). In Wayoró, the morpheme -t was analyzed as a past marker, appearing in progressive clauses (Nogueira 2011:83)\(^\text{117}\).

In the other remaining Tupárian languages, Braga described two particles that mark tense in Makuráp, namely xe:t ‘past’ and eya ‘future.’ In Tupári, tense is not morphologically

\(^{115}\) Dietrich (2010b) describes deeply this idea for Guaraní language.

\(^{116}\) However, the past marker is not always found in past tense clauses (Galucio 2001:91).

\(^{117}\) Examples:
   a. *ndeke te-agop-k-a-t*  
      3s 3-warm\text{intr}-vblz-v.t-past
      ‘She warmed herself’ (‘Ela se esquentou’)

   b. *igi te-e-im-ng-a-t*  
      water 3-intr-drop-vblz-v.t-past
      ‘The water is dropping’ (Água está pingando’)

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encoded on the verb. In Tupari, auxiliaries are described as morphemes responsible for coding tense and aspect (Alves 2004).

On the other hand, Makuráp is the only one of these languages with perfective and imperfective aspectual markers — i.e., what are called ‘thematic vowels’ or ‘thematic suffixes’ in other languages are described as the perfective aspectual marker -ø and imperfective aspectual marker -a in Makuráp (Braga 2005).¹¹⁸

Tupían languages in general tend to express tense and aspect through particles and/or auxiliaries (Rodrigues and Cabral 2012).

In this section, the main aspectual morphemes found in Akuntsú are presented, which include: -ra ‘habitual,’ ekwa ‘iterative,’ and kom ‘projective,’ followed by a discussion of verbal reduplication.

### 5.11.1 Habitual -ra

In this language, habitual aspect is expressed by the morpheme -ra. It designates an event that regularly takes place, instantiated from time to time. The habitual aspect may indicate an event that used to occur in the past (5.44), occurs in the present (5.45) or in the future (5.46). The examples below show that through the use of the habitual morpheme -ra, the speaker makes reference to the habit of doing some event. For instance, in (5.45a), the habit of sleeping in the afternoon is common to the speaker and the other person that he refers to; that is, the situation of sleeping occurs frequently. Example (5.45b) indicates the

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¹¹⁸ Examples:

<table>
<thead>
<tr>
<th>Example</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. wawo ngoy-ø</td>
<td>potato dig up-perf</td>
</tr>
<tr>
<td></td>
<td>‘The potato is dug up’ (‘La patate est arrachée’)</td>
</tr>
<tr>
<td>b. yemó wawo ngoy-a</td>
<td>let's go potato dig up-imper</td>
</tr>
<tr>
<td></td>
<td>‘Let’s go dig up some potatoes’ (‘Allons arracher des patates’)</td>
</tr>
</tbody>
</table>
habitual process of coming back by a person who is used to going away and coming back regularly. Turning to the examples in (5.46a-b), the speaker comments on the fact that it is customary to sniff snuff and to eat bananas; he is going to do it as usual. Finally, the last example (5.46c) indicates the habit of going to the forest.

(5.44) $i=no \quad i=ko-ra \quad en$
3s=other 3s=ingest-HAB  2s
‘the other one, you ate it (as usual)’ (repeated from (4.83a)).

(5.45) a. $o=et-a-ra \quad te=et-a [...]$
1s=sleep-THV-HAB  3COR=sleep-THV
‘I am used to sleeping and he's used to sleeping [...]’

b. $te=ip-a-ra$
3COR=come.back-THV-HAB
‘He comes back’

(5.46) a. $\delta jpe \quad ko-a-ra$
snuff  ingest-THV-HAB
‘(I am going to) sniff snuff as usual’

b. $apa \quad ko-a-ra \quad kom$
banana  ingest-THV-HAB  PROJ
‘I will eat bananas as usual’

c. $e=\delta t-et-a-ra \quad kom$
2s=leave-THV-HAB  PROJ
‘You will leave (to the forest)’

The habitual morpheme can also occur with negative clauses, as exemplified below:

(5.47) $ke \quad nom \quad mi-ra$
DEM no  kill-HAB
‘That one is not used to hunting’
5.11.2 Iterative $ek^w$a

The iterative morpheme $ek^w$a expresses the idea that the event occurred several times, that an event happened repeatedly, expressing plurality. Iteration is also expressed through reduplication, which is the only morphological process that conveys this meaning. Reduplication is described in section 5.11.4.

The iterative morpheme may have two semantic readings: (i) the event occurred many times or (ii) it reflects the idea of the plurality of objects affected.

Example (5.48a) comes from a natural conversation where the speaker is talking about a person who leaves the rainforest repeatedly. In this scenario, the action of leaving happens several times in the frame time. In (5.48b-c) the act of running and sleeping is regular and it is happening once again. In the examples below, the subjects are singular and the iterative morpheme linked to the verb indicates that the action happens repeatedly, where the action is realized by the same subject over and over, as follows:

(5.48) a. $te=tʃ\text{et} \quad ek^w\text{a}$
   $3\text{COR}=\text{leave} \quad \text{ITER}$
   ‘He leaves repeatedly’

b. $te=\text{era} \quad ek^w\text{a}$
   $3\text{COR}=\text{sleep} \quad \text{ITER}$
   ‘He sleeps continuously’

c. $(en)\quad e=\text{neme} \quad ek^w\text{a}$
   (2s) $2s=\text{run} \quad \text{ITER}$
   ‘You are going to run many times’

In the scenario below, the particle is attached to transitive verbs, and when it occurs, the iterative morpheme involves multiple objects, reflecting the plurality of the objects
involved in the action. In (5.49a) the speaker is explaining to the addressee that the next time that he leaves the Indigenous area he needs to bring many ‘fishing lines.’ Example (5.49b) also gives the idea of multiple things to bring, while (5.49c-d) gives the idea of multiple animals to hunt/to kill.

It is worth noting that the particle $ek^w$ gives the plurality of the object, when attached to transitive verbs, while the morpheme $-k^w$ yields the repetition/continuity/plurality of the action only (see section (5.7) from above). Examples of the iterative particle are shown below:

\[(5.49) \quad \text{a. } ko \ am \ pega \ ek^w a \\
\quad \text{fishhook thread bring \ ITER} \\
\quad \text{‘He brings many fishing lines’} \]

\[\text{b. } eɾẽ \ i=pega \ ek^w a \\
\quad \text{2s.EM 3s=bring \ ITER} \\
\quad \text{‘You bring many of them’} \]

\[\text{c. } Konibu \ i=mi \ ek^w a \\
\quad \text{Konibu 3s=kill \ ITER} \\
\quad \text{‘Konibu hunted them’} \]

\[\text{d. } jõnebo \ mi \ ek^w a \\
\quad \text{cricket kill \ ITER} \\
\quad \text{‘Kill the crickets!’} \]

Unlike the habitual aspect, the iterative shows an event that happens repeatedly many times over a certain period of time, which does not imply that it is habitual. There are examples where the iterative morpheme appears in phrases that also contain the habitual morpheme, as follows:

\footnote{It may be hypothesized that the suffix $-k^w$ was derived from the particle $ek^w a$. However, diachronic investigation needs to be undertaken to test this.}
5.11.3 Projective *kom*

The morpheme *kom* was previously described in Aragon (2008) as a projective morpheme. It indicates that (i) an event is going to occur right after a reference point (5.51); or (ii) it may also occur in a non-immediate future in which the speaker is not certain about the precise time at which it is going to happen, but it usually refers to an event that speakers do indeed expect to occur in the future (5.52).

(5.51) a.  
\[ e=\text{o-}abafõ \quad \text{kipé} \quad jãj-ka \quad \text{kom} \]
\[ 2s=r-\text{grandfather} \quad \text{machete} \quad \text{teeth-TR} \quad \text{PROJ} \]
‘Your grandfather will sharpen the machete’

b.  
\[ orê=bô \quad o=t\text{fet-}a \quad \text{kom} \]
\[ 1s.\text{EM}=\text{DAT} \quad 1s=\text{leave-THV} \quad \text{PROJ} \]
‘I will leave’

(5.52) a.  
\[ o=\text{amõj-}a-ra \quad \text{kom} \]
\[ 1s=\text{dance-THV-HAB} \quad \text{PROJ} \]
‘I am going to dance’

b.  
\[ \text{tawt}fe \quad mî \quad o=\text{amøj-}a \quad \text{kom} \]
\[ \text{peccary} \quad \text{kill} \quad 1s=\text{dance-THV} \quad \text{PROJ} \]
‘If he kills the peccary, I will dance’

The two examples below show that ‘the rain’ will happen but they are not sure when exactly it will take place; they do, however, believe that the event is going to happen, due to some changing in the weather.
Similarly, this is seen in the two examples below. The two situations may occur in the future but the precise time is not known. In (5.54a) he will catch something, but it will depend on certain things, so the speaker is not sure when it will happen. In (5.54b), Purá may fall from the chair, because the chair is shaking, but it is only a presumption of a probability.

(5.54) a. kojõpe=bõ  i=at  kom
    night=ALL  3s=catch  PROJ
    ‘At night he will catch it’

b. Pura  te=akat-a  kom  Pura  βuh
    Purá  3COR=fall-THV  PROJ  Purá  IDEO
    ‘Purá will fall, Purá will fall’

Note that the projective morpheme occurs after the independent pronoun when the latter is placed at the end of the verb phrase, as illustrated below:

(5.55) a. o=i-ko  kora  on  kom
    1s=OBJ.NMZL-ingest  look.for  1s  PROJ
    ‘I will look for my food’

b. karã  at-a  on  kom
    Brazil nut  catch-THV  1s  PROJ
    ‘I will catch Brazil nut’

c. i=ta  te  kom
    3s=plant  3s  PROJ
    ‘He will plant it’
The projective morpheme *kom* also has scope over the nominal phrase, as seen in the NP in bold:

\[(5.56) \text{pebo at-}a \text{ kom } \text{Pura kom pebo kom}\]

feather catch PROJ Purá PROJ feather PROJ

‘He will catch the feather, it will be Purá, it will be the feather’

### 5.11.4 Verbal reduplication

Reduplication in this language occurs with several different word classes, including verbs, nouns, and ideophones. In verbs and verb ideophones, it indicates aspect. There are two types of reduplication found in the language: (i) monosyllabic (5.57) and (ii) disyllabic reduplication (5.58).

In example (5.57a) the last syllable of the verb *ãpi* ‘to pull’ is repeated to indicate the fact that the speaker is pulling the head recurrently. The idea expressed is that the person, by holding the hair, pulls the head in a continuous process without stopping. In (5.57b) the reduplication of *mara* ‘to fold’ indicates that the folding of the rope is continuous and iterative; the rope was folded many times.

\[(5.57)\]

a. \[o=\circ-\text{anam } âpi-pi-ka\]
   \[1S=\circ-\text{head pull-RED-TR}\]
   ‘I am pulling and pulling my head’

b. \[koro + am \text{ mara ma-ma-mara}\]
   \[\text{bowl + rope fold RED-RED-fold}\]
   ‘He keeps folding the rope of the bowl’

In (5.58a) the idea expressed by the reduplication is that something is being rolled repeatedly, and in (5.58b) the reduplication of the verb *paj* ‘to clean’ indicates cleaning
happening over and over until there is no more meat on the *jirau*. In (5.58c) the hair has been curling until the hair has become entirely curly.

(5.58) a. $en \; i=kapa-kapa$
   
   $2s \; 3s=\text{roll-RED}$
   
   ‘You roll it repeatedly’

   b. $kw\text{etfope} \; baj-a-baj-a$
   
   $jirau \; \text{clean-THV-RED-THV}$
   
   ‘Clean the *jirau* entirely!’

   c. $e=\varnothing-\text{atap} \; \text{wiri-wiri}$
   
   $2s=\text{R-hair} \; \text{curl-RED}$
   
   ‘(You) curl your hair over and over’

### 5.12 Thematic vowel

The morpheme -a, with its counterpart -ø, has been called a ‘thematic vowel’ or ‘thematic suffix’ in the Tuparían literature, with the exception of Makuráp, where these are described as a perfective and imperfective aspectual marker respectively.

In Akuntsú, the thematic vowel occurs in clauses that express different aspectual meanings, as following:

(5.59) $\text{apara} \; \text{ko-a} \; \text{apara} \; \text{ko} \; \text{apara} \; \text{ko}$ $\text{wen}$

$\text{banana} \; \text{ingest-THV} \; \text{banana} \; \text{ingest} \; \text{banana} \; \text{ingest} \; \text{finish}$

‘(She) is eating bananas over and over, (they are) gone’

Context: Narrating the process of eating bananas.

(5.60) a. $e=\varnothing-\text{mepit}$ $\text{tfop} \; \text{en}$

$2s=\text{R-son/daughter.of.woman} \; \text{see} \; 2s$

‘You see your daughter’

Context: When the person arrived, the speaker told her to see her daughter who came to talk to her.

---

120 Brazilian Portuguese word to refer to a platform made of sticks to dry/roast game meat, Brazil nuts, etc.
b.  
\[ \text{i} \text{k} \text{i} \text{ te=}= \text{k}^{w} \text{at-a} \text{ i=}= \text{t} \text{fop-a} \]
`water 3COR=leave-NMLZ 3s=see-THV`
`The water is going away, see it`
‘to burn’ occur in negative constructions, as in nom i=poka ‘he doesn't burn it,’ the final a is still there, which means that the final a is not a thematic vowel, but rather a part of the verbal root. The examples (5.63) below show situations where the negative morpheme nom is employed and the speakers do not make use of the thematic vowel.

(5.63) a. erape [nom e=k'at] te=k'at-a
tomorrow no 2s=leave 3COR=leave-THV
‘Tomorrow you don't leave, he leaves’

b. en i=o-kit ko-a orê=bô nom iwe [nom i=o-kit ko]
2s 3s=R-seed ingest-THV 1S.EM=DAT no INTERJ no 3s=R-seed ingest
‘You eat the seed, I don't, it hurts, I don't eat it.’

c. aw-aw [nom aot] [...]  
baby no go.out
‘Baby didn't go out [...]’

d. te=tʃet-a ... [nom tʃet] [...]  
3COR=leave-THV no leave
‘He leaves... he doesn't leave [...]’

Note that the thematic vowel is only attached to verbs. Nouns do not bear the thematic vowel.

(5.64) e=i-at at-a en  
2s=OBJ.NMLZ-catch catch-THV 2s
‘You catch your caught (thing)’

In imperative sentences the thematic vowel is not common, though it is possible to find it in some examples (which are fewer than those that do not have thematic vowels). See example (5.65a) without the thematic vowel and example (5.65b) with an occurrence of the thematic vowel.
(5.65) a. *tiero ko*
   chicha ingest
   ‘Let’s drink chicha’

b. *ko-a*  \(i=\emptyset-pi\)
   ingest-\(THV\)  \(3s=R\)-foot
   ‘Eat its feet’

It may be worth investigating whether or not the thematic vowel is now a frozen morpheme, that is, its function is no longer visible or predictable from phonological context or from in any other function that it may have. However, this issue needs further investigation in the future in order to clarify this matter.

5.13 Mood and Modality

Modality involves "how we come to know and speak about the world..." (Timberlake 2007:315). Modality is the speaker’s attitude toward the realities expressed by the speaker, or by some other participant, within the proposition. The typology of modal systems often distinguishes two general types of modalities: ‘realis’ and ‘irrealis’ modality. The difference between ‘realis’ and ‘irrealis’ follows the description found in Mithun (1999:173 *apud* Palmer 2001:1): "The realis portrays situations as actualized, as having occurred or actually occurring, knowable through direct perception. The irrealis portrays situations as purely within the realm of thought, knowable only through imagination."

In Akuntsú, three kinds of moods are discussed in this section: indicative, interrogative, and imperative. The indicative is unmarked, fitting into the realis modal system, while the other moods tend to fit into irrealis modality. Imperative and interrogative are often morphologically marked in the language. The notion of splitting moods, the
indicative into realis and the other moods into irrealis, is not new. Payne (1997:245), for example, has discussed the fact that interrogative and imperative are "likely to be irrealis," including negative clauses as well. Palmer (2001:4) also noted that even though there are two categories of modality in terms of modal system and mood, he affirms that "typically with mood, all or most clauses are either realis or irrealis: the system is basically ('prototypically') binary."

Next, the types of mood in this language are briefly presented. Modality is described in chapter 7 of this dissertation, where particles are discussed.

5.13.1 Mood

This subsection provides an overview of indicative, imperative and interrogative moods. These three moods have in common the semantics of the uncertainty of an event, which can be described as happening in the past, present or future.

5.13.1.1 Indicative

The indicative is not overtly marked morphologically in this language. The indicative indicates if a proposition is factual, truth (realis [declarative] assertion) or non-truth (negative assertion). Notice, however, that the non-truth assertion is not semantically realis, since negative clauses refer to actions that have not taken place or that will not take place; as such, it indicates the irrealis status of the proposition, as seen below:

\[
\begin{align*}
\text{FACTUAL TRUTH} \\
(5.66) \quad ot'e & \quad i=at-a \\
1\text{PL.EXCL} & \quad 3s=\text{catch-THV} \\
\text{‘We catch it’}
\end{align*}
\]
IRREALIS

(5.67) nom i=at=om
no 3s=catch=NEG
‘[...] (you) don’t catch it’

5.13.1.2 Imperative

The imperative mood indicates that the speaker wants the addressee to do or not to do some event. It can indicate orders, commands, requests, suggestions or advice. The imperative is often marked by the suffix -tʃo (5.68). Imperative clauses refer to actions that have yet to take place (irrealis).

(5.68) a. i=dara-tʃo
3=unfold-IMP
‘Unfold it!’

b. tfajā aot-a-tʃo
earring go.out-THV-IMP
‘Get out the earring!’

c. ege-tʃo
stand.up-IMP
‘Stand up!’

d. te=wip-ka-tʃo
3COR=slide-TR-IMP
‘They are going to slide’

Context: When things are coming out of baskets, bags, etc.

However, it is possible to have imperative clauses without the presence of the suffix -tʃo, some examples of which are presented below:
(5.69) a.  
\[i=ko\]  
3s=ingest  
‘Eat it!’

b.  
\[takirap \quad mĩ\]  
spider.monkey  kill  
‘Hunt spider monkey!’

c.  
\[erẽ=bõ \quad aj\]  
2S.EM=DAT  stay  
‘You stay!’

d.  
\[jẽ \quad at\]  
DEM  catch  
‘Catch this!’

There are also lexical words used to indicate hortative meanings, as in (5.70a) and (5.70b)\textsuperscript{121}:

(5.70) a.  
\[tfobara\]  
‘Let’s go!’

b.  
\[toptfika\]  
‘Look!’

### 5.13.1.3 Interrogative

A speaker uses interrogatives to get information about something that is not known. As described in detail in chapter 8, there are two types of interrogative clauses: yes-no questions (polar questions) and content questions (information questions). Interrogative clauses also involve an inherent uncertainty. Examples below show an illustration of a yes-no question (5.71) and a content question (5.72).

\textsuperscript{121} So far, there is no evidence to segment them into separate morphemes.
YES-NO QUESTION

(5.71) \( e=t\text{et}-a \quad ek\text{"a} \text{?} \)
\( 2s=\text{leave-THV} \quad \text{ITER} \)
‘Are you going to leave once again?’

CONTENT QUESTION

(5.72) \( i=t\text{-et} \quad \text{ete?} \)
\( 3s=\text{r-name REL} \)
‘What is his name?’

5.14 Summary

This chapter described several topics related to the verbal morphology, including a brief discussion on types of moods and the alignment system in this language. The alignment system is by default ergative-absolutive; however, this pattern may be optionally neutralized in transitive clauses, if (and only if) the object is inanimate. A summary of types of verbs and their respective morphemes is presented in table 5.2 below. The verbs that allow combination with the morphemes on the left of the table are marked with an X, as shown:

<table>
<thead>
<tr>
<th>VERB MORPHEMES</th>
<th>TYPES OF VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TRANSITIVE</td>
</tr>
<tr>
<td>Causative ( (m)\text{\textbar} )</td>
<td>X</td>
</tr>
<tr>
<td>Object Nominalizer ( i\text{-} )</td>
<td>X</td>
</tr>
<tr>
<td>Transitivizer ( -ka )</td>
<td>X</td>
</tr>
<tr>
<td>Transitivizer ( -k\text{&quot;a} )</td>
<td>X</td>
</tr>
<tr>
<td>Middle ( e\text{-} )</td>
<td>X</td>
</tr>
<tr>
<td>Aspectual forms</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 5.2 - Verbal morphology.
6.1 Introduction

In this chapter, adjectives and adverbs are described; it is argued that they are small open classes of their own. In section 6.2, an overview of adjectives in this language is presented, showing their differences and similarities with the classes of nouns and verbs. In section 6.3, adverbs are presented with a discussion of their primary characteristics.

6.2 Adjectives

Adjectives have been the subject of many analyses and theories cross-linguistically, with debate, for instance, about whether or not they are a universal word class. Some previous works suggested that adjectives are not a class found in all languages (e.g. Dixon 1982, Croft 2001) and others argue the opposite: adjectives are indeed a universal word class (e.g. later, Dixon 2004).

Adjectives share many characteristics both with nouns and with verbs. Some of these similarities lead some scholars to classify adjectives as specifically belonging either to the class of nouns, or of verbs, or as an independent class of their own, i.e., belonging to the adjective word class. The fact is that the category of adjectives, according to Givón (2001), varies across a scale of temporal stability from less-prototypical adjectives (such as
temporary states: temperature, feelings, etc.) to more prototypical ones (such as the adjectives that denote durable physical properties). This scale means that the less-prototypical adjectives tend to share more characteristics with verbs, and those considered more-prototypical tend to share similarities with nouns (Givón 2001:54).

Dixon (2004) discusses intensively some criteria for recognizing the class of adjectives in terms of its grammatical properties. He affirms, based on typological study involving different languages, that although the adjectives may share properties with nouns and verbs in some languages, and in other languages only with verbs or only with nouns, and in some with neither, there will be always some kind of grammatical criteria to classify adjectives as an independent word class, and, hence, "a distinct class for adjectives can be recognized for every human language" (Dixon 2004:1).

The issue of whether or not adjectives are an independent word class has been a subject of debate in the description of the Tupian languages as well, which is the reason adjectives deserve special attention here. The evidence found supports the argument that Akuntsú has a set of lexemes that seem to be more adjective-like, supporting an independent lexical class with true adjectives as its members. Examples and an overview of how adjectives function in Akuntsú are discussed in this section. Firstly, some examples of adjectives in phrases are provided, and the difference and similarities found between adjectives and the other open word classes will be provided in further subsections.

Traditionally, adjectives include a class of words that describe attributes or qualities and typically modify a noun. The adjectives in this language co-occur with a noun (6.1a-b), a pronoun (6.2a-b) or a demonstrative (6.3a-b).
(6.1) a. *otfe pitoa tit*
   2PL.EXCL tobacco unripe
   ‘We have unripe tobacco’

   b. *abobo niy*
   caterpillar striped
   ‘Striped caterpillar (sp.)’

(6.2) a. *apara kop*
   banana red
   ‘Ripe banana’

   b. *atiti petse*
   corn good
   ‘Good corn’

(6.3) *kipkap iw*
   annatto ugly/rotten/bad
   ‘Rotten annatto’

Adjectives may function as predicate complements (6.4) or they may function as the head of a phrase by themselves (6.5). Examples (6.5a) and (6.5b) indicate a situation where the speaker, by answering a question, uses the adjective ‘delicious’ and ‘red’ independently in the phrase.

(6.4) *ek pi k‘iri*
   house interior empty/clean
   ‘The interior of the house is empty’

(6.5) a. *tfobe te*
   delicious FOC
   ‘(It's) delicious’

   b. *kop te*
   red FOC
   ‘(It's) red’
Another situation where adjectives function as the head of a phrase by themselves is when a speaker uses the adjective as an exclamation. Note that in both situations, by answering a question (as shown above) and in an exclamation clause (as exemplified below in (6.6)), the adjectives are necessarily accompanied by the focus particle te.

\[(6.6) \quad \text{êh ten te}\]
\[\text{INTER heavy FOC}\]
\[\text{‘Hey, (it's) heavy!’}\]
\[\text{Context: Trying to lift some heavy thing.}\]

An adjective can also occur as the head of a phrase by itself when followed by the essive clitic =na, as illustrated by the below example:

\[(6.7) \quad \text{kipitfik =na}\]
\[\text{cold=ESS}\]
\[\text{‘It is cold’}\]
\[\text{Lit: It (the weather) became cold.}\]

Syntactically, adjectives can function: (i) as predicates (6.8), where there is no overt copula between the head noun and the adjective; or (ii) as modifiers of nouns (post-nominal, attributive adjectives), as in (6.9):

\[(6.8) \quad \text{iat pitoa petfe}\]
\[\text{2PL tobacco good}\]
\[\text{‘Your tobacco is good’}\]

\[(6.9) \quad \text{o=t-ek pagop}\]
\[\text{1s=R-house new}\]
\[\text{‘My new house’}\]
Adjectives can be negated with the negative clitic =*(e)rom. Adjectives (6.10) are negated as the same way as verbs (6.11) and nouns (6.12), as illustrated in the following set of examples:

(6.10) $Konibu\ i=t\'ame=erom$

Konibú 3s=beautiful/good=NEG

‘Konibú is not well’

(6.11) $o=t\'et=erom$

1s=leave=NEG

‘I don't leave’

(6.12) $ek=erom$

house=NEG

‘There is no house’

Akuntsú employs vowel lengthening in adjectives to represent the degree of intensity of meaning ‘very’, as in the following example:

(6.13) a. $k'ako\ o-ok'aj\ peerek=na$

guan (sp.) r-tail wide/long=ESS

‘The guan's tail is very long’

b. $o=o-jaj\ atliii\ nom\ o=i-ko\ ko=rom$

1s=r-tooth pain no 1s=OBJ.NMLZ-ingest ingest=NEG

‘I don't eat my food, my teeth hurts very much’

With respect to the order of the adjectives in the clause, the adjectives follow the head of the noun phrase when they function syntactically as noun modifiers. See template of adjectives order, as follows:
6.2.1 Adjectives and nouns

Adjectives and nouns are similar in many aspects. The relevant aspects are cited in this section. The first common aspect worth mentioning is that both can be arguments (complements) of a predicate; compare the adjective in (6.14a) and the noun in (6.14b), both in boldface:

(6.14) a. *erape*  *kipitfik*  *te=kʷat-a*
   tomorrow  cold  3COR=leave-THV
   ‘The cold will go away tomorrow’

b. *erape*  *aremāw*  *te=kʷat-a*
   tomorrow  Alemão  3COR=leave-THV
   ‘Alemão will go away tomorrow’

Both nouns and adjectives can occur with oblique clitics (see section 4.3.1), as shown in the examples below, which illustrate a noun (6.15a) and an adjective (6.15b) with the essive clitic =*na*:

(6.15) a. *e=o-kora-kora=na*
   2s=R-chicken=ESS
   ‘It became your chicken’

b. *i=kʷerep=na*
   3s=black/dark=ESS
   ‘It turned into black’

---

122 Note that only one of the elements in parentheses can occur.
From the data available, only nouns receive the suffix -a that carries the meaning of comparativeness ‘like/as.’ This similar (probably cognate) suffix also occurs in Tupari, described by Rodrigues and Caspar (1957) as a suffix that gives a special characteristic to the noun, literally meaning ‘the one that is...’ or ‘the one that has...’ Compare, in Akuntsû, examples below:

(6.16) a.  kõj-kõj
   ‘Catfish’

   b.  kõj-a-kõj-a  te
catfish-N-catfish-N  3S
   ‘He is like a catfish’

(6.17) a.  kipek
   ‘Papaya’

   b.  kipek-a  perek  kipek-a  ika
papaya-N  wide  papaya-N  short
   ‘It is long papaya and it is short papaya’

Unlike common nouns, adjectives (in bold) are not marked by the determinative morpheme -(e)t, as following:

(6.18) a.  ameko-t  k"erep
  jaguar-DEF  black/dark
  ‘the black jaguar’ (repeated from (4.8))

   b.  otfe  t-ek-et  iw
1PL.EXCL.  R-house-DEF  ugly/rotten/bad
   ‘Our damaged house’
6.2.2 Adjectives and verbs

It is difficult in Akuntsú to apply the criterion that says that verbs are the only word class that can be combined with categories that denote person, mainly because absolutive and genitive are coded by personal markers; thus, the verb, the noun and the adjective can bear personal markers. However, one of the main criteria that separate verbs from adjectives and nouns is the fact that neither nouns nor adjectives can take the thematic vowel -a, which is restricted to verb classes:

(6.19)  \( k^w \text{ako te}=\text{akat-a te} \)
\( \text{guan 3COR=fall-THV FOC} \)
\( \text{‘Guan (sp.) fell’} \)

Another difference between verbs and adjectives is that only adjectives (6.20a) can function as arguments without adding any derivational morphology. The verbs in (6.20b) must be verbalized in order to function as an argument:

(6.20) a.  \( \text{kipi te}=\text{ita} \)
\( \text{elder 3COR=arrive} \)
\( \text{‘The elder (man) has arrived’} \)

b.  \( \text{poget-ap paj-a en} \)
\( \text{roast-VBLZ clean-THV 2s} \)
\( \text{‘You clean the roasted’} \)

In addition, adjectives, not verbs, function as modifiers of nouns. See the example below that shows an adjective (in boldface) as the modifier within a noun phrase (NP):

\( \text{(NP):} \)
6.3 Adverbs

As described in section 3.3.4, the adverbs, like the adjectives, form a small class, diverging from the other prototypical open classes: noun and verb classes. Syntactically, adverbs function to modify the verb (the predicate) or the entire clause. As noted before, morphologically, adverbs do not differ from adjectives, especially those called manner adverbs. However, they are included in a separate class by means of syntactic criteria, since only nouns and adjectives can function as arguments of verbs. Semantically, the adverbs are mainly divided into temporal, manner, and locational adverbs.

Adverbs occur in different position within the clause. They are commonly encountered at the beginning or at the end of the clause, without interfering in the internal structure of the clause. They differ from nouns in that they cannot be the argument of a clause, mainly because they cannot form a syntactic unit with nouns. Finally, they differ from particles due to two main factors: (i) being able to form a phrase by themselves while particles cannot; and (ii) appearing in different positions within the clause, while particles tend to have a fixed position\(^{123}\).

The main reason to classify these words as adverbs is that they are encountered in different positions within the clause. Not all examples shown below illustrate all the possible alternatives for adverbial position; however, we need to be aware that the position of all three

\(^{123}\) More on particles in chapter 7.
types of adverbs varies — that is, it is possible to place them at the beginning or at the end of the clause. Below, the three types of adverbs are discussed:

**TEMPORAL ADVERBS**

Temporal adverbs locate the predicate in a time frame. They can indicate a specific time or some event that occurred over time. They are commonly found at the beginning of the clause, though it is also possible for them to occur in clause-final position. The most frequent temporal adverbs are given in (6.22) and their behavior in the clause is shown in (6.23–6.26).

(6.22)  
*erape* ‘tomorrow’  
*kirê* ‘today/now’  
*køjöpe* ‘(at) night’  
*kopi* ‘evening’  
*kwiri* ‘(during the) day’  
*kwirimâ* ‘early/morning’  
*erape no* ‘day after tomorrow’

(6.23)  
*køjöpe=bô  ôjpe-ka  on*  
night=ALL  snuff-TR  1s  
‘I am going to sniff snuff at night’

(6.24)  
*erape*  
te=ô-poemôkʷa\(^{124}\)  
tomorrow  
3COR=R-manufacture  
soft-TR  
‘He'll cook his food tomorrow’

---

\(^{124}\) This word is used to talk about things that are made or prepared by someone. It is possible to refer to a basket, to cooked corn and so on by using the word *poemôkʷa*.  

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(6.25) \textit{kirē} \hspace{0.5cm} te=\textit{kʷat-a}  \\
\hspace{0.5cm} \text{today/now} \hspace{0.5cm} 3\text{COR}=\text{leave-THV}  \\
\hspace{0.5cm} ‘He leaves today’

(6.26) \textit{kepi} \hspace{0.5cm} te=\textit{ita}  \\
\hspace{0.5cm} \text{evening} \hspace{0.5cm} 3\text{COR}=\text{arrive}  \\
\hspace{0.5cm} ‘He arrives in the evening’

The temporal adverb \textit{erape} ‘tomorrow’ can also occur with the indefinite pronoun \textit{no} ‘other,’ which gives the idea of ‘the day after tomorrow,’ as exemplified below:

(6.27) a. \textit{erape} \hspace{0.5cm} \textit{no} \hspace{0.5cm} \textit{tapdut} \hspace{0.5cm} \textit{pega}  \\
\hspace{0.5cm} \text{tomorrow} \hspace{0.5cm} \text{other} \hspace{0.5cm} \text{manioc} \hspace{0.5cm} \text{bring}  \\
\hspace{0.5cm} ‘Bring the manioc the day after tomorrow’

b. \textit{kibapi} \hspace{0.5cm} \textit{poka} \hspace{0.5cm} \textit{erape} \hspace{0.5cm} \textit{no}  \\
\hspace{0.5cm} \text{bush} \hspace{0.5cm} \text{burn} \hspace{0.5cm} \text{tomorrow} \hspace{0.5cm} \text{other}  \\
\hspace{0.5cm} ‘He will burn the bush the day after tomorrow’

\textbf{Locative adverbs}

The adverbs in this category express a locative meaning. Some examples of the most common adverbs found in the language are presented in (6.28). In (6.29), (6.30) and (6.31) the adverbs in bold, like other adverbs found in the language, cannot be used in place of the noun and have scope over the clause.

(6.28) \textit{jō} ‘here’  \\
\hspace{0.5cm} \textit{wā} ‘close’  \\
\hspace{0.5cm} \textit{ketē}\textsuperscript{125} ‘there’

\textsuperscript{125} It may be possible that this can be also considered a complex form of demonstrative plus another morpheme, if one could separate the form as \textit{ke} + \textit{te}.
(6.29) a. *beriberi jō*  
mat here  
‘The mat is here’

b. *jō e=ô-erek kʷak*  
here 2s-r-speech sound  
‘Your recorder is here’

(6.30) a. *ameko aporo-ka wā*  
jaguar growl-TR close  
‘The jaguar growls close by’

b. *wā ke=bō nom*  
close DEM=DAT no  
‘That one is not close by’

(6.31) a. *ameko tsaro erek-ka kete*  
jaguar yellow speech-TR there  
‘The yellow jaguar is howling there’

b. *kete en i=ma*  
there 2s 3s=place/put/spill  
‘You put it there’  

Context: She was giving the parrot to be placed inside the house.

Note, however, that *jō* ‘here’ and *kete* ‘there’ are also related to deictics. In addition, there are also locative notions expressed by nouns attached to locative clitics or linked to postpositional phrases to form adverbial phrases, as discussed in sections 4.3.1 and 4.8.2. Some examples are presented below:

(6.32) a. *kopiba i=t-ek pi=bō*  
parrot 3s=R-house interior=ALL  
‘Parrot got into his house’ (repeated from (4.17d))

---

126 Sometimes discussed in the literature as adverbial demonstratives.
b. \textit{orē=bō nom ek etfe}  
\textit{ls.EM=DAT no house DIFF}  
‘I am not in the house’

Another way that the language represents the idea of location is by using adjectival words to express adverbial notions. Besides the semantics (which shift), syntactic properties are what lead us to identify lexemes as adjectives or as adverbs, hence no morphology is used to mark them as adjectives or as adverbs.

The examples below illustrate the adjective \textit{perek} ‘wide/long’ being used to express distance (6.33a) versus as an adjectival word (6.33b).

(6.33) a. \textit{aparabia erek-kʷa  perek}  
\textit{non-Indian speech-TR.PL  perek}  
‘The non-Indian speaks far away’

b. \textit{kip  perek}  
\textit{leg/stick wide}  
‘Long leg’

\textbf{MANNER ADVERBS}

The adverbs in this category represent the way that an event occurs. They may give the idea of fast/rapidly, strongly, quickly, etc. In this category, it is more common to see reduplication in the verbal root expressing the same semantic notions as manner adverbs, rather than the use of adverbial words themselves. The words described as manner adverbs are those that behave as both adjectives and adverbs. As adverbs, the words consistently occur before or after the verb phrase. Examples (6.34a-b) show the possible positions of the manner adverb in a clause.
(6.34) a.  
\[ \text{te}=\text{k"akwa} \quad \text{ten} \quad \text{orê=bô} \quad \text{nom} \]
\[ \text{3COR=cry} \quad \text{strong} \quad \text{1S.EM=DAT} \quad \text{no} \]
‘(She) cries strongly, I don’t’

b.  
\[ \text{ten} \quad \text{te}=\text{k"akwa} \quad \text{orê=bô} \quad \text{nom} \]
\[ \text{strong} \quad \text{3COR=cry} \quad \text{1S.EM=DAT} \quad \text{no} \]
‘(She) cries strongly, I don’t’

Note that the adverb ten comes after the verbal predicate (as in (6.34a)) and it can be placed at the beginning of the verb phrase (as in (6.34b)) or at the end (as in (6.34a) and (6.35a)); however, it cannot be inside the elements of the predicate — that is, between the verb and the object (as in (6.35b)) — as this is ungrammatical.

(6.35) a.  
\[ \text{õjpe} \quad \text{ko-a} \quad \text{ten} \]
\[ \text{snuff} \quad \text{ingest-THV} \quad \text{strong} \]
‘(He) sniffs snuff strongly’

b.  
\[ *\text{õjpe} \quad \text{ten} \quad \text{ko-a} \]
\[ \text{snuff} \quad \text{strong} \quad \text{ingest-THV} \]
‘(He) sniffs snuff strongly’

It is important to note that verbal reduplication\(^{127}\) can also be understood as expressing an adverbial notion, though it is a morphological property of the verb and not an adverbial word on its own. The context is what tells us how to understand the expression assigned by this morphological process. Below are examples of verbal reduplication that, from a semantic point of view, are used adverbially.

(6.36) a.  
\[ \text{kota-kota} \quad \text{kota} \quad \text{kota} \]
\[ \text{climb-RED-RED} \]
‘He climbs fast’

---

\(^{127}\) More on verbal reduplication in section 5.11.4.
b.  $o$=neme-neme  
    $1s$=run-RED  
    ‘I ran quickly’

c.  $Aramira$  kopkap  kit-kit-kit-ka  
    Aramira  annatto  seed-RED-RED-TR  
    ‘Aramira takes the annatto's seed quickly’

d.  $i$-i-ka  
    liquid/genipap-RED-TR  
    ‘She paints quickly’

e.  $kîn$-kîn  
    scratch-RED  
    ‘It scratches very much’

6.4 Summary

In this chapter, I have examined the basic structures of adjectives and adverbs. Adjectives and adverbs are described as an open class, though a small one. Adjectives, nouns, verbs and adverbs can be similar to a degree, but they have some divergent characteristics of syntax and morphology that lead to their being categorized as independent members of different lexical classes.

Adverbs (manner adverbs and some locative adverbs) in the language, from a morphological point of view, have no independent status of their own; rather, words that are adjectives in form and basic meaning can be used to modify verbs, and thus in that context have an adverbial function. However, adjectives used as adverbs are syntactically different from prototypical adjectives; that is, adverbs are words that have no fixed order in the clause, being allowed to occur at the beginning or at the end, though they are not allowed to come between the object and verb within the verb phrase.
CHAPTER 7
PARTICLES, IDEOPHONES AND INTERJECTIONS

7.1 Introduction

The closed word classes in Akuntsú are pro-forms, particles, postpositions, ideophones, and interjections. Some of the closed classes, such as pro-forms and postpositions were discussed in sections 4.8 and 4.3.1.1 respectively.

The main purpose of this chapter is to address the main generalizations about, and specific functions of, the remaining closed classes: particles, ideophones and interjections. Firstly, particles are defined and illustrated in part by their semantic characteristics and in part by their form, generally considered to be small elements (§7.2). In sections 7.3 and 7.4, respectively, ideophones and interjections are discussed. The last section gives a summary of the main points presented in this chapter (§7.5).

7.2 Particles

Particles are here defined as a closed class of phonologically independent words that occur on the level of the sentence. They have a grammatical function and are usually very small, not made up of many segments. Particles are considered an invariable class of words that do not take any inflection or derivation morphemes. Particles cannot function as a
predicate by themselves and differ from both ideophones and interjections by how they are integrated syntactically into the sentence — that is, ideophones and interjections are not used in a syntactic construction with other word classes, as particles are. The most productive particles in the language are described in this chapter, with focus on their distribution in the clause and their main functions.

7.2.1 Epistemic particles

There are so far three epistemic particles identified in the texts and narratives, namely mā ‘indeed/truly,’ nika ‘maybe/perhaps,’ and dap ‘he/she said that... (reportative).’ All three of these particles indicate in some way the speaker’s attitude towards the proposition.

7.2.1.1 Certainty mā

The particle mā is called in this study an epistemic particle, meaning ‘indeed/truly.’ It occurs at the end of the clause and it appears in sentences where the speaker wants to convey the certainty of a proposition.

(7.1) \textit{i=iat eni etfe mā}  
3s=lay hammock DIFF CERT  
‘(He) is laying in the hammock’

(7.2) \textit{otat=pe kij mā}  
fire=OBL take CERT  
‘It's indeed to take the fire’

(7.3) \textit{ompera ta-ap otfe i=tfop-a mā}  
pineapple plant-NMLZ 1PL.EXCL 3s=see-THV CERT  
‘The planted pineapple, indeed we are going to see them’
(7.4) **kopiba kerēn mā**
parrot (sp.) enter **CERT**
‘The parrot got in’

(7.5) a. **Aramira et-a mā o=iat on**
Aramira sleep-**THV CERT** 1s=lay 1s
‘Aramira indeed sleeps, I am going to lie down’

b. **Pura et-a mā**
Pura sleep-**THV CERT**
‘Pura sleeps’

(7.6) **en perek mā**
2s wide/long **CERT**
‘You are indeed long’

### 7.2.1.2 Uncertainty *nika*

This particle conveys the uncertainty of the speaker about the truth of the proposition.

It gives the idea of ‘maybe/perhaps’ or ‘not sure,’ indicating that his/her commitment to the truth value of the proposition is not certain.

(7.7) **i=t-et nika**
3s=R-name **UNC**
‘I am not sure about its name’

(7.8) **e=i-mi tawtse nika**
2s=OBJ.NMLZ-kill peccary **UNC**
‘It may be your hunted thing, peccary’

(7.9) **ario no t-ek-ō nika**
Adriano R-house-ALL **UNC**
‘Maybe to Adriano's house’
7.2.1.3 Reportative *dap*  

In Akuntsú, there is an epistemic particle *dap* that is used by the speaker when they report/quote another person's speech, expressing the concept of ‘she/he said.’ This particle expresses that the veracity of what is said at the moment was not attested by the speaker, and it also shows the hearer that what is being said is not the speaker's own assertion, but represents the speech of someone else. The position of the particle is clause-final.

(7.10)  

\[ [...] \text{o=ø-ti} \ 	ext{pip} \ 	ext{dap} \]  
\[ 1s=R\text{-mother} \ 	ext{afraid.of} \ 	ext{RPT} \]  
"[...] my mother is scared" he said’

(7.11)  

\[ \text{tfonatå} \ i=mi \ 	ext{dap} \]  
Jonathan \[ 3s=\text{kill} \ 	ext{RPT} \]  
"Jonathan killed it" she said’

(7.12)  

\[ \text{te=aot-a} \ 	ext{dap} \]  
3COR=\text{go.out-THV} \ 	ext{RPT}  
"It went out" she said’

(7.13)  

\[ \text{ke=bô} \ 	ext{top=erom} \ 	ext{dap} \]  
DEM=\text{DAT} \ 	ext{father=NEG} \ 	ext{RPT} \  
"For that one, there is no father" she said’

7.2.2 Focus marker *te*  

The function of this particle is to delimit the scope of the proposition which is to be taken as relevant by the listener from the point of view of the speaker. The focus marker *te* appears in many examples of natural conversation and narratives, appearing in declaratives and in interrogative sentences\(^\text{128}\).

\(^{128}\) Section (5.10) provides the different functions of the morpheme *te* found in the language.
(7.14) a. \( te=k^w_{ep-a} \) te Buko te=i-ko at-a
\( 3\text{COR}=\text{climb-THV} \quad \text{FOC} \quad \text{Buquá} \quad 3\text{COR}=\text{OBJ.NMLZ}-\text{ingest} \quad \text{catch-THV} \)
‘Buquá climbs, he catches his food’

b. \( te=k^w_{ep-a} \) te Konibu kota-kota
\( 3\text{COR}=\text{climb-THV} \quad \text{FOC} \quad \text{Konibu} \quad \text{go.up-RED} \)
‘Konibú climbs, climbs, climbs’

The focus marker takes the process as the relevant theme, that is, it highlights either
the verb itself (7.15a) or the entire predicate (7.15b).

(7.15) a. \( t\text{fop-a} \) te te=mepit tfiramati
\( \text{see-THV} \quad \text{FOC} \quad 3\text{COR}=\text{son/daughter.of.woman} \quad \text{Txiramanty} \)
‘Txiramanty will see her son’

b. \( i=t\text{fop-a} \) te karow i=ko
\( 3\text{s}=\text{see-THV} \quad \text{FOC} \quad \text{Carol} \quad 3\text{s}=\text{MOV}. \)
‘Carol is going to see it’

The focus marker can also be used to give focus only to the object of the verb phrase.
Notice that when the focus is on the object, the subject tends to move to the end of the
sentence, as indicated in the following example:

(7.16) a. \( e=t-ek-et \) tfok-a te jē
\( 2\text{S-R-house-DEF} \quad \text{build-THV} \quad \text{FOC} \quad \text{DEM} \)
‘This one will build your house’

b. \( iki \ t-ek \) tfop-a te aparabia
\( \text{water R-house} \quad \text{see-THV} \quad \text{FOC} \quad \text{non.Indian} \)
‘Non-Indian is seeing the well’

In (7.17a-b) the subject is the focus of the discourse. The speaker in these situations
wants to emphasize who is doing/carrying the event, as illustrated below in boldface:
(7.17) a. kite Konibu te atiti ta kite petkop
    one Konibú FOC corn plant one alone
    ‘Only Konibú plants corn, one alone’

b. o=ø-top papa\textsuperscript{129} te Konibu mā
    1s=R-father daddy FOC Konibú CERT
    ‘My father is truly Konibú’

The subject can also be highlighted in existential clauses, as seen:

(7.18) e=ø-pi-atfo on te tfokìn
    2s=R-foot-INT IS FOC small
    ‘Your foot is big, I have small (one)’

When the verb or the predicate is the focus of the sentence, the object moves to a position after the verb predicate. The subject may or may not be overtly expressed in the sentence.

(7.19) a. tfop-a te tabit
    see-THV FOC garden
    ‘See the garden!’

b. piri te kipe
    throw FOC machete
    ‘Throw the machete!’

c. on \dok"a-\dok"a te mī+kapa-kapa
    1s wash-RED FOC vagina+roll-RED
    ‘I washed the underwear over and over’

Another way that the focus particle te is employed is when the speaker is answering information questions (such as questions like what is it, who is it, etc.) (7.20 a-c), as shown:

\textsuperscript{129}This is a Portuguese loanword: papai ‘daddy’.
(7.20) a. kibek te
    papaya FOC
    ‘(It's) papaya’

    b. Pura ojtpe te
    Pura hat FOC
    ‘(It's) Pura's hat’

    c. pitoa=pe kij te=ip-a-ra te
    tobacco=OBL take 3COR=come.back-HAB FOC
    ‘He comes back to take tobacco’

The particle te is also employed in yes/no questions. It is used to focalize the relevant information. In (7.21a) the temporal adverb is emphasized in the question, while in (7.21b-c) the focus is on the noun and on the adjective respectively. Note that in the interrogative sentences below there is no morphological marker that indicates whether or not it is a question; rather, the intonation is what marks these sentences as interrogatives.

(7.21) a. kirē=bō te ip-a-ra Ariano?
    today=ALL FOC come.back-THV-HAB Adriano
    ‘Is it day (that) Adriano comes back?’

    b. e=ø-ti te Ana?
    2s=R-mother FOC Ana
    ‘Is your mother Ana?’

    c. i=petfe te?
    3s=good FOC
    ‘Is it good?’

7.2.3 Particle emo

The particle emo has the meaning of ‘also.’ This particle has scope over the entire noun phrase. It is usually an intra-sentential particle. The particle can follow a noun (7.22) or
a pro-form (7.23). In (7.24) it is possible to see the behavior of this particle in a negative sentence.

(7.22) a. Aɾamiɾa kʷakwako emo ita
Aɾamiɾa guan also arrive
‘Aɾamiɾa and the guan also arrived’

b. kora-kora emo tfame
chicken also well/good
‘The chicken is also well’

c. Tfiramãti i-ð Tfiramãti emo i-ð
Txiramanty OBJ.NMLZ-give Txiramanty also OBJ.NMLZ-give
‘It is Txiramanty's thing, it is also Txiramanty's thing (pointing to another thing)’

(7.23) a. eme emo
DEM also
‘This one too’

b. apara no emo
banana other also
‘The other banana too’

In negative constructions, the negative particle nom is placed after the particle emo, where the negation has the scope over the proposition.

(7.24) a. tawtfe ki emo nom
peccary river also no
‘It is not the peccary's river either’

b. en i=ífere-ka emo nom
2s 2s=cut-TR also no
‘You don't cut it either’
7.2.4 Particle *ne*

This particle appears in questions giving a hypothetical meaning to the proposition. The two examples below show how the particle is employed. Note that the particle *ne* occurs at the end of the clause.

(7.25) a.  

\[
\text{eni=bô } \ ne \\
\text{hammock=ALL } \text{HYP}
\]

‘Is it to the hammock?’

b.  

\[
\text{eti no ne?} \\
\text{basket other } \text{HYP}
\]

‘Is the other basket?’

The particle *ne* can also appear with another interrogative particle *arop* ‘who/what’ (7.26). Note, however, that *ne* is not frequent in questions that already carry an interrogative word, as the one exemplified below:

(7.26)  

\[
\text{arop } \text{i-ô } \ ne? \\
\text{who OBJ.NMLZ-give } \text{HYP}
\]

‘Who gave it?’

Besides its function above, *ne* can also appear in declarative sentences, which gives the meaning of [TO MAKE X] or [TO BECOME X], a notably different function from the one presented above. It shares characteristics both with a verbalizer (7.27) and with a translative morpheme (7.28), as following:

(7.27) a.  

\[
\text{Tfaru}j \text{ ape } \ ne \text{ on} \\
\text{Tfaru}j \text{ path VBLZ 1S}
\]

‘I’m making Tfaru’j’s path’

Context: She was cleaning a path around the house.
b. *Enotej potʃek nom ne*

Enotej thing no VBLZ

‘Enotej didn't make the thing’

Context: Talking about the drawing on the notebook.

(7.28) a. [...] *aramira ne en*

woman TRANSL 2S

‘Then, you become woman’

b. [...] *tawtʃe ap ne*

peccary fat TRANSL

‘(For) peccary’s fat’

When the particle *ne* occurs in declarative sentences, it has the same meaning as the clitic *=na* ‘essive.’ It seems that, at least in the data available, they can be interchangeable; however, further investigation needs to be undertaken to test this assertion.

### 7.2.5 Particle *ãka*

The particle *ãka* has the meaning ‘like this, in that way.’ It is intra-sentential and it is often followed by ideophones. This particle is very common in natural discourse and texts.

The distribution of the particle within the sentence is exemplified below:

(7.29) a. *oʔ o=pera ãka ?čh-?čh tik pɛ-kx a ãka*

INTER 1S=wake.up that.way IDEO-RED mosquito beat-TR.PL that.way

‘Oh, I woke up. That way, beating, beating, (I) beat the mosquitos, that way [...]’

b. *aparabia te=kwa akx a ãka hɛ-hɛ-hɛ-hɛ*

Non-Indian 3COR=cry that.way IDEO-RED-RED-RED

‘The non-Indian is crying that way hɛ hɛ hɛ hɛ’

c. *kijtpit ãka toj-toj on toj kijtpit at-a iki=ri*

fish that.way IDEO-RED 1S IDEO fish catch-THV river/water=ABL

‘I catch fish that way (simulating the fishing), I'll catch fish from the river’
7.2.6 Existential a and tea

In Akuntsú, there are two particles that produce an existential meaning, namely tea (7.30) and a (7.31). The particles occur NP-finally.

(7.30) a. iki geʻe tea
   river IDEO exist
   ‘There is the big river’
Context: After the raining, the volume of the river has increased.

b. abatfo i-ko ko-a tea
   grandfather OBJ.NMLZ-ingest ingest-THV exist
   ‘There is grandfather's food to eat’

c. te=ø-pi mara-ap tea
   3COR-R-foot fold-NMLZ exist
   ‘There are his tied feet’

(7.31) a. po ø-akā a
   hand R-bone exist
   ‘There is the bone of the hand’

b. ōjpe a tifop-a on
   tobacco exist see-THV 1s
   ‘It's tobacco (that) I'll see’

These particles also express possession in many of the translations found in the data, even though the possessor is not overtly expressed in the clause. The sentences below are classified as clauses that fit into the constructions called in this study TYPE 2, i.e., clauses that
do not consist of a possessor and a possessed element (see chapter 8 for more information on existential clauses).

The existential constructions are reduced in terms of the number and kind of morphology they can have when compared to other constructions, which seems to be one of the cross-linguistic characteristics of existential clauses (Payne 1997:123). Examples of each particle are given below:

**With /a/ [ʔa]**

(7.32) a. *kado a*
    necklace exist
    ‘There is necklace’
    Lit: Necklace exists.

    b. *pawrape a*
    shaker
    ‘There is shaker’
    Lit: Shaker exists.

    c. *jê a*
    DEM exist
    ‘There is this one’
    Lit: This exists.

    d. *t=ə-okʷaj a*
    3s=r-tail exist
    ‘There is its tail’
    Lit: Its tail exists.

    e. *atfï a*
    pain exist
    ‘There is pain’
    Lit: Pain exists.

---

130 According to Payne (1997:123) "usually there is no or reduced evidence of grammatical relations in existential constructions (...)"
The difference found between a and tea is not entirely clear, but the hypothesis is that the difference is connected to deictic meaning. The particle tea usually refers to someone or something at a distance from the speaker, while a refers to things or people that are usually near the speaker.

**With /tea/ [teʔa]**

(7.33) a. potʃek tea
doing exist
   ‘There is the notebook’
Lit: Notebook exists.

   b. te=amõj-ap tea
(NMLZ=dance) exist
   ‘There is dancing’
Lit: Dancing exists.

c. tiri tea
   two exist
   ‘There are two (or more)’
Lit: Two (or more) exist.

d. eni iw tea
   hammock ugly/rotten/bad exist
   ‘There is a spoiled hammock’
Lit: Spoiled hammock exists.

**7.3 Ideophones**

Ideophones and their representation of iconicity not only show examples of how word formation occurs in Akuntsú, but also show interesting manifestations of speakers’ life experiences. Iconicity and its relation to life experience are not new; earlier literature has mentioned “the intuition behind iconicity is that the structure of the language reflects in some
way the structure of experience” (Croft 2003:102). Although ideophones clearly are iconic, they do not always carry sounds that refer to the process or event that they related to.

Ideophones are found in many languages, and it is a well-known feature found in Tupían subfamilies, including, but not limited to Mundurukú (Crofts 1984), Rámaráma (Gabas Jr. 1999), Arikém (Landin 2005, Everett 2006), Tupí-Guaraní (Seki 2000, Solano 2009), and Tuparí (Galúcio 2001, Braga 2005). Ideophones are described in this study as expressions of sounds, appearances, manners, etc. perceived through the senses. Ideophones have been described by the literature variously; some cross-linguistic characteristics have been defined for ideophones (Voeltz & Killian-Hatz 2001:2, apud Smoll 2011-2012), as presented below:

<table>
<thead>
<tr>
<th>CROSS-LINGUISTIC CHARACTERISTICS OF IDEOPHONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ideophones are semantically highly marked and express perceptual imagery of events and states;</td>
</tr>
<tr>
<td>(2) Ideophones generally have a special phonology;</td>
</tr>
<tr>
<td>(3) Ideophones often do not fit into normal syntactic patterns;</td>
</tr>
<tr>
<td>(4) Ideophones are often subject to processes of reduplication;</td>
</tr>
<tr>
<td>(5) Ideophones are often only used in oral language and tend to have a special dramaturgic effect.</td>
</tr>
</tbody>
</table>

**Figure 7.1** - Cross-linguistic characteristics of ideophones.

In Akuntsú, ideophones can contain segments that are not part of its regular phoneme inventory, which are exemplified in boldface below. The segments below represent a sound-symbolic representation of the sounds reproduced in different events.
In addition, the ideophones tend to keep the shape of the syllable structure (CV(C)) found in other lexical categories described for Akuntsú. They are typically pronounced with a relatively high pitch and intensity (this also applies to other lexical classes that allow reduplication). Some examples are given below:

(7.34) $uf$ voiceless labiodental fricative ‘tired’; ‘blowing’

$\beta uh$ voiceless bilabial fricative ‘of something/someone falling’

$wi fi$ voiceless alveolar fricative ‘of someone sliding’

$uh$ glottal fricative ‘of someone snoring/sleeping’

Additionally, ideophones carry different phonological characteristics related to vowel lengthening: they are intensively lengthened compared to other lexical categories. See for example the lengthening in the ideophones $tfoooo$ ‘biii...g’ [big], and $wiiifi$ ‘sliii....ding’ [sliding].

Ideophones have other peculiar characteristics. The ideophones mostly function (syntactically) as verbs in this language, although they can also be adjectives or nouns. The speakers use little morphology on verbal ideophones; some examples of derivational iconicity are shown below, where $dow$ represents the sound of a gunshot. In (7.35a-b), the ideophone $dow$ is being used as a verb, receiving the thematic vowel, typical of verbs, whereas in (7.35c) the same ideophone is used as a noun. Note that the examples (7.35a-b) show the ideophone with the thematic vowel; however, it is optional and most of the ideophones in the data do not take all the inflectional and derivational morphology typical of verbs (see verbal morphology in chapter 5).
Another example of ideophones functioning in different word classes is shown in (7.36) below. This example shows part of a conversation where speakers are talking about a cut on the hand. In (7.36a) the lexical verb ‘to cut’ korom is mentioned, and after it they begin to replace this verb with the ideophone k/u, which functions as a verb in (7.36b). In the next example, the same ideophone is used as a noun and as a verb respectively, as seen in (7.36c). Note that the final vowel of the ideophone is reduplicated indicating the manner that it was cut.

(7.36) a. on o=ø-po korom-ka
   1s 1s=R-hand cut-TR
   ‘I cut my hand’

   b. po k'u-ka
      hand IDEO-TR
      ‘I cut the hand’

   c. k'u a kipe k'uuu
      IDEO exist machete IDEO
      ‘I have a cut, the machete cut strongly’

There are also kinds of ideophones that function as adjectives, as seen below:
Ideophones are often reduplicated. It is possible to have three, four or five repetitions of the basic form, or even more when it is necessary, depending on the amount of emphasis that the speaker wants to give to the event. The reduplication can also indicate repeated actions, intensification or the duration of the process. The number of repetitions depends on the context, such as the intensity of an action that the ideophone represents. Compare examples (7.38a-c), where \( k^w \text{at} \) is sound symbolic of the water boiling.

(7.38) a.  \( te=k^w \text{at-}ka \)
\( 3\text{COR=} \text{IDEO-TR} \)
‘It's boiling’

b.  \( iki \quad k^w \text{at-}k^w \text{at-}ka \)
water \( \text{IDEO-RED-TR} \)
‘Water is boiling vigorously’ (repeated from (3.20))

c.  \( k^w \text{at-}k^w \text{at-}k^w \text{at-}k^w \text{at-}i=\text{tip-}ka \quad o=jâ \)
\( \text{IDEO-RED-RED-RED} \quad 3\text{S=} \text{soft-TR} \quad 1\text{s=} \text{sit-} \)
‘It boils intensively, I am cooking it’

In the examples below, \( \beta\text{uh} \) represents the sound of something/someone falling down:

(7.39) a.  \( \text{kip} \quad te=\text{parâ-}ka \quad \text{kip} \quad te=\beta\text{uh} \)
wood \( 3\text{COR=} \text{crack-TR} \quad \text{wood} \quad 3\text{COR=} \text{IDEO} \)
‘Wood cracked, wood has fallen down’

b.  \( te=\text{akat-}a \quad te=\beta\text{uh} \)
\( 3\text{COR=} \text{fall-THV} \quad 3\text{COR=} \text{IDEO} \)
‘He fell, he fell down’
One of the most frequently used ideophone is *buru* which indicates the movement of person going or coming, as seen in (7.40).

(7.40) a.  

<table>
<thead>
<tr>
<th></th>
<th>1s</th>
<th>IDEO-RED-RED-RED</th>
<th>fish</th>
<th>catch-THV</th>
</tr>
</thead>
<tbody>
<tr>
<td>on</td>
<td>buru-ru-ru-ru</td>
<td>kijpit</td>
<td>at-a</td>
<td></td>
</tr>
</tbody>
</table>

‘I am leaving to catch fish’

b.  

<table>
<thead>
<tr>
<th></th>
<th>2s</th>
<th>IDEO-RED</th>
<th>fish</th>
<th>catch-THV</th>
</tr>
</thead>
<tbody>
<tr>
<td>en</td>
<td>i=at</td>
<td>kom</td>
<td>e=ø-ok'øa</td>
<td>buru-ru</td>
</tr>
</tbody>
</table>

‘You’ll catch him, your young brother comes’

The speakers also use other types of ideophones, and some of them are illustrated below:

(7.41)  

<table>
<thead>
<tr>
<th></th>
<th>1s</th>
<th>non-Indian-DEF</th>
<th>shaman</th>
<th>IDEO-RED-RED</th>
</tr>
</thead>
<tbody>
<tr>
<td>aparabia-t</td>
<td>k'amo√</td>
<td>kiw-kiw-kiw</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘The doctor wiggled (repeatedly)’

(7.42)  

<table>
<thead>
<tr>
<th></th>
<th>1s</th>
<th>IDEO-RED</th>
<th>fish</th>
<th>proj</th>
<th>2s=</th>
<th>r-young.brother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nanoj</td>
<td>on</td>
<td>Aramira</td>
<td>meti</td>
<td>dɔk-dɔk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘Nanoj, Aramira and I are hitting the maripa's fruit many times (to break it)’

(7.43) a.  

<table>
<thead>
<tr>
<th></th>
<th>3s=</th>
<th>IDEO-RED</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-ke</td>
<td>kera-k'øa</td>
<td>aka</td>
</tr>
</tbody>
</table>

‘(You) split it, that way, cutting’

b.  

<table>
<thead>
<tr>
<th></th>
<th>2s=</th>
<th>IDEO</th>
<th>FOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>e=ø-po</td>
<td>akã</td>
<td>piiii</td>
<td>te</td>
</tr>
</tbody>
</table>

‘You snap your hand's bone’

(7.44)  

<table>
<thead>
<tr>
<th></th>
<th>2s=</th>
<th>IDEO-RED</th>
<th>DEM=DAT</th>
<th>IDEO-RED</th>
<th>DEM=DAT</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>ke=bõ</td>
<td>tfu-tfu</td>
<td>ke=bõ</td>
<td>nom</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‘That is pulling (repeatedly), for that one isn't (pulling)’

Akuntsú people have used ideophones and gestures as a way to facilitate their
communication with the FUNAI staff. Since the Akuntsú are monolinguals and there is no contact language to use with outsiders, the use of ideophones (full of iconic expressions) seems to be a way that they have found to compensate for the lack of communication with these outsiders. This hypothesis (along with their isolation from non-Indians) may help to explain why the Akuntsú people, since contact, have not learned Brazilian Portuguese: mostly because they do not need it; they found a way for the use of ideophones in combination with gestures to serve their primary needs.

7.4 Interjections

Interjections in Akuntsú are words used as a result of speakers’ emotions and reactions to different situations, a result of "various cultural conventions that govern social and inter-personal relations" (Givón 2001:102).

They are not used in syntactic constructions with other word classes — that is, the interjections have no syntactic connection to other words found in an utterance. Unlike ideophones, interjections do not present verbal functions or any other function related to any other word class. The interjection usually comes at the beginning of the utterance, and can also form a phrase by itself. Some of the interjections most commonly used by the speakers are repeated here from previous sections in table 7.1 below:

<table>
<thead>
<tr>
<th>INTERJECTION</th>
<th>SITUATION/Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ahá</td>
<td>To indicate surprise, to approve some activity or the result of some work.</td>
</tr>
<tr>
<td>oʔ</td>
<td>The speaker wants to indicate his/her arrival.</td>
</tr>
<tr>
<td>iwe</td>
<td>To indicate pain; mostly used with non-Indians.</td>
</tr>
<tr>
<td>ê</td>
<td>To call someone's attention.</td>
</tr>
</tbody>
</table>

*Table 7.1 - Sample of interjections.*
Some examples of interjections within utterances are presented below:

(7.45)  
\[ \begin{align*} 
\text{o=ip} & \quad \text{on} \\
\text{Ooo} & \quad 1s=\text{come.back} \quad 1s \\
& \quad \text{‘Ooo, I arrived’} 
\end{align*} \]

(7.46)  
\[ \begin{align*} 
\text{i=t=fame=na} & \\
\text{aha} & \quad 3s=\text{beautiful=}\text{TRANS} \\
& \quad \text{‘Aha, it's beautiful’} 
\end{align*} \]

There is also the borrowed word \textit{iwe\textsuperscript{131}}\textsuperscript{131} which functions as an interjection in the language; it can have both vowel lengthening (7.47) and can be reduplicated (7.48).

(7.47)  
\[ \begin{align*} 
\text{o=\text{o-amina} \quad iwee} & \\
1s=\text{R-knee} & \quad \text{IDEO} \\
& \quad \text{‘My knee is hurting very much’} 
\end{align*} \]

(7.48)  
\[ \begin{align*} 
\text{te \quad \text{aka} \quad \text{ojpe} \quad ko-a \quad \text{iwe-iwe} \quad eo \quad at\text{fi}} & \\
3s \quad \text{that.way} \quad \text{snuff} \quad \text{ingest-THV} \quad \text{IDEO-RED} \quad \text{belly} \quad \text{pain} \\
& \quad \text{‘[...] he, that way, sniffed snuff, it is hurting so much, the belly is hurting’} 
\end{align*} \]

7.5 Summary

The purpose of this chapter was to provide an overview of the different particles found in this language, as well as their function and syntactic position in clauses. This chapter also provided a description of ideophones and their main characteristics. In addition, some of the most frequent interjections were discussed and illustrated. Table 7.2, below, summarizes the main findings:

\textsuperscript{131} This interjection is a borrowing word from Kanoê language /iva-e/ pain-NMLZ ‘pain’ (Bacelar 2004:114)
### Table 7.2 - Main characteristics of interjections, particles and ideophones.

<table>
<thead>
<tr>
<th>CLOSED CLASSES</th>
<th>MAIN CHARACTERISTICS</th>
</tr>
</thead>
</table>
| Particles      | • Syntactically integrated into the sentence;  
                 • Do not constitute a predicate by itself. |
| Ideophones     | • Constitute a predicate by itself;     
                 • Can represent different grammatical categories. |
| Interjections  | • Constitute a predicate by itself;     
                 • Express speaker's emotion and reaction |


CHAPTER 8
SIMPLE CLAUSE TYPES

8.1 Introduction

The aim of this chapter is twofold. The first goal is to investigate the main non-verbal clauses in this language, seeking to describe their key semantic and morphosyntactic characteristics. The second goal of this chapter is to provide a brief description of the sentence types discussed in chapter 5, but this time with a focus on negative and interrogative clauses. The discussion seeks to outline the differences between various utterances, such as declarative, negative and interrogative, putting emphasis on the strategies Akuntsú employs to indicate each sentence type. This chapter is organized as following:

• Predicate complements (§8.2), with the following subsections:
  - Equative and proper inclusion predicate complements (§8.2.1);
  - Existential constructions (§8.2.2);
  - Adjectival predicate complements (§8.2.3);
  - Locative predicate complements (§8.2.4);
• Discussion of verbal predicates (§8.3);
• Interrogative clauses (§8.4), with a description of intonation pattern in polar questions and the structure of content questions in this language;
• Negative clauses (§8.5);
• A summary of the chapter (§8.6).

8.2 Predicate complements

A predicate complement is here defined as a predicate that lacks a real verb or copula. The important characteristic of this type of predicate is that there is no overt copular element in this type of sentence. There are five main kinds of sentences with predicate complements to be discussed in this section: proper inclusion and equation predicate complements, existential, adjectival, and locative (with postpositional or adverbial phrases) predicate complements.

The word order in non-verbal clauses is often [\textit{SUBJECT (NP)} + \textit{COMPLEMENT (NP)}] (with exceptions described further in this section) and there is a $\varnothing$ copula\footnote{Copula is here defined as a term that "(...) refers to a linking verb (...) whose main function is to relate other elements of clause structure, especially subject and complement" (Crystal 1980:93 \textit{apud} Pustet 2003:2). According to Pustet (2003:2) there are three main known syntactic functions of copulas: (1) to function as a link between the subject and predicate complement; (2) to function as the element for inflectional verb morphology to be attached to; and (3) as to be a predicator, for those elements that cannot form predicates on their own.} between the subject NP and its predicate complement.

8.2.1 Nominal predicate complements

Nominal predicate complements are those that have a noun as the predicate complement. In the literature, it is possible to find two types of predicate complements, called proper inclusion clauses and equational clauses (by Payne 1997:114). These two types are also found in Akuntsú, as discussed and illustrated in the following subsections. Note that equatives and proper inclusion predicate complements differ from a semantic perspective (only). Table 8.1 presents the predicate complements and their grammatical structure
8.2.1.1 Equative constructions

Equative constructions are clauses that have two NPs in juxtaposition, as in the structure \([\text{NP}_1 = \text{NP}_2]\), where the NP\(_1\) is identical to the NP\(_2\) specified in the predicate complement (Payne 1997:114). Presented below are some examples of this equative construction:

\[(8.1)\]  
\(a.\) \(\text{en} \quad o=\emptyset-\text{mepit}\)  
\(2s\quad 1s=r\)-son/daughter.of.woman  
‘You are my daughter’

\(b.\) \(o=\emptyset-\text{tfej} \quad te \quad \text{Pupak}\)  
\(1s=r\)-uncle \quad FOC \quad \text{Pupák}\)  
‘My uncle is Pupák’

\(c.\) \(k^wak^w a \quad i=t-et\)  
\(k^wak^w a \quad 3s=r\)-name\)  
‘\(k^wak^w a\) is her name’

Note in example (8.1b) above and (8.2a) below (section 8.2.1.2) that the equative predicate has a focus marker between the subject and the predicate. In relation to the
presence of the focus marker, predicate complements pattern similarly to verbal predicates, in
the sense that the focused element is the one placed before the particle te — i.e., the focused
syntactic constituent is fronted.

8.2.1.2 Proper inclusion

Proper inclusion refers to two nominal phrases in juxtaposition where the first noun
has a relationship with the second one; that is, the first noun is semantically part of a class or
category specified in the nominal predicate, as in the English sentence A trout is a fish.
(Payne 1997:114). Note that there is no morphological difference between equative and
proper inclusion predicate complements. They diverge only semantically. In examples (8.2a-
b) the subject NP is a pronoun while in example (8.2c) the subject NP is a full noun phrase.

(8.2) a. en te aramira
     2s  FOC woman
     ‘You are a woman’

b. on akûtsu nom
     1s Akuntsu no
     ‘I am not Akuntsú’

c. nako-t aparapia
     man-DEF non-Indian
     ‘The man is non-Indian’

Proper inclusion constructions can also be formed with an independent noun as the
head of the predicate and they are usually followed by the focus particle te (8.3) or by the
essive morpheme =na\(^{133}\) (8.4), where the latter construction is more frequent in the data.

\(^{133}\) For the definition and description of the essive morpheme see section (4.3.1.2).
The next subsection describes negation in predicate nominals.

### 8.2.1.3 Negation

Negation in equational and proper inclusion clauses of [NP + NP] is made with the clitic =\((e)\)rom (8.5a-b) or with the particle nom (8.6). In (8.7), the negation comes after the second NP:

(8.5) a.  
\[
\text{apaw } i=t-et=erom
\]
\[
\text{grub (sp.) } 3s=R\text{-name}=\text{NEG}
\]
‘It is not called grub’

b.  
\[
jè aramira ø-mepit=erom
\]
\[
\text{DEM Aramira } R\text{-son/daughter.of.woman}=\text{NEG}
\]
‘This is not Aramira’s son’

(8.6)  
\[
\text{apaw } i=t-et \text{ nom}
\]
\[
\text{grub (sp.) } 3s=R\text{-name} \text{ no}
\]
‘It is not called grub’

This strategy to negate predicate complements is similar to negation of other types of predicates. In verb constructions, the negation usually goes before or/and after the verb,
where the scope of the negation is over the whole predicate. See details about negative clauses in section 8.5.

\[(8.7)\] 
\[erê=bô \quad nom \quad tfet=om\]

\[2S.EM=DAT \quad no \quad leave=NEG\]

‘You don’t leave’

The possible positions of the negation in equative clauses are summarized in Figure 8.1.

---

\[\begin{align*}
&[\text{NP} + \text{NP}=\text{NEG}] \\
&\text{OR} \\
&[\text{NP} + \text{NEG} + \text{NP} (=\text{NEG})] \\
&\text{OR} \\
&[\text{NP} + \text{NEG}]
\end{align*}\]

**Figure 8.1** - The position of negation in predicate complement.

---

### 8.2.2 Existential constructions

Existential predicates are those that assert the existence of an entity. They may also allow possessive readings. The existential constructions can be semantically divided into two types. TYPE 1 often associates two NPs in juxtaposition, while TYPE 2 sentences do not use the structure \([\text{NP} + \text{NP}]\), but rather are clauses that contain the particle *a* or *tea* (existential markers)\(^{134}\). Table 8.2 illustrates how the existential predicates are distributed in this language according to internal structural criteria, as shown:

\(^{134}\) Since existentials were discussed in a previous chapter, I focus here only on the types of existential constructions not mentioned earlier in this study. For the properties of particles see section 7.2.
The main difference between a Type 1 and Type 2 sentence (as seen from Table 8.2) is that the latter has a predicate complement that cannot be combined to another NP in a juxtaposition construction. Below, each sentence type is exemplified and discussed.

**Type 1**

Type 1 clauses are existential clauses (with possible possessive readings)\(^{135}\) that have a noun as the head of the predicate. There are two NPs that are joined to form a genitive construction — that is, one of them refers to the possessor, and the other to the possessed. Type 1 predicates share features with the predicate complements, i.e., they are the result of two NPs in juxtaposition as \([NP + NP]\), as seen below:

(8.2) a. jē nom pi + kapa-kapa  
DEM no feet + roll-RED  
‘This one doesn't have shoes’  
Lit: ‘Shoes don't exist for this one.’

---

\(^{135}\) This is not uncommon cross-linguistically. As Payne (1997:126) reported, "languages usually employ existential and/or locational structures to express the notion of possession." Turkish, for example, "uses the verb meaning 'exist' that also occurs in the existential constructions" in possessive constructions, as do many languages, including Latin, which had the construction, e.g. *mihi est* [1pers.dat is/exist.3pers.pres.indicative] ‘I have’, literally ‘to me is/exists’.
b. \( orê \quad o=ô-koro \)
   \[ 1S, EM \quad 1S=R \]-bowl
   ‘There is my bowl’ (‘I have a bowl’)

c. \( jê \quad kem+kì \)
   \[ DEM \quad breast+liquid \]
   ‘This one has breast-milk’ (repeated from (3.29))
   Lit: Breast-milk exists for this one.

d. \( on \quad o=ô-tfajä \)
   \[ 1S \quad 1S=R \]-earring
   ‘I have earrings’
   Lit: Earrings exist for me.

**TYPE 2**

**TYPE 2** existential constructions occur with either the particle \( a \) or the particle \( tea \)

(8.9).

(8.9) a. \( ek^{w}it \quad tea \)
   honey exist
   ‘There is honey’
   Context: Looking at a tree and saying that up there, there is honey to get.

b. \( k^{w}e + nī \quad a \)
   game meat + to weave\(^{136}\) exist
   ‘There is a mat’

c. \( tfame \quad a \)
   good exist
   ‘There is a good one’

However, I would like to call attention to negative constructions. In these

\(^{136}\) This example shows a case of the compound form of \([\text{NOUN} + \text{TRANSITIVE VERB}]\). However, only a few cases were found in the data. This particular situation will be treated with special attention in future studies.
constructions, the NP can occur independently as a predicate complement, that is, it occurs without the addition of any other morphology, as follows:

\[[NP + \text{NEG}]\]

This construction can be seen in the below examples:

(8.10) a.  \textit{ek=erom}
\begin{align*}
\text{house} &= \text{NEG} \\
\text{‘There is no house’ (repeated from (6.12))}
\end{align*}

b.  \textit{taip=erom}
\begin{align*}
\text{son.of.man} &= \text{NEG} \\
\text{‘There is no son’}
\end{align*}

For predicates with the particles \textit{tea} and \textit{a}, the only possible negative structure is the one with the particle \textit{nom}. So far, no examples where the clitic \=(-e)rom is employed in these constructions have been found.

(8.11)  \textit{e=ø-pi atfî nom a}
\begin{align*}
2s &= \text{R-foot pain} \\
\text{no exist} \\
\text{‘There is no pain in your foot’}
\end{align*}

\textbf{8.2.3 Adjectival predicate complements}

In adjectival predicate complements, the adjectives occur as predicate complements indicating a property or an attribute of the noun phrase that is the subject of this construction. As seen below, as with the nouns, the adjectives are also capable of forming predicate complements in a juxtaposition construction. There are no morphological criteria to differentiate predicate complements of the [NP + NP] type from adjectival predicate complements of the [NP + ADJ] type. The predominant criterion used here was semantic. The
structure of adjectival predicate complements is \([NP + ADJ]\).

(8.12) a. \textit{Konibu} \textit{kipi}
\begin{itemize}
  \item Konibú old.man
  \begin{itemize}
    \item ‘Konibú is old’
  \end{itemize}
\end{itemize}

b. \textit{Pupak} \textit{pagop}
\begin{itemize}
  \item Pupák young.man
  \begin{itemize}
    \item ‘Pupák is young’
  \end{itemize}
\end{itemize}

Adjective phrases also occur with the particle \textit{te} or with the essive clitic \textit{=na}. This structure is similar to some nominal predicate complements:

(8.13) a. \textit{i=kop=na}
\begin{itemize}
  \item 3s=red=ESS
  \begin{itemize}
    \item ‘(It is) red (corn)’
  \end{itemize}
\end{itemize}

b. \textit{i=iw} \textit{te}
\begin{itemize}
  \item 3s=rotten FOC
  \begin{itemize}
    \item ‘It is rotten’
  \end{itemize}
\end{itemize}

Note that unlike verbs, adjectives and nouns do not allow thematic vowels to attach to them, and unlike verbs, they can function as arguments of predicates without taking any morphological marker (such as the nominalizer morpheme).

Negative constructions with adjectival predicate complements are formed by simply using the negative particle (8.14) or the negative clitic (8.15) after the adjective, as shown below:

(8.14) \textit{Pupak} \textit{i=ten nom}
\begin{itemize}
  \item Pupák 3s=strong no
  \begin{itemize}
    \item ‘Pupák is not strong’
  \end{itemize}
\end{itemize}
(8.15) \( i=tfobe=rom \)
\( 3s=delicious=\neg \)
‘It isn't delicious’

Neither the particle te nor the essive clitic =na is necessary for attributive adjective complements, when the negative morphemes show up in the clause.

**8.2.4 Locative predicates**

There is another type of non-verbal predicate in the language, namely locative predicates. The locative predicates are the juxtaposition of a noun phrase and a postpositional phrase, in the order of \([NP + PP]\), as seen in (8.16), or of noun and a locative adverb that has either the structure \([ADVP + NP]\) or \([NP + ADVP]\). Examples of locative predicates are presented below:

\[[NP + LOCATIVE EXPRESSION]\]

(8.16) a. \( amon \ e=\phi-ape \ etfe \)
\( soap \ 2s=\text{r-thigh} \ \text{DIFF} \)
‘The soap is on your thigh’

b. \( t=\phi-anam \ etfe \ kap \)
\( 3s=\text{r-head} \ \text{DIFF} \ \text{wasp} \)
‘A wasp is on his head’

(8.17) a. \( T\text{jaruj} \ otfe \ t-ek \ etfe \)
\( T\text{jaruj} \ 1\text{PL.EX r-house} \ \text{DIFF} \)
‘Tjaruj is in our house’

b. \( j\phi \ kipe \)
\( \text{here machete} \)
‘Machete is here’
The negation is also formed with the particle *nom* or the clitic *=(e)rom*, as following:

(8.18) a. \( kirê=bô \) *nom*
\( \text{today}=\text{ALL} \) no
‘It is not today’

b. \( jô \) \( kipe=\text{rom} \)
\( \text{here} \) \( \text{machete}=\text{NEG} \)
‘The machete isn't here’

8.3 Verbal predicates

Clauses composed with verbal predicates are divided into two categories: transitive predicates and intransitive predicates. This division is made according to the number of arguments required by the verb. Intransitive predicates are those that require only one argument, the subject; transitive predicates are those that require two arguments, namely a subject and an object. Pro-forms or nouns can function as object or subject in these predicates.

8.3.1 Transitive predicates

Following Hopper and Thompson (1980), transitivity is here defined as an activity which is ‘carried-over’ or ‘transferred’ from an agent subject to a patient object. It involves two arguments and an action. Transitive verbs are those that syntactically have a direct object (O). The transitive verbs in Akuntsù obligatorily bear a marker; whether it cross-references the subject or the object depends on the animacy of the object and of the subject being used in the discourse, as presented in chapter 5.

The first goal of this section is to present reasons for subject ellipsis in this language. As noted in previous examples, the subject can be omitted in transitive clauses; this is mainly
due to pragmatics, as pointed out below. The pragmatic functions discussed in figure 8.2 follow Andrews' discussion (2007:148).

<table>
<thead>
<tr>
<th>SUBJECT ELLIPSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1)</strong> The elided argument that plays the subject role was mentioned earlier in the conversation and so the speaker has the necessary information to determine the relationship between argument and predicate;</td>
</tr>
<tr>
<td><strong>(2)</strong> What the hearer presumes that the speaker is conscious of, i.e., the situation that involves both speaker and addressee shows who the elided agent is. It is presupposed or predictable from the context;</td>
</tr>
<tr>
<td><strong>(3)</strong> What is foregrounded as important versus what is backgrounded as secondary — that is, the parts of discourse which do not immediately contribute to the goal of the story-line are considered the background. The parts of the discourse which supply the main story-line points are the foreground. The foregrounded material conveys the skeleton of the conversation, which means that when the subject is omitted the OV is the main portion of the utterance, i.e., it contains foregrounded information.</td>
</tr>
</tbody>
</table>

**Figure 8.2** - Pragmatic factors for subject ellipsis.

Note that even though the subject can be elided, the transitive clause needs to be instantiated by the subject somehow. Thus, two arguments (overt or not) are strictly necessary in transitive constructions. Table 8.3 shows whether or not the subject and object of transitive clauses can be a full NP, a free pronoun, a bound pronoun or a demonstrative. Note that only one element is cross-referenced on the transitive verbs, namely the object or the subject — the subject is only marked on transitive verbs when the object is a 3rd person

137 Topics are usually presupposed information in this language.
non-animate full NP and the subject (agent) is a pronoun.\(^\text{138}\)

### Table 8.3 - Subject and Object in transitive clauses.

<table>
<thead>
<tr>
<th>OBLIGATORY ARGUMENTS OF TRANSITIVE VERBS</th>
<th>SUBJECT AND OBJECT IN TRANSITIVE CLAUSES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full NP</td>
</tr>
<tr>
<td>Subject</td>
<td>Yes</td>
</tr>
<tr>
<td>Object</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Besides the required arguments (subject and object), transitive clauses (as well as intransitive clauses) also allow non-core arguments, such as in adverbial phrases (8.20) and other oblique phrases (8.21).

(8.19) \[ pitoa\ o=kõj-k\ ka\ kõj-kõj-kõj \]
\[ \text{tobacco 1s=pound-TR pound-RED-RED} \]
\[ \text{‘I’m going to pound the tobacco, kneading (intensively)’} \]

(8.20) \[ ororo + pe \ ōkw\ a\ kirê \]
\[ \text{cotton + skin/peel wash/clean today/now} \]
\[ \text{‘...he washes the clothes now’} \]
Lit.: ‘He washes to/on the clothes’

(8.21) \[ erê=bô\ i=kij \]
\[ \text{1s.EM=DAT 3s=take} \]
\[ \text{‘It is for you to take it’} \]

---

\(^{138}\) See chapter 5 for details.
8.3.1.1 Word-order in transitive predicates

In Akuntsú discourse, the most frequently used word-order in transitive sentences is SOV; however, OVS and VOS (while less frequent than the other two) are also found in situations where the object or the event are the focus of the clause, which are often marked by the focus marker te.

The object of transitive clauses often precedes the verb, and the S (subject) can either precede or follow the verb phrase (OV). Thus, the word order of transitive clauses can be SOV (8.22a), OVS (8.22b) or VO(S)\(^{139}\) (8.22c):

(8.24) a. *poraki iki apeka* (SOV)
    curassow water drink
    ‘Curassow is drinking water’

    b. *iki apeka poraki* (OVS)
    water drink curassow
    ‘Curassow is drinking water’

    c. *apeka te iki* (VO(S))
    water FOC water
    ‘Drink water!’

In Akuntsú, when the agent occurs post-verbally, it is due to the fact that the object is the main topic of the conversation. Focus markers may (8.23) or may not (8.23) appear, depending on the semantics of the proposition.

(8.23) *tautfe tʃop-a te Konibú* (OVS)
    peccary see-THV FOC Konibú
    ‘Konibú is going to see the peccary’

\(^{139}\) VOS word order usually happen in imperative clauses and the subject is often ellipsed.
The position of the object is usually pre-verbal: when it is placed after the verb there is often a focus marker indicating the movement, as in (8.25-8.26).

(8.25)  
\text{mi-a te poga} \quad (\text{VO(S)})  
\text{kil-THV FOC tortoise}  
‘Kill the tortoise!’

(8.26)  
\text{pow-pow tfoga te Tjaroj o-po} \quad (\text{SVO})  
\text{owl bite FOC Tjaroj R-hand}  
‘Owl bit Tjaroj’s hand’

8.3.1.2 Demotion of the direct object: antipassive construction

In Akuntsú, the antipassive voice is not morphologically marked directly on the verb, but through the demotion of the object to an oblique position in a given transitive clause. The oblique clitic \text{\textit{=pe}} marks the object when it is occurring outside of the usual syntactic position of the object\textsuperscript{140}. This type of construction is well-known as an antipassive construction. In such constructions, the subject does not change its status and it continues to be the agent of a transitive clause.\textsuperscript{141} However, in this strategy the core internal argument of a transitive verb, its logical direct object, changes its status to a non-core, oblique argument.

However, unlike other languages in which the verb receives an antipassive morpheme (Comrie 1988), the corresponding constructions in Akuntsú do not receive any overt marker.

\textsuperscript{140} The cognate morpheme \textit{pe} is also described as a mark of object demotion in related languages (Galucio 2001, Rodrigues & Caspar 1957).

\textsuperscript{141} Aragon (2008:99-100) has identified a morpheme \textit{pe} as a marker of indirect object of a lexical transitive verb.
on their verbs, i.e., there is no visible antipassive morphology, as illustrated in the following examples:

(4.27) a. *tiri puru-ru-ru me-me-me ek pagop=pe*
   
two IDEO-RED-RED IDEO-RED-RED house new=OBL
   ‘In two (days) that one (go and come) and he builds at a new house’

b. *kip ero i=par-ka kip=pe*
   wind 3s=break-TR tree=OBL
   ‘The wind is breaking the tree’

c. *aparabia o=o-ike dow mi-a o=ike=pe*
   non-Indian 1s=R-older.brother IDEO kill-TV 1s=older.brother=OBL
   ‘The non-Indian killed my older brother, (he) killed my older brother’

d. *te=i-maj at ka atiti=pe*
   3COR=OBJ.NMLZ-say/tell catch go corn=OBL
   ‘He said: “(go and) catch corn!”’

As seen above, the patients of transitive verbs are marked as oblique in all these examples. Thus, the antipassive in this language is characterized by having a voice as seen in other Tupían languages, such as Karitiana, where antipassive voice "(...) is used in situations in which an action’s effects on a patient are reduced or de-focused" (Everett 2006:438).

The example below shows an oblique marker in a complex clause:

(5.28) *k’amoa mâtfero ôipe ko o=tfet-a ôipe ko pe=mâtfero*
   shaman Marcelo snuff ingest 1s=leave-THV snuff ingest OBL=Marcelo
   ‘The shaman Marcelo sniffs snuff, I leave for Marcelo to sniff snuff’

8.3.2 Intransitive predicate

Intransitive predicates select only one argument, the subject (S). The subject can be expressed by different kinds of noun phrases, such as by pronouns (8.29a), non-human nouns
(8.29b), human nouns (8.29c) or demonstratives (8.29d):

(8.29) a.  \( te=ita \)  
3COR=arrive  
‘He has arrived’

b.  \( ëjpe \ \te=wip-ka \)  
tobacco 3COR=slide-TR  
‘Tobacco is falling’

c.  \( abatfo \ \te=kwep-a \)  
grandfather 3COR=climb-THV  
‘Grandfather is climbing’

d.  \( ke \ \wen \)  
DEM finish  
‘That one ended’

This language codes the subjects of active predicates (8.30) and stative predicates (8.31) with the same set of pronominal markers. The stative predicates have stems that denote states that affect their participants, as shown in the following examples:

(8.30) a.  \( o=atfo-a \)  
(on)  
1s=bathe-THV (1S)  
‘I bathe’

b.  \( e=et-a \)  
(en)  
2s=sleep-THV (2S)  
‘You sleep’

(8.31) a.  \( o=pip \)  
1s=afraid.of  
‘I’m scared’

b.  \( e=pekëm \)  
2s=cold  
‘You are cold’
In intransitive clauses, the subject is only elided when the subject is third person and has been previously mentioned in the discourse, narrative or natural conversation, as illustrated below, where the verb with no subject marker is in boldface:

\[(8.32)\]
\[o=\text{pera}\quad uf-uf\quad te=\text{ita}\quad \text{pit-ka} \]
\[1\text{s}=\text{wake.up}\quad \text{IDEO-RED}\quad 3\text{COR}=\text{arrive}\quad \text{hole-TR} \]
‘[...] and I woke up tired, the mosquitos arrive and they stick (when they sting and blood comes out)’

### 8.4 Interrogative clauses

Interrogatives (questions) are used by the speaker in requesting information due to some lack of knowledge. The interrogatives in this language can be either yes-no questions (polar question) or content questions (information question).

The major difference between polar questions and content questions is that in the former, the speaker seeks either to confirm or deny the truth value of the proposition, whereas in the latter, the speaker may ask for information, for instance about the subject, the object, the place, the manner, the time, etc. In this section, the intonation pattern in polar questions and their structural organization are described (§8.4.1), as well as the pattern of content questions (§8.4.2).

#### 8.4.1 Intonation in polar questions

When there is no wh-question word present in the clause, the intonation pattern is crucial to distinguishing whether an utterance is an interrogative or a declarative sentence. Rising intonation is a common characteristic of polar questions in this language; hence polar clauses do not bear any other interrogative marker (no grammatical marker).
Rising intonation is a characteristic of interrogative clauses, even the content questions (more on content questions in the next subsection). In Akuntsú, rising intonation is usually seen at the end of the interrogative clause\textsuperscript{142}, while in declarative sentences the opposite holds — that is, declarative sentences usually carry a gradually falling intonation contour.

Compare in the pictures below the intonation contour at the end of interrogative clauses (a rising line at the end of each interrogative clause) with the intonation contour at the end of declaratives, which are described after the interrogatives. Note that the structure of interrogatives and declaratives is otherwise the same. Firstly, compare the two examples below that illustrate the intonation difference between interrogative (8.33) and declarative clauses (8.34).

\begin{verbatim}
(8.33) nako=na?

man=ESS

‘Is it a man?’
\end{verbatim}

\textsuperscript{142} Rising intonation in interrogative clauses is also a characteristic of many languages. It is basically due to the fact that high pitch "signals uncertainty, indecision, hesitation and also insecurity" (Ohala 1993,1994; \textit{apud} König and Siemund 2007:292).
More examples of intonational contours are shown below. Interrogative clauses are presented first, followed by declarative clauses.

**INTERROGATIVES - POLAR QUESTIONS**

(8.34) \( pitoa=na \)

\[
\begin{array}{l}
\text{tobacco}=\text{ESS} \\
\text{‘It's tobacco’}
\end{array}
\]

(8.35) \( i=\varnothing-ti \quad te \quad ke? \)

3s=r-mother FOC DEM

‘Is his mother that one?’
(8.36)  \(i=\text{o-men} \quad t\text{-et} \quad \text{ete?} \)
3s=R-husband  R-name  REL
‘Is there a husband’s name?’

(8.37)  \(\text{kirê}=\text{bô} \quad \text{te} \quad i\text{-p-a} \quad \text{arianu}?\)  \[\text{kînêmô te iba}^2\text{ari?anu}\]
today=ALL  FOC  come.back-THV  Adriano
‘Is it today (that) Adriano comes back?’
Note that in the example above (8.37), the question has the focus particle *te* (seen also in example (8.35)), indicating that the main purpose of the question is to ask whether or not the person is coming TODAY. As a focused constituent, the adverbial phrase also receives high intonation contour, as compared to the intonation contour on the rest of the utterance.

Let us now compare the intonation of interrogatives, as presented above, with the one in declarative clauses, as shown. Note the falling pitch in the end of each declarative clause.

**DECLARATIVE**

(8.38)  \( karo(w) \ k^\circ ep-a \ e=k^\circ ep-a \)
Carol climb-THV 2s=climb-THV

‘Carol climbs, you climb’
This one doesn't have a husband

Answers to polar questions are either yes or no. In Akuntsú, for a positive answer, the speaker often repeats the entire clause (with any additional information that they want to include) and usually inserts the focus marker at the end of the utterance. For example:

(8.40) a. nako te wip?
  man  FOC slide
  ‘Did the man slid?’
b. \textit{nako wip te}  
\hspace{1em} \textit{man slide FOC}  
\hspace{1em} ‘The man slided.’

For a negative answer, the speaker can either use the negative particle \textit{nom} (8.40a) or can use this particle and the verb (8.40b).

(8.40) a. \textit{nom}  
\hspace{1em} \textit{no}  
\hspace{1em} ‘No’

(8.40) b. \textit{nom wip}  
\hspace{1em} \textit{no slide}  
\hspace{1em} ‘He didn't slide’

When it is a non-verbal predicate question, as in the above question \textit{nako=na} ‘Is it a man?’ the answer can be, for example, (i) (8.41a) with a falling contour for an affirmative answer, or (ii) (8.41b) to express a possible negative answer for that question:

(8.41) a. \textit{nako=na}  
\hspace{1em} \textit{man=ESS}  
\hspace{1em} ‘It is a man’

(8.41) b. \textit{nom jê aramira}  
\hspace{1em} \textit{no DEM woman}  
\hspace{1em} ‘No, this one is woman’

\textbf{8.4.2 Content questions}

Content questions are those that do not require a yes/no answer. This kind of interrogative clause poses questions about a subject, an object, the manner of an action, time, place, etc. That is, the interrogative forms in this language basically indicate what part of a
proposition the speaker is guiding the hearer towards to pay attention to. Intonation to show interrogation is optional in these clauses. The main interrogative words found in this language are presented in table 8.4.

<table>
<thead>
<tr>
<th>INTERROGATIVE</th>
<th>GLOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>arop</td>
<td>‘what/who/why/whose/which’</td>
</tr>
<tr>
<td>tara</td>
<td>‘what/who’</td>
</tr>
<tr>
<td>âka</td>
<td>‘how/when’</td>
</tr>
<tr>
<td>êrom</td>
<td>‘where’</td>
</tr>
</tbody>
</table>

Table 8.4 - Interrogative words.

The interrogative forms (alternatively called ‘interrogative pronouns’ in the grammatical literature) presented above allow different semantic meanings, depending on what part of the clause is in focus. Some of them can indicate either ‘what’ or ‘who,’ or can even represent other semantic meanings such as ‘why.’ Below, each one will be presented with its respective meaning and function.

Syntactically, the interrogative words occur in sentence-initial position, as a focused constituent does.143

8.4.2.1 arop ‘what/who/why/whose/which’

The word arop means ‘what/who/why.’ The difference between arop ‘what’ and arop ‘who’ is discernable from the structure of the clause. That is, when the verb is nominalized with a structure of [NP i-VERB] or [PRON=i-VERB], giving the idea of, for example, ‘eaten

---

143 The focus marker is described in section 7.2.2.
thing,” ‘hunted thing,’ etc., it makes clear to the addressee that the speaker is requesting information about the subject\textsuperscript{144}, as in:

\begin{quote}
WHAT
\end{quote}

\begin{enumerate}
\item[(8.42) a.]\textit{arop te=i-mi?}
\begin{tabular}{l}
what \\ 3COR=OBJ,NMLZ-kill
\end{tabular}
\begin{tabular}{l}
‘What may he hunt?’
\end{tabular}
\begin{tabular}{l}
Lit: What may be his hunted thing?
\end{tabular}
\item[(8.42) b.]\textit{arop te te=i-maj t\text{fo}p-a kom?}
\begin{tabular}{l}
what \\ 3COR=OBJ,NMLZ-tell \\ see-THV \\ PROJ
\end{tabular}
\begin{tabular}{l}
‘What did he say he would see?’
\end{tabular}
\end{enumerate}

The word \textit{arop} ‘who’ is used less frequently than the interrogative word \textit{tara} ‘who’ in utterances inquiring about the subject of the proposition. Only few examples of this kind of question were found in the data.

\begin{quote}
WHO
\end{quote}

\begin{enumerate}
\item[(8.43)]\textit{arop te i=ko-a?}
\begin{tabular}{l}
who \\ FOC \\ 3S=ingest-THV
\end{tabular}
\begin{tabular}{l}
‘Who ate it?’
\end{tabular}
\end{enumerate}

In example (8.44) below, the verb is nominalized; however, the interrogative word is the element that is linked to the nominalized verb, so it does not follow the structure of the \textit{arop} ‘what’ questions presented above. The structure in (8.44) is used when the speaker is requesting information about the possessor of an object.

\begin{footnotesize}
\textsuperscript{144} Note that in questions, only the object is marked on transitive verbs.
\end{footnotesize}
For whom (whose) is the seen (thing)?’

The word arop may also bear the ablative clitic =e(ri; when this happens, it expresses an inquiry about the reason/purpose of a proposition, meaning ‘why,’ as exemplified below:

**WHY**

(8.45) arop=eri e=ip-a ete?
what=ABL 2S=come.back REL
‘Why did you come back?’

To inquire about a specific object, the name of the thing that the speaker wants information about comes immediately after the interrogative word, as in the following:

**WHICH**

(8.46) arop kora-kora e=i-mi?
what chicken 2S=OBJ.NMLZ-kill
‘Which chicken will be your killed (thing)?’

**POSSIBLE ANSWER TO A CONTENT QUESTION**

An example of a content question (in (8.47a)) followed by its answer (in (8.47b)) follows:

(8.47) a. arop te te=i-maj tfop-a kom?
what FOC 3COR=OBJ.NMLZ-tell see-THV PROJ
‘What did he say (that he) would see?’ (repeated from (8.42b)).
b. aparapia te te=i-maj
   non-indian FOC 3COR=OBJ.NMLZ-tell
   ‘The non-Indian said:’

\[
\begin{align*}
     ik\rangle aj & \quad i-ko & \quad k\rangle ak & \quad tfop-a & \quad on & \quad kom \\
     \text{tapir} & \quad \text{OBJ.NMLZ-ingest} & \quad \text{sound} & \quad \text{see-THV} & \quad 1s & \quad \text{PROJ}
\end{align*}
\]
   ‘I will see the tapir's food’

### 8.4.2.2 tara ‘what/who’

The word tara has a semantic meaning of ‘what/who.’ It follows the same structure described above for the word arop, meaning ‘what’ and ‘who.’

**WHAT**

(8.48) a. tara i=tfe e=erek-k\rangle a?
   what 3S=COMING 2s=speech-TR.PL
   ‘What is it that you speak?’

b. tara i=j\rangle a?
   what 3s=sitting
   ‘What is it?’

**WHO**

(8.49) a. tara e=o-men=na?
   who 2s=r-husband=ESS
   ‘Who is your husband?’
   Lit: Who functions as your husband?

b. eme tara i=õ?
   DEM who 3s=give
   ‘This, who gave it?’

c. tara te ita mâ?
   who FOC arrive CERT
   ‘Who arrived for sure?’
d. *tara ip te?*
   who come.back FOC
   ‘Who comes back?’

### 8.4.2.3 *ãka* ‘how/when’

The word *ãka* means ‘how’ and ‘when.’ The word *ãka* behaves as a particle with the meaning ‘like this, in that way’ when it occurs intra-sententially, assuming characteristics of particles in this language. In the example below (8.50) the interrogative word is used to question the manner (for example, by what type of transportation, car or motorcycle) by which the person will come back or will leave.

**How**

(8.50) a. *ãka te=ita ete?*
   how 3COR=arrive REL
   ‘How does he come back?’

b. *ãka te=tʃet-a?*
   when 3COR=leave-THV
   ‘How will he leave?’

This interrogative word is also used to inquire about the time of a proposition, and the word *ebapa* ‘moon’ or *kiakop* ‘sun’ is used after the interrogative word, as shown in the following examples:

**When**

---

145 Details in section 7.2.5.

146 Questions requiring time information without the interrogative word *ãka* are also found in the language, though this is a topic for future studies.
(8.51) a. ãka kiakop te=ita te?  
how sun 3COR=arrive REL  
‘When does he arrive?’  
Lit: ‘When [at what time of day] will he arrive?’

b. ãka ebapa te=ip-a?  
how moon 3COR=return-THV  
‘When will he come back?’  
Lit: ‘When [in what month] will he come back?’

8.4.2.4 ěrom ‘where’

The particle ěro is often used to ask for information about location. As with the other wh-question words, it is used at the beginning of the clause. In example (8.52) the ablative clitic =ri is attached to the verb, creating the locative meaning of the point of origin of a movement. This interrogative form also functions as a demonstrative (as seen in section 4.8.2); however, note that when used as a wh-question, the notion of the spatial location of a referent and position (that the demonstrative signifies) does not matter in interrogatives.

(8.52) a. ěrom=ri kʷatín i=kó-a te?  
where=ABL snake 3S=ingest-THV FOC  
‘From where did the snake start eating it?’

b. ěrom i=tʃok-a ne?  
where 3S=build-THV HYP  
‘Where may he build it?’

8.5 Negative clauses

The particle nom is used to negate the verb phrase, noun phrase or the entire clause. There is also the clitic =(e)rom, employed to negate phrases that it is attached to. In earlier studies, Aragon (2008:109) described the negative morpheme as an affix with the following allomorphs: -erom, -rom and -om. Examples below illustrate nouns and verbs in negative
clauses.

Nouns

(8.53) a. jāj=erom
tooth=NEG
‘It isn’t sharpened’

b. jē men=erom
DEM husband=NEG
‘This one doesn’t have a husband’

c. abatfo apitep=erom
grandfather ear=NEG
‘Grandfather doesn’t hear’ (Aragon 2008:109)
Lit: ‘Grandfather doesn’t have ear’.

d. jērom o=i-ko nom
DEM 1s=OBJ.NMLZ-ingest no
‘I have no food’

Verbs

(8.54) a. nom et=rom
no sleep=NEG
‘She doesn’t sleep’

b. akataba nom at
buriti no catch
‘Don’t get buriti (palm fiber sp.)’

c. nom ko=rom
no ingest=NEG
‘He doesn’t eat’

d. o=ø-mepit erek- k’a nom k’ak tʃop on
1s=R-son/daughter of woman speech-TR.PL no sound see 1s
‘I don’t hear (what) my daughter speaks’
e. \( orē=bō \ nom \ ek \ etfē \)
\[
\text{IS.EM=DAT no house DIFF}
\]
'I am not home’

f. \( ki=tʃet=om \)
\[
\text{1PL.INCL=leave=NEG}
\]
'We don't leave’

g. \( t=əot \ nom \ t=əot \ nom \)
\[
\text{3S=go.out no} \quad \text{3S=go.out no}
\]
'It doesn't go out, it doesn't go out’

In addition, a particle \textit{om} can stand alone as a predicate, with the meaning of
‘nothing’ or ‘there isn’t (any), there is no.’

(8.55) \( kojōpe \ ebapa \ om \ tʃet-a […] \)
\[
\text{night moon no leave-THV}
\]
‘At night there isn’t a moon, it leaves […]’

8.6 Summary

In this chapter I have presented the types of predicates, which are divided into non-verbal and verbal predicates. Predicate complements were also described in this chapter. In addition, clause types were introduced, with a focus on interrogative and negative clauses. The language uses high intonation contours to differentiate polar questions from declarative clauses. For content questions, the language uses interrogative words, which can have oblique clitics attached, to inquire about different elements of the proposition. Negative clauses use the same negative particles or negative clitics found in verbal and noun phrases. Some topics about the structure of sentences in this language were identified for future investigation; for example, more research is needed on complex sentences and constituent
order in different types of sentences, including issues of word order and topicalization/focalization.
CHAPTER 9

CONCLUDING REMARKS

This dissertation represents an investigation into many grammatical aspects of Akuntsú. The main goal of this work was to present the relevant phonological and morphosyntactic aspects of this language in order to produce a grammar of Akuntsú. Some topics were excluded from the analysis presented here (though they are the subject of current and future studies), while other topics were only briefly presented, and some were discussed in detail. But, in general, the data provided in this study and their description sought to prepare a basis for future research, including typological, historical and theoretical issues; as well, it sought to provide a basis for the future production of a comprehensive grammar of this language, by increasing the data and description of topics briefly mentioned and/or excluded from this current studies.

The topics detailed or briefly presented in this study included:

i. the main phonological structures encountered in the language;

iii. the morphosyntactic classification of nouns, processes of word formation and inflection;

iv. the morphosyntactic classification of verbs and their morphemes;

v. the lexical classes of adjectives and adverbs, which are considered small closed classes, where adverbs are only syntactically different from adjectives;

vi. ideophones, particles and interjections form independent classes of their own, where ideophones are very frequent in the language;
vii. an overview of clause types found in this language, and a description of the negative and interrogative clauses.

A project to describe and document Akuntsú is underway to extend the corpus and knowledge of this language and culture, assisting in the exploration of the above-mentioned topics as well as new ones.
APPENDIX A

THE PHONOLOGY OF TUPARÍAN LANGUAGES

This brief typological survey presents phonological similarities and differences among Tuparían languages. This study utilizes different sources. Mekéns data are based on Galucio (2001); the Makuráp data are from Braga (1992, 2005), the Tuparí data from Caspar and Rodrigues (1957), Alves (2002, 2004), and Seki (2002), and finally, the Wayoró data are from Nogueira (2011). Some notes about Kampé are also included in this appendix.

1.1 Consonantal phonemes

1.1.1 Stops

All the Tuparían languages, Akuntsú (Ak), Makuráp (Ma), Mekéns (Me), Tuparí (Tu) and Wayoró (Wa), have voiceless stop consonants /p, t, k/ that occur syllable-initially.
<table>
<thead>
<tr>
<th>Onset position</th>
<th>Ak</th>
<th>Ma</th>
<th>Me</th>
<th>Tu</th>
<th>Wa</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/</td>
<td>/puga/ ‘turtle sp.’</td>
<td>/pipåp/ ‘shadow’</td>
<td>/pera/ ‘macaw’</td>
<td>/patop/ ‘rat’</td>
<td>/piri/ ‘to pierce’</td>
</tr>
<tr>
<td>Medially</td>
<td>/apara/ ‘banana’</td>
<td>/tfepa/ ‘forehead’</td>
<td>/mapi/ ‘arrow’</td>
<td>/ape/ ‘peel’</td>
<td>/apín/ ‘cricket’</td>
</tr>
<tr>
<td>/t/</td>
<td>/ten/ ‘strong/hard’</td>
<td>/toap/ ‘mirror’</td>
<td>/tiero/ ‘chicha’</td>
<td>/tak/ ‘hard’</td>
<td>/tip/ ‘cooked’</td>
</tr>
<tr>
<td>Medially</td>
<td>/atap/ ‘hair’</td>
<td>/atip/ ‘hair’</td>
<td>/sete/ ‘he/she’</td>
<td>/toto/ ‘grandpa’</td>
<td>/atia/ ‘pepper’</td>
</tr>
<tr>
<td>/k/</td>
<td>/kop/ ‘red’</td>
<td>/kap/ ‘leg’</td>
<td>/kirêp/ ‘today/now’</td>
<td>/kopkap/ ‘fire’</td>
<td>/kâm/ ‘long’</td>
</tr>
<tr>
<td>Medially</td>
<td>/akop/ ‘hot’</td>
<td>/pakat/ ‘crazy’</td>
<td>/ameko/ ‘jaguar’</td>
<td>/kiakop/ ‘sun’</td>
<td>/akek/ ‘ant’</td>
</tr>
</tbody>
</table>

In syllable-final position, the stops are unreleased, as shown:

<table>
<thead>
<tr>
<th></th>
<th>Ak</th>
<th>Ma</th>
<th>Me</th>
<th>Tu</th>
<th>Wa</th>
</tr>
</thead>
<tbody>
<tr>
<td>[k̚]</td>
<td>[ɛk̚] ‘house’</td>
<td>[ɛk̚] ‘house’</td>
<td>[ɛk̚] ‘house’</td>
<td>[ɛk̚] ‘house’</td>
<td>[tak̚] ‘daughter’</td>
</tr>
</tbody>
</table>

With respect to the voiced stops, all these languages have voiced counterparts to the voiceless stops that occur syllable-initially: [b, d, g].

In Mekéns, voiced stops /b, g/ are analyzed as phonemes which never occur word-initially, but only intervocally (Galucio 1994).

In Wayoró only /g/ is phonemic, though its "distribution is very restricted, occurring
only in intervocalic position syllable-initially” (Nogueira 2011:48). In addition, this language also has a series of pre-nasalized consonants: [mb, nd, ng, ngʷ] that occur before oral vowels.

In Tuparí only /b/ is phonemic. See examples and distribution below. Note that the existence of [d] in Tuparí is not mentioned in Alves (2004) and according to this author, [g] only occurs at morpheme boundaries.

In Makuráp, the voiced allophones are surface forms of nasal consonants. The voiced stops occur word-initially adjacent to oral vowels, or syllable initially after nasal vowels. They vary with pre-nasalized stops.

The asterisk (*) in the table indicates that examples were not encountered in the studies analyzed for this section.

<table>
<thead>
<tr>
<th></th>
<th>Ak</th>
<th>Ma</th>
<th>Me</th>
<th>Tu</th>
<th>Wa</th>
</tr>
</thead>
<tbody>
<tr>
<td>/b/</td>
<td>/ɔbɔbo/</td>
<td></td>
<td>/tɔbisarã/</td>
<td>/tɔbeko/</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>‘bird (sp.)’</td>
<td></td>
<td>‘chief’</td>
<td>‘bean’</td>
<td></td>
</tr>
<tr>
<td>/d/</td>
<td>/dɔp/</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>‘reportative’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/g/</td>
<td>/ɔpɔgã/</td>
<td>*</td>
<td>/pɔgɔp/</td>
<td></td>
<td>/pɔgã/</td>
</tr>
<tr>
<td></td>
<td>‘tortoise (sp.)’</td>
<td></td>
<td>‘new’</td>
<td></td>
<td>‘to die/to get drunk’</td>
</tr>
</tbody>
</table>

In addition to the bilabial, alveolar and velar stops, there are also labiovelars. The labiovelars [kʷ, gʷ] are found in Akuntsú, Mekéns, and Wayoró. However, the contrast between /kʷ/ and /gʷ/ is phonemic only in Wayoró, while in Mekéns and Akuntsú there is /kʷ/ but not /gʷ/. Some illustrations of the forms are shown in table below.
There is also a surface glottal stop [ʔ] in all the languages. Whether or not this glottal stop is phonemic varies among the analyses. Tupari is the only language that has two underlying glottals: /ʔ/ and /h/ (Alves 2004).

1.1.2 Nasals

The nasals /m, n, ŋ/ are found in all the Tuparián languages. The only nasal consonant phoneme encountered word-finally is /ŋ/ (except in Makuráp and Wayoró, where /ŋ/ occurs syllable-initially before nasal vowels). Wayoró and Mekéns are the only languages that have /ŋʷ/. In addition, Wayoró has another nasal phoneme, the palatal /ɲ/.

In coda position /m, n/ are unreleased.
### 1.1.3 Affricate and Fricatives

The affricate /tʃ/ is found in almost all Tuparían languages, with the exception of Mekén. However, in Tuparí, Alves (2004) notes that this phoneme occurs with low frequency. With respect to the fricative, Tuparí and Mekén are the only language with the fricative /s/ in their phonological inventories. Wayoró is the only language analyzed as having a phonemic bilabial fricative /β/. Examples are shown below:
<table>
<thead>
<tr>
<th>Onset position</th>
<th>Ak</th>
<th>Ma</th>
<th>Me</th>
<th>Tu</th>
<th>Wa</th>
</tr>
</thead>
<tbody>
<tr>
<td>/tʃ/</td>
<td>/tʃatʃakop/ ‘ant (sp.)’</td>
<td>/tʃepa/ ‘forehead’</td>
<td>/tʃaʔi/ ‘flour’</td>
<td>/tʃato/ ‘to finish’</td>
<td>/tʃiʔamkwa/ ‘to sneeze’</td>
</tr>
<tr>
<td></td>
<td>/atʃi/ ‘pain’</td>
<td>/atʃi/ ‘uncle’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/</td>
<td></td>
<td>/sik/ ‘sap’</td>
<td>/sin/ ‘smoke’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>/asisi/ ‘corn’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/β/</td>
<td></td>
<td></td>
<td>/βoɲ/ ‘fish’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1.1.4 Flap

There is only one liquid phoneme in these languages, the flap /ɾ/. This phoneme only occurs in onset position word-medially, as illustrated below:

<table>
<thead>
<tr>
<th>/ɾ/</th>
<th>Ak</th>
<th>Ma</th>
<th>Me</th>
<th>Tu</th>
<th>Wa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/aramiɾa/ ‘woman’</td>
<td>/terek/ ‘light’</td>
<td>/pera/ ‘macaw’</td>
<td>/jɔɾoŋ/ ‘fruit sp.’</td>
<td>/ŋaɾa/ ‘grasshopper’</td>
</tr>
</tbody>
</table>

### 1.1.5 Approximants/glides

There are two glides in the Tuparí, Mekéns, Makuráp and Akuntsú /w/ and /j/. In Wayoró, there is none.
1.2 Vocalic phonemes

The Tuparían languages are very similar with respect to their vowel systems. All of them have a total of five underlying oral vowels and five nasal vowels; however, they differ with respect to vowel length. Wayoró and Mekéns are analyzed as having underlyingly long vowels. Nogueira (2011) opted to insert in the vocalic chart /ɛ/ rather than /e/. The tables below indicate the phonemes for each Tupari language.

<table>
<thead>
<tr>
<th></th>
<th>Ak</th>
<th>Ma</th>
<th>Me</th>
<th>Tu</th>
<th>Wa</th>
</tr>
</thead>
<tbody>
<tr>
<td>/w/</td>
<td>/wen/</td>
<td>/wera/</td>
<td>/sawã/</td>
<td>/wao/</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>‘to finish’</td>
<td>‘to pinch’</td>
<td>‘to chew’</td>
<td>‘potato’</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>/pau/</td>
<td>/awak/</td>
<td>/pawat/</td>
<td>/awsa/</td>
<td>‘horn’</td>
</tr>
<tr>
<td></td>
<td>‘wind’</td>
<td>‘many’</td>
<td>‘to row’</td>
<td>‘‘</td>
<td></td>
</tr>
<tr>
<td>/j/</td>
<td>/jãj/</td>
<td>/jêrêp/</td>
<td>/jê/</td>
<td>/jam/</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>‘tooth’</td>
<td>‘green’</td>
<td>‘aux.seated’</td>
<td>‘stool’</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>/baj/</td>
<td>/nejto/</td>
<td>/soboj/</td>
<td>/maj/</td>
<td>‘manioc’</td>
</tr>
<tr>
<td></td>
<td>‘buriti palm fiber’</td>
<td>‘wind’</td>
<td>‘to splash’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|     |     |     |     |     |     |
|     |     |     |     |     |     |
|     |     |     |     |     |     |
| Front | High | Ak | Ma | Me | Tu | Wa |
|       | /i/ | /i/ | /i/ | /i/ | /i/ | /i/ |
|       | /i/ | /i/ | /i/ | /i/ | /i/ | /i/ |
|       |     | /i:/ | /i:/ | /i:/ | /i:/ | /i:/ |
| Mid | /e/ | /õ/ | /e/ | /õ/ | /e/ | /õ/ |
|      | /e/ | /õ/ | /e/ | /õ/ | /e/ | /õ/ |
|       | /e:/ | /õ:/ | /e:/ | /õ:/ | /e:/ | /õ:/ |
| Central | High | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ |
|        | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ |
|       | /õ:/ | /õ:/ | /õ:/ | /õ:/ | /õ:/ | /õ:/ |
| Low | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ |
|      | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ | /õ/ |
|       | /õ:/ | /õ:/ | /õ:/ | /õ:/ | /õ:/ | /õ:/ |
| Back | Mid | /o/ | /õ/ | /õ/ | /õ/ | /o/ |
|       | /o/ | /õ/ | /õ/ | /õ/ | /õ/ | /o/ |
|       | /o:/ | /õ:/ | /õ:/ | /õ:/ | /õ:/ | /o:/ |
1.3 Phonetic notes on Kampé (Sikʷeriat)

In this section, I present some phonetic notes on the Kampé language, spoken by only one elderly man. After living for many years in Mekéns Indigenous Area, located in Rondônia (Brazil), this man moved to Rio Branco Indigenous Area (also in Rondônia) to stay with his niece (daughter of a Kampé father and a Tuparí mother). The Kampé speaker was born near the banks of the Tanaru river (east side of Rondônia). When he was young, he and his family moved to the River Verde, a place where they met with the Mekéns people, of whom they were very afraid in the past. After the death of his people, he claims that nowadays he is the only sikʷeriat (group of Toucans) alive. Galucio (2001) states that the languages spoken by the Kampé and Mekéns people are mutually intelligible, and she affirms that aside from lexical differences, there are also "a few syntactic differences..." (2001:19), and that further investigation needs to be done to assess the degree of kinship of Kampé and Mekéns. Galucio shows that in addition to Kampé and Mekéns, there are two other groups living in the Mekéns Indigenous Area: the Guarategayat and Guaratira, whose languages, according to Galucio (2001), are dialects of Mekéns.

In Kampé, there is a set of surface stops [p, b, t, k, g], as shown below. Note that [d] was not attested in the data available.

(1) a. [pɛ] ‘way’
b. [tabit’] ‘garden’
c. [kiakop’] ‘sun’
d. [pakuri] ‘moon’
e. [puga] ‘tortoise’
f. [tsebapi] ‘face’
g. [gie] ‘one’
h. [kibeit’] ‘calf’
There is a set of voiceless unreleased stops, including unreleased nasals, which occur syllable-finally:

(2) a. [kitˈkip] ‘neck’
b. [kemˈki] ‘breast milk’
c. [kibek] ‘papaya’
d. [ekʰit] ‘honey’
e. [kibakap] ‘urucu (Bixa orellana)’
f. [ek] ‘house’
g. [pitˈsiک] ‘cold’
h. [utatˈkat] ‘firewood’
i. [arãpɛ] ‘embaúba tree (Cecropia angustifolia)’

There is a labiovelar [kʷ] found syllable-intially and [gʷ] word-intially:

(3) a. [kʷaritsa] ~ [gʷaritsa] ‘bat’
b. [kʷajtˇpe] ~ [gʷajtˇpe] ‘sky’
c. [akʷa] ‘yam’
d. [atsoa kʷak] ‘thunder’
e. [kʷaku] ~ [gʷaku] ‘sweet potato’

Examples of words with glottal stops [ʔ] were found intervocalically, as seen below:

(4) a. [kʷaʔi] ‘stone’
b. [kʷaʔe] ‘pan’
c. [tseʔɨt] ‘his/her belly’
d. [kʷatsaʔɛ] ‘hummingbird’

The set of nasals found among the data collected are [m, n], and [ŋ] syllable-intially, as exemplified below:

(5) a. [konĩpu] ‘snake’
b. [kanã] ‘brazil nut’
c. [tsanoa] ‘its heart’
d. [kumãtatsu] ‘bean (big one)’
In addition, there are sibilant consonants [ts, s] in this language, as shown in the examples; they occur at syllable-initial position.

(6) a. [tsakʷat] ‘spine’
b. [atsuap] ‘rain’
c. [batse] ‘jatobá (Hymenaea courbaril)’
d. [aparatsu] ‘banana (long one)’
e. [tsira] ‘aricuri palm (Attalea phalerata)’
f. [batsup] ‘rat’
g. [atsitsi] ‘corn’
h. [piritsa] ‘trahira (tiger fish)’
i. [sakirap] ‘spider-monkey’
j. [itsi] ‘deer’
k. [siga] ‘genipap’
l. [tapsiri] ‘manioc’

The consonant [ɾ] was found syllable-initially in word-medial position only.

(7) a. [parparu] ‘star’
b. [kɛɛru] ‘fish (sp.)’
c. [kɛi] ‘açáí’
d. [ururu] ‘cotton’
e. [tapiru] ‘peach-palm’
f. [akara] ‘arecaceae’
g. [ira] ‘atta’

The approximants [w, j] were encountered syllable-initially and finally, as shown below:

(8) a. [kibakāj] ‘land’
b. [piraj] ‘rubber tree’
c. [a:j] ‘cajá (Spondias dulcis)’
d. [kajtu] ‘butterfly (sp.)’
With regard to the vowels, no innovations were found in its vocalic inventory, i.e., there were not any unusual vowels as compared to the set of vowels found for other Tupari languages.

e. [weremi] ‘fly’
f. [puwpwba] ‘owl’
g. [piwape] ‘toenail’
h. [jū] ‘tongue’
APPENDIX B
SAMPLE OF TEXTS

The following texts are examples of short narratives that were selected to provide elements that illustrate the daily life of the Akuntsú people, such as the preparation of fermented drink by the Akuntsú women (TEXT 1), with some pictures of this process shown in appendix C; and a personal narrative of the traumatic past alive in their memories, which also gives some examples of kinship terminology (TEXT 2). In text 2, some selected parts of the whole recorded narrative have not been included here.

TEXT 1 - THE PREPARATION OF THE FERMENTED DRINK
Speaker: Tʃaruj
Gender: Female
Context/notes: Tʃaruj and Aramira were preparing fermented drink from peach-palm\textsuperscript{147}
Recorded date: January 19th 2007 (32:29)

\begin{verbatim}
JAN07-1A-TX-001
\textit{on}  i=jõmaj tum-tum ko-a ko ko
1s 3s=knead IDEO-IDEO ingest-THV ingest ingest
‘I knead it, I pound, I take it in many times’

JAN07-1A-TX-002
\textit{i=tsaw} ma otse \textit{i=tsaw} \textit{i=tsaw} kia ma
3s=chew keep/spill/put 1PL.EXCL 3s=chew 3s=chew peach palm keep/spill/put
‘I chew it and I spill (the chewed fruit inside the pan), we chew it, we chew it and we spill the peach palm’

JAN07-1A-TX-003
\textit{i=tsaw} a \textit{iki} kij \textit{iki-iki} jõ ka
water exist water catch water-RED here go
‘There is water, I catch water, plenty of water goes here’
\end{verbatim}

\textsuperscript{147} Bactris gasipaes.
liquid water knead-NMLZ keep/spill/put grandmother
‘The liquid, grandmother kneads the kneading of water and spills (the water)’

You knead and spill it here

‘Grandmother kneads it and spills it as usual’

‘She makes chicha (fermented drink) over and over’

‘You, my daughter, do not make chicha’

‘I chew it many times that way, that way’

‘I chew it many times that way’

‘And I don't vomit, I don't vomit’

‘Take in and spill! (the chewed fruit inside the pan). ’
TEXT 2 - KONIBÚ (PERSONAL NARRATIVE)

Speaker: Konibú
Gender: Male
Context/notes: Konibú narrates part of his past, talking about his relatives.
Recorded date: February 2004 (54:05)

FEB04-KN-MD04-001
o=ő-tojēpit babakop a
1s=r-granddaughter Babakop exist
‘There was Babakop (proper name), my granddaughter’

FEB04-KN-MD04-002
kip doa ē tfe doo ē tfe doa puru-ru-ru
tree IDEO DEM come IDEO DEM come IDEO IDEO-RED-RED
‘The tree killed, that (the tree) came killing (he shows with gestures how the tree fell)’

FEB04-KN-MD04-003
kani148 tfaruj o-mepit=eri hī-hī tfaruj=eri
child tfaruj r-son/daughter of woman=ABL IDEO-RED tfaruj=ABL
‘Because of Tfaruj's daughter, the child, there was crying from Tfaruj’

FEB04-KN-MD04-004
tfokī petkop tfaruj
small alone Tfaruj
‘Tfaruj was small, alone’

FEB04-KN-MD04-005
maj-a k*ak tfop ē-ē āka ē-ē-ē
3s=tell-THV sound see IDEO-RED that.way IDEO-RED-RED
‘See what tells, that way’

FEB04-KN-MD04-006
tfokeee=na te=ko mepit te āka
big=TRANSL 3COR=MOV. son/daughter of woman FOC that.way
‘(She) was getting bigger, the daughter was like that’

FEB04-KN-MD04-007
ē mepit at-a maj k*ak tfop-a awtfe
DEM son/daughter of woman catch-THV tell sound see-THV Indian
‘That caught the daughter, Indian tells’

148 Kani is a Kanoē word, meaning ‘child.’
aramira nom  aramira  aparabia  dow
woman no  woman  non.Indian  IDEO
‘Woman no, woman, the non-Indian shot’

nako  at-a  ăka  iki  o-ape  dow  aparabia-t
man  catch-THV  that.way  water  R-path  IDEO  non-Indian-DEF
‘(They) caught the men, that way, the river's path, the non-Indian shot’

k*at*in  ih-*ih*i  orê  nom
snake  IDEO-RED  1s.EM  no
‘The Snake (proper name) cried, I didn't’

at-a  ăka  iki  o-ape  dow
catch-THV  that.way  water  R-path  IDEO
‘(They) caught men, that way, the river's path, they shot’

akûtsu  akûtsu  akûtsu  o=ô-ike  dow
Akuntsú  Akuntsú  Akuntsú  1s=R-old brother  IDEO
‘Many Akuntsú and my older brother died’

akûtsu  ăka  o=ô-jke  ăka
Akuntsú  that.way  1s=R-old brother  that.way
‘Akuntsú, that way, my older brother, that way’

k*amaoa  eme  òjpe  fff  o=jâ
shaman  DEM  tobacco  IDEO  1s=sitting
‘Shaman is sniffing this’ (he simulates that he was sniffing tobacco))

o=ô-kojë  tsop-a-ra  jûû  ăka
1s=R-brother.in.law  see-THV-HAB  IDEO  that.way
‘I see my brother-in-law as usual, far away, that way’

akûtsu  aparabia  dow  dow-a
Akuntsú  non-Indian  IDEO  IDEO-THV
‘Akuntsú, the non-Indian shot, they shot’
They died, died, died, died, it is over

My old sister, there was far there, a far path, the non-Indian shot Tjaru

There was Patše, that one's wife, there was Patše who that one caught, Pupák

Children, that way, men

That way, they caught them, shot the path, shot the child, shot the man

The child's path, the child's path, it is cleaned, there are no sons

His mother is there (pointing to Pupák's mother)

My older sister, Ururu’s son, the child, the woman (pointing to the people)

---

149 This is a Portuguese word morreu '(he/she) died'
‘His mother is Ururu, there, it is the older sister’

‘My older sister, my niece (pointing to two different people) […]’
APPENDIX C

PICTURES

Picture 1 - One the left, Konibú was drying tobacco's leaf for preparation of snuff; on the right, a picture of marico basket, tucum fiber basket (2013).

Picture 2 - Labial labret and nasal labret (2014)

150 All the pictures were taken by the author of this study.
**Picture 3** - Some of the steps of the preparation of Urucu, by Ururu (May 2009).

**Picture 4** - The left picture shows one of the types of arrow points (2004) and the right picture illustrates roasted grubs ready to be eaten (2007).
Some of the steps described in TEXT 1 (APPENDIX B) - preparation of fermented drink (Jan. 2007).

**Picture 5** - Some of the steps described in TEXT 1 (APPENDIX B) - preparation of fermented drink (Jan. 2007).
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