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## Ayoreo (Zamuco). A grammatical sketch*

## 1 General aspect

### 1.1 Present-day situation

According to the most recent estimations (Fabre 2007a, Combès 2009), Ayoreo is spoken by about 4500 people, more of less equally spread between Paraguay and Bolivia. The Ethnologue's web-site (http://www.ethnologue.com/) indicates close to 4000 speakers; for comparison, Briggs (1973) reported 1700 individuals, while subsequent sources indicated increasing figures. According to the demographic study by Pérez Diez \& Salzano (1978), the population's figures should not have changed a lot in the past few centuries, as is typical of nomadic cultures. Most Ayoreo presently live in small communities which are (or used to be) built around an evangelic or catholic mission. Apart from the community based in Santa Cruz de la Sierra, ${ }^{1}$ the Ayoreo still live in rural environments, following their instinct of hunters-gatherers, as they used to be until settlement. Their degree of integration with the surrounding world is still fairly low. Two

[^0]or three small groups (presumably too small to last) still live their traditional life in NorthEast of Paraguayan Chaco.

Their territory used to go from Rio Grande and Rio Paraguay and, from North to South, from the area East of Santa Cruz (Gran Chiquitanía) to Northern Paraguay; namely, they moved around between the $57^{\text {th }}$ and the $63^{\text {rd }}$ meridians, and the $16^{\text {th }}$ and the $21^{\text {st }}$ parallels. Their traditional territory was a rather difficult one: it is the northern Chaco area, with its savanna-like grassland, scattered trees and drought-resistant undergrowth. The climate is subtropical, with a dry season in winter and abundant rain in the summer. Due to their nomadic life, they used to have unfriendly relations with all their neighbors, with whom they competed for natural resources; in fact, they were regarded as very fierce warriors. Even among themselves they were divided into friendly and hostile groups, identified by names whose interpretation was often relative to the specific point of view of those who gave it (e.g., Garai Gosode lit. 'the people living in the pampa'). Thus, war was a constant part of their life and males were trained to it from very early on. Consistently with this, they had strictly endogamic habits, mitigated by interclan-marriage rules. ${ }^{2}$ Even their blood genetic characteristics singles them out as a quite separate group with respect to the rest of the South American population (Salzano et al. 1978).

The ethnonym ayorei (ayoréode FS, ayoré, FS, ayoredie FP) means, needless to say, '(real) person', as opposed to the outsiders (called cojñoi, pl. cojñone; possibly a derogatory loanword from Castillan). The word Ayoreo is, however, currently used by the Ayoreo themselves when speaking Castillan. The ethnonym Ayorei/Ayoreo was relatively recently introduced in the ethnographic literature; among the names previously used one finds Moro, Morotoco, Samococio, Takrat, Coroino, Potureros, Guarañoca, Yanaigua, ${ }^{3}$ Tsirákua, Pyeta Yovai (Fabre 1998, Fabre 2007a; further names are listed on the Ethnologue's web-site and in Combès 2009). Needless to say, as Combès (2009) abundantly shows, it is not easy to ascertain whether all these names referred to actual

[^1]Ayoreo bands; it is even possible that one and the same name has been used for bands belonging to different ethnic groups.

### 1.2 Sociolinguistic profile and education

Virtually all Ayoreo are fluent speakers of their language, which is used on a daily base. Despite this, many words belonging to their traditional culture begin to be poorly understood even by people of the intermediate age groups. Fortunately, the last surviving shamans are now more and more willing to transfer at least part of their ancestral knowledge to the very few anthropologists whom they trust. Hopefully, this will be done before too late. The main obstacle to surmount is, needless to say, the reticence not only towards outsiders, but even between members of the ethnic group. The Ayoreo have many tabus (puyai, pl. puyade); they are scared, for fear of negative consequences, by the prospect of even accidentally listen to stories that should only be known to the most initiated people.

Most males, except for elderly people, have at least some knowledge of spoken Castillan; some are even considerably fluent. Women may also be fluent, although this is less frequent among them. Children now receive some school education in Castillan, so it is to be foreseen that bilingualism will rapidly increase. Among the text-book expressly devised for (Bolivian or Paraguayan) Ayoreo school-children, Fabre (2007a) quotes the following: Briggs \& Morarie (1973), Zanardini (1994), Bogado et al. (1999), Bogado (2001). To these one can add GuIA (2003).

### 1.3 Historical profile

The Ayoreos established the first stable contacts with the Hispano - American culture towards the end of the Forties, due to USA evangelical missionaries (the first of whom payed a very high price; cf. Torrico Prado 1971: 259-265). Subsequently, the sedentarization process took gradually place. The Chaco war of the Thirties played a decisive role in pushing the Ayoreo towards this radical decision, due to sharp reduction and deterioration of the ancestral territory, which in turn brought about a dramatic increase of infratribal competition (Combès 2009).

The first news about Zamuco populations, to which the Ayoreo belong, date however from the XVI century, when the "conquistadores" coming from Rio de La Plata (Ñuflo de Chávez, Nuñez Cabeza de Vaca, Domingo Martinez de Irala) penetrated the Chaco area. Towards the end of the XVII century, the Jesuits managed to bring different ethnic and linguistic groups into fortified missions in the Chiquitanía. In 1724 the mission of San Ignacio de Samucos was founded in the Bolivian Chaco. The exact location of this reduction is nowadays unknown; what is known for sure is that it had to be abruptly abandoned in 1745 (Aguirre Acha 1933; Vaudry 1936; Parejas 1976; further details and quotations in Combès 2009). Very important for our concern is the fact that the French speaking Jesuit (born in the French Flanders) Ignace Chomé, who was active in San Ignacio de Samucos until the end, wrote a very valuable grammar (Arte de la lengua Zaтиса; cf. Lussagnet 1958) concerning a language spoken in the reduction and quite close to Modern Ayoreo. ${ }^{4}$ This proves that groups of Ayoreo were indeed present there; according to Combès (2009), about $80 \%$ of the Zamucos of those times were, in one way or another, affected by the Jesuits' activity in the Chaco.

Fabre (2007a) quotes a number of anthropological studies on the Ayoreo. Some of these, plus some others, are reported in the references. Fischermann (1988) is to date the most comprehensive work; Zanardini (2003) is a collection of contributions by virtually all the most prominent anthropologists who have so far published on the Ayoreos. See also Simoneau et al. (1989). The recently published Combès (2009) provides a detailed historical account of the Zamuco people.

### 1.4 Genetic classification5

Ayoreo belongs, as mentioned above, to a family called Zamuco (sometimes, specially in the past, also written Samuco). According to Fabre (2007a), citing previous suggestions, this word might be connected with the name of the tribe Samacocis, already mentioned in XVI Century writings. One often quoted (but by no means certain) etymology relates the word Zamuco to Chiquitano tamokosh 'dog'; it would thus be a derogatory denomination

[^2]attributed to other populations (not necessarily all Zamucos!) by their northern rivals. ${ }^{6}$ The only other extant language belonging to this family is Chamacoco, spoken in NorthEastern Paraguay, in a territory adjacent to that traditionally occupied by the Ayoreo. Despite tight geographical proximity, the two languages seem to share no more than $30 \%$ of their lexicon, according to independent calculations by the present author and his collaborator Luca Ciucci, on the one side, and Matthew and Rosemarie Ulrich, authors of a valuable Castillan - Chamacoco dictionary, on the other side (pers. comm.). Nevertheless, Ayoreo and Chamacoco share striking morphological similarities, especially in their morphology. As shown by Ciucci (2007/08,a), for instance, most irregular verbs of both languages tend to exhibit the same sort of irregularity. Consider the following list of 3 s in verb conjugations:

|  | Ayoreo |  | Chamacoco |
| :--- | :--- | :--- | :--- |
|  | $\mathbf{1 s}$ | $\mathbf{3 s}$ | $\mathbf{3 s}$ |
| 'eat' | yac | tac | taak |
| 'steal' | yoría | toría | torha |
| 'shout' | yibidi | tibidi | tibi |
| 'walk' | yiric | dic | dirk |
| 'smile' | ñingâna | câna | yana |
| 'sleep' | $\tilde{n}$ imo | mo | umo |
| 'die' | yitoi | toi | toy |
| 'go' | yi(ji) | jno | hno |

To fully understand this, one should keep in mind that the only identical person inflection in Ayoreo and Chamacoco verb conjugations is the 3s regular prefix chV(where V stands for the "thematic" vowel; note that in Ayoreo, as opposed to Chamacoco, there is no difference between 3 s and 3 p ). Some verbs however, as shown above, present an irregular $3 \mathrm{~s}(/ \mathrm{p})$ inflection and, significantly, the irregularity is often almost identical in both languages. This, as well as a number of other morphological similarities, suggest that Ayoreo and Chamacoco must have had a common ancestor, despite the considerable divergence of their respective vocabularies. This observation is strengthened by the

[^3]anthropological datum concerning the existence, in both communities, of seven clans with very similar names (Fischermann 1988; see Combès 2009 for further historical details). ${ }^{7}$

One remarkable similarity consists in the fact that the two languages are both typically fusional languages, although surrounded by highly agglutinating languages. This invites the hypothesis that the Zamuco languages might have had an agglutinative structure at previous stages, and indeed there exist possible traces of such a past stage. This, however, should be the matter of future studies.

### 1.5 Earlier linguistic studies

Ayoreo is not an undescribed language, although some of the previous works are difficult to access. Hervás (1784) already mentioned the Zamuco languages in his survey of the world's languages. Apart from the now virtually unavailable dictionary listed here as SIM (1958; 1967), there exist two recent ones: Barrios et al. (1995) and Higham et al. (2000) (as for Zanardini (1994), it is supposedly absorbed into Barrios et al.). Although neither of them is claimed to be a fully-fledged scientific work, they are both very useful. Barrios et al. is a Castillan-Ayoreo- Castillan dictionary, with the Castillan-Ayoreo section much more developed than the other; Higham et al. is an Ayoreo-English dictionary (supplemented with a final alphabetical list of the correspondences to the English items used for the translations). The latter work lists the corresponding masculine or feminine cognate (when relevant), the possessive form, the so-called 'determinate' and 'indeterminate' forms (see below). Feminine nouns receive less attention simply due to their considerable degree of regularity, which makes them by and large predictable. Due to its morphological wealth, Higham et al.'s work should be regarded as an indispensable reference point for anybody interested in Ayoreo.

Fabre (2007a) mentions three Ayoreo grammars, none of them written by professional linguists, whose existence was confirmed in loco to the present author, although it turned

[^4]out impossible to obtain a copy: Johnson (1955), Colegio (1971), Morarie (1980). ${ }^{8}$ Other linguistic contributions are: Loukotka (1931), Baldus (1932), Sušnik (1963; 1973), Kelm (1964), Briggs (1973), Adelaar 2004, Bertinetto et al. (2007/08), Ciucci 2007/08,a/b). The last works are part of a research project aiming at producing the first scientifically-oriented Ayoreo grammar, of which this chapter is an anticipation. Adelaar (2004) is a very short note, apparently inspired by Briggs (1973), which is presumably based on Johnson (1955). Sušnik's contributions contain interesting suggestions, but are unfortunately of limited utility, due to the idiosyncratic terminology as well as to the cryptic (and possibly even internally inconsistent) phonetic transcription system. Kelm (1964) is a useful survey of several grammatical and lexical features and appears to be sufficiently solid and documented to serve as initial reference. Loukotka (1931) and Baldus (1932), on the contrary, are only marginally useful.

The availability of Ayoreo texts is non negligible. The by far largest text is the New Testament translation (NTM 1982). ${ }^{9}$ Riester \& Zolezzi (1985) is a collection of texts of ethnographical character. Amarilla-Stanley (2001) and Zanardini \& Amarilla (2007) are collections of bilingual texts of anthropological import. A collection of short stories, elaborated by missionaries and ostensibly intended to serve as religious instruction, is available through the Ethnologue's site (QCCB 1972).

## 2 Grammatical sketch

### 2.1 Phonology

### 2.1.1. Vowels

The Ayoreo phonemic inventory presents a number of areally congruent as well as incongruent features.

[^5]|  | front | centre | back |
| :---: | :---: | :---: | :---: |
| high | i |  | u |
| mid | e |  | o |
| low |  | a |  |

Table 1. Ayoreo vowel chart
The vowel system lacks the high central vowel often to be observed in other languages of the area. Since this vowel exists in Chamacoco, one is inclined to surmise that Ayoreo lost it as a result of diachronical development. Comparative phonological analysis, especially in the domain of morphology, might possibly provide the solution to this puzzle.

The language presents distinctive vowel nasality; thus, the number of vowel phonemes in the above chart should be doubled, separating oral and nasal vowels. Vowel quantity, on the contrary, does not belong to Ayoreo's phonology, despite explicit mention of this feature in previous works (Sušnik 1963; Briggs 1973; Adelaar 2004). The major source for this claim is the frequent deletion of intervocalic $/ \mathrm{x} /$, bringing about a prolongued vowel, often heard as two tightly rearticulated vowels but sometimes also as a single long one (cf.: bata 'you sharpen' vs. parata [parata] / [parta] 'she/he/they is/are weak'). This suggests - to the extent that such predictions hold - that the language might be on the verge of acquiring vowel quantity, although this is not yet the case.

### 2.1.2. Consonants

Ayoreo, like many Amazonian languages, lacks /l/ (which is however present in Chamacoco, possibly as an autonomous development; here again, comparative analysis is needed). The only liquid-like sound, realized as [ I$]$, is in fact an approximant and, as observed in 2.1.1, often undergoes deletion in the only position where it may occur, namely intervocalically. The Ayoreo from both the South and the North often consider the pronunciation of $/ \mathrm{r} /$ as the distinctive feature of the others' speech (those of Bolivia as oppposed to those of Paraguay); since, however, the actual pronunciation of this sound seems to be confined to very few communities (notably, that of Rincón del Tigre in South-

East Bolivia), the above opinion simply suggests that the Ayoreos are aware of the latent presence of /r/ even though most of them do not pronounce it any more.

The glide /w/ occupies a somewhat marginal status: it only occurs in onset position, typically word-initially, occasionally as postlexical euphonic dissimilation between two identical vowels (mostly two /a/). The glide /j/, by contrast, also occurs in coda position, especially word-finally, where it often shows up in the singular 'full' form of masculine nouns. In onset position it is optionally but frequently produced as a voiced palatal affricate [あ].

Both Plaza Martinez \& Carvajal Carvajal (1985) and Adelaar (2004) mention the velar nasal as a phoneme. Presumably, however, this only occurs as an allophone of the (often prenasalized) phoneme $/ \mathrm{l} \mathrm{g} /$, which completes the series of the prenasalized voiced stops. Instrumental analyses (which will be the matter of future work) seem to show that slight but unmistakable traces of prenasalization occur, even in word-initial position. This might explain the frequent oscillation in pronunciation - or, at least, in the different dialects' pronunciation - of $/ \mathrm{d} / \mathrm{e} / \mathrm{n} /$. For instance, the word for 'shaman' is variously reported as daijnai or naijnai. Less frequent, but still perceptible, is the oscillation between /b/ and $/ \mathrm{m} /$. In any case, the prenasalization of $/ \mathrm{d} /$ seems to be absent in nominal plurals, where the alternation with $/ \mathrm{n} /$ is governed by the logic of nasal harmony (see $\S 2.5 .4$ ).

Of special interest is the series of voiceless nasals. This type of sound is called, somewhat vaguely, "fricativo nasal sonoro" by Plaza Martinez \& Carvajal Carvajal (1985), while Adelaar (2004) labels them correctly. Preliminary acoustic analyses have shown the presence of nasal frication as an effect of devoicing only in the first part; phoneticswise, one might thus regard these complex, yet monophonematic sounds as predevoiced nasals. ${ }^{10}$ Judging from orthography, they seem to exist in Chamacoco as well (where they are transcribed with <h> plus the relevant nasal, e.g. <hn>). Analogous sounds have been pointed out by Claire Moyse-Faurie (pers. comm.) in some Austronesian languages, like Drehu (Loyauté islands) and Iaai (New Caledonia). Voiceless nasals are also reported in other languages of the Amazonian area, such as Resígaro, a moribund

[^6]Arawakan language spoken in Columbia (Frank Seifart, pers. comm.). Analyses aimed at comparing the acoustical properties of all these sounds are under way in the Laboratorio di Linguistica of Scuola Normale Superiore (Pisa).

|  | labial | dental | palatal | velar | glottal |
| :--- | :---: | :---: | :---: | :---: | :---: |
| voiceless stop | p | t |  | k | $?$ |
| voiced stop | ${ }^{(\mathrm{m})} \mathrm{b}$ | ${ }^{(\mathrm{n})} \mathrm{d}$ |  | ${ }^{(\mathrm{g})} \mathrm{g}$ |  |
| affricate |  |  | $\mathrm{tf}<\mathrm{ch}>$ |  |  |
| fricative |  | s |  |  | $\mathrm{h}<\mathrm{j}>$ |
| nasal | m | n | $\mathrm{n}<\tilde{\mathrm{n}}>$ | $\mathrm{y}<\mathrm{ng}>$ |  |
| voiceless nasal | $\mathrm{m}<\mathrm{jm}>$ | $\mathrm{n}<\mathrm{jn}>$ | $\mathrm{n}<\mathrm{jn}>$ |  |  |
| approximant | w | $\mathrm{I}<\mathrm{r}>$ | y |  |  |

Table 2. Ayoreo consonant chart (orthographic conventions between angled brakets)

According to Higham et al. (2000), many vowel-final words - especially, but not only, in the so-called 'base-form' (see below) - end with a glottal stop, which is only audible in absolute final position and disappears elsewhere. In the opinion of the present author, this is likely to be a generalized allophonic behavior, unrelated to any morphological conditioning. There is however a class of masculine words characterized by the stable presence of a glottal stop, namely those presenting a regular alternation between $/ \cdot /$ in the singular and a voiced velar stop (followed by the plural suffix -ode/one) in the plural (like acadí' 'pupil', acadigode 'pupils'; see § 2.5.4). Limited to this word-class, the glottal stop should thus possibly be given phonemic status. ${ }^{11}$

### 2.1.3. Prosody

The topic of vowel quantity was already addressed in § 2.1.1. According to Adelaar (2004), Ayoreo has contrastive stress. Although the present author cannot rule this out, this claim appears to be doubtful. The Ayoreo words are indeed produced with a very perceptible stress prominence (often involving the final syllable); however, its exact

[^7]location seems to vary from speaker to speaker and possibly among the different productions of one and the same speaker. This topic needs further research. In any case, the hypothesis initially entertained by the present author, namely that Ayoreo should be considered as a phonologically stress-less language, is likely to be inadequate. Among the admittedly not many candidates for stress-contrasting pairs, consider yojí 'my bow' vs. yóji 'I drink', pichó '(the fact of) throwing (typically, an arrow)' vs. pícho 'wood' (plural of the "base-form"). In other instances, like acadi'' 'pupil' (PL acadigode) vs. acadi 'flatulence' (PL acadode), one remains in doubt: what probably makes the difference is the presence vs. absence of a final glottal stop, rather than any possible stress-contrast. Although the informants' testimonies are, in this respect, fairly confusing, both words appear to be stressed on the final syllable.

As for syllable structure, Ayoreo mostly presents open syllables. Word-internally, the only syllable-closing phoneme is $/ \mathrm{j} /$. Word-finally, codas may consist, in addition to $/ \mathrm{j} /$, of one of the following consonants: /. s k p t/. However, final consonants are very often followed, especially within an utterance, by the default vocoid [e], recreating the preferred syllable structure (this is in fact compulsory with word-final /I/). This may cause some confusion in orthography, for dajachuc and dajachuque 'boiled' ostensibly are one and the same word.

A notable areal feature exhibited by Ayoreo is nasal harmony, characterized by morphophonologically- as well as postlexically-governed alternations. As for the former ones, see below; as for the latter, see the following sentence, where the 1 s pronoun (u)yu becomes $\tilde{n} u$ due to harmony: Cho mungâ $\tilde{n} u$ 'it suffocates me'. The exact details of this harmonic process are not entirely clear for the time being, except for the fact that its source lies in either a nasal consonant or a phonologically nasal vowel. The preliminary analysis carried out by Ciucci (2007/08,b) (based on the data available at the time, i.e. the lexical repertoire of Barrios et al. (1995) supplemented with fieldwork data collected by the present author), suggested that the barriers preventing the spread of nasality might to be differently set for nouns and verbs. These observations should however be checked against more (and more reliable) data. What one can state for sure is that, as far as right-spreading is concerned, voiceless stops definitely act as blockers (see the non-nasal 1 p suffix -go in
ñimatago 'we join' or ñiterêtago 'we lie down', as opposed to the nasal suffix -ngo in ñicôrango 'we fall' or ñijnochangome 'we bury'). As a consequence, the 1 p suffix -co of the mobile-syllable's paradigm (see below) is not affected by the presence of nasality in the root; since, however, the 2 p suffix -cho is equally unaffected, it follows that other consonants, in addition to voiceless stops, might act as blockers. Indeed, nominal roots might possibly obey stricter conditions. As for left-spreading nasal harmony, relating to possessive and personal prefixes (see table 4 below, showing the non-nasal vs. nasal allomorphs), the application appears to be variable.

It should be noted that some formatives appear to be relatively immune from this harmonic process. Such is the case of the indeterminate-form suffix of nouns (see below), whose actual shape, altough related to the root structure, is often independent from nasality.

### 2.2 Morphophonemic alternations

In a number of cases, although far from regularly, Ayoreo presents fortition processes at word-edges. Consider the following examples: (a-b) present irregular $3 \mathrm{~s} / \mathrm{p}$ forms, as shown by the absence of the regular person prefix ch-; (c-d) show the alternation of the 1 s possessive prefix and the $\varnothing$-morpheme which, in these particular words, indicates inherent $3 \mathrm{~s} / \mathrm{p}$ possession; the final two examples exhibit alternations before inflectional (e) and derivational (f) affixes. Note that here, as well as in all other examples in this chapter, the hyphen within words is a mere morpheme-boundary marker, with no orthographic status:

| (1)a. $\tilde{n} i-$-ri 1s.arrive | di | 3s/p.arrive |  |
| :--- | :--- | :--- | :--- |
| b. yi-bo | 1s.cry | po | $3 \mathrm{~s} /$ p.cry |
| c. yi-boti | 1s.food 'my food' | poti | food |
| d. ñimatarâi | 1s.tooth 'my tooth' | patarâi | tooth |
| e. soc | unequal (ms) | sogode (FS), sogué (fs) |  |
| f. ejnaretac | ill | ejnaretagui-pise ill-ELAT 'very ill' |  |

In (1f) the $\mathrm{i} /$ preceding the elative suffix -pis (in turn followed by the euphonic vocoid [e]) is a euphonic epenthesis, aimed at preserving the legal syllabic structure. Strengthening processes and euphonic insertions may also occur post-lexically. For instance, the modal particle $a$, often used in questions and above all in exclamations, may appear as $y a$ after another vowel (particularly after /a/). For analogous reasons, the locative
adpositions $i j i$ [ihi] and aja [aha] may be strengthened as tiji and taja if the previous word ends in a vowel. Other functional words following this behavior are the invariable copula (t)u, the demonstrative (t)uaté 'this.F', or the adverb (t)ajei 'inside'. This may also be observed word-internally, as in the compound guijna-tajei 'room’ (lit. house + inside).

Consonant deletion occurs very often in the derivation of the 'indeterminate' form (see § 2.5.4). The masculine indeterminate suffix takes the form of -tic/nic/ric, where the choice of the suffix-initial consonant depends on the shape of the preceding root. Consider the following examples (where FF stands for "full-form", BF "base-form" and IF for "indeterminate-form") ${ }^{12}$ :
(2) (a) 'day': FF diri (PL dirode), BF dir (PL diño), IF dinic (PL diningo)
(b) 'owner of a vehicle': FF gachingôri (PL gachingorone), BF gachingor (PL gachingoño), IF gachingotic (PL gachingotingo)
(c) 'food': FF poti (PL posode), BF pos (PL poso), IF potic (PL potigo)
(d) 'inward parts, soul': FF ajepisi (PL ajepisode), BF ajepis IF ajepitic (PL ajepitigo)
(e) 'roaring': ajemini (PL ajeminone), BF ajemit IF ajemitic (PL ajemitigo).

If one took the full-form as the starting point of the derivation, it might look as though the examples of indeterminate-forms in (2) involve some sort of haplology, although the consonant of the first syllable is sometimes different from the replacing one (as in a-b). Since, however (as will soon become clear), the origin of any morphological operation is the base-form, the situation should be seen differently: the indeterminate suffix simply replaces (and sometimes even copies) the root final consonant.

Other frequently observed and sufficiently regular processes are vowel elision and vowel fusion. The attachment of possessive prefixes provides an example of both. In (3a), root-initial /i/ turns the 2 s and 2 p prefix-final /a/ (of, respectively, ba and uaca) into /e/, remaining unchanged in all other persons; in (3b), on the other hand, root-initial /e/ directly replaces all prefix-final vowels:
(a) 'what is found': FF 1s y-iyai, 2s b-eyai, 3s iyai, 1p yoqu-iyai, 2p uaqu-eyai
(b) 'foam': $\quad \mathrm{FF} 1 \mathrm{~s}$ y-ebie, 2 s b-ebie, 3s ebie, 1p yoqu-ebie, 2p uaqu-ebie

[^8]
### 2.3 Orthography

There seems to be substantial convergence as for the Ayoreo orthography, although the various sources occasionally present discrepancies. The orthography is inspired by Castillan conventions. Thus, <que qui gue gui> stand for [ke ki ge gi]; <ch> for [tf]; <jm, jn , jñ $>$ for $\left[\begin{array}{ll}\mathrm{m} & \mathrm{n} \\ \mathrm{n}\end{array}\right]$; <ng> for $[\mathrm{l} \mathrm{g}] /[\mathrm{g}]$. There are, however, a few deviations and oscillations. The glide $/ \mathrm{j} /$ is usually written <i> in coda position, although <y> (which is generally used word-internally) would be more respectful of the Castillan conventions. Equally, there seems to exist some oscillation as for the rendering of word-final $/ \mathrm{k} /$, variously transcribed as $\langle\mathrm{k}\rangle$ or $\langle\mathrm{c}\rangle$ (as well as <que> when accompanied by a euphonic vocoid). Since $\langle\mathrm{k}\rangle$ does not belong to the Castillan orthography, $\langle\mathrm{c}\rangle$ should be preferred. Vowel nasality is often rendered by the diacritic $<^{\wedge}>$, probably due to keyboard limitations, although the palatal nasal consonant is transcribed as usually, namely <ñ>. Finally, it is advisable to use the grapheme <ú> (or possibly <ü>, as done by some authors) to distinguish the phonemic status of (stressed) /u/ in the hiatus /ui/ - as in dugúi 'vegetable's vine (of squash, watermelon etc.)' - from its mere orthographic nature as part of the digram <gu> (as in ejnaretaguipise 'very ill').

### 2.4 Lexicon and word classes

### 2.4.1. Word classes

Ayoreo presents all the major word classes, although with some distributional peculiarities. The main divide is between nouns and verbs, whose morphologies are clearly distinguished. Some nouns, however, may be directly used as predicates (§ 2.5.4) quite independently from their use in copula sentences, where nouns (or adjectives) obviously take on the predicative function. In addition, and remarkably, nouns and adjectives may assume a specific shape (the so-called "base" form) when used predicatively in copula-less sentences (§ 2.6.3).

Adjectives inflect alongside the pattern of nouns but have independent syntactic status. Since, however, the language presents a rather restricted amount of derivational affixes, the number of adjectives and adverbs is, on the whole, rather limited as compared with

Indo-European languages. In practice, perhaps with few exceptions, only monomorphemic adjectives and adverbs are to be found. There is, in addition, some shortage of abstract nouns, evidently due to the same reason.

Both nouns and verbs may be grouped into different inflectional classes, as is typical of fusional languages.

### 2.4.2. Possessed and non-possessed nouns

Nouns can be divided into two major subclasses: possessed and non-possessed (see § 2.5 .4 for further details). The latter typically designate animals and vegetables, but also inanimate objects like echoi 'salt', which the Ayoreode used to collect from the salt-pits at the end of the dry season. Possessed nouns should be further subdivided into optionally vs. inherently possessed nouns. Further study is needed in order to exactly delimit the above mentioned classes.

In order to employ a non-possessed noun, one should have it preceded by the appropriate classifier, the most typical of which are nouns such as: -achidi 'pet, vehicle', ajne 'belonging, possession, property' and yui ( F yugué) 'prey, victim, haul, captured/gathered object' (cf. its irregular possessive-prefix inflection in § 2.5.4). ${ }^{13}$ For instance: d-achidode cuchabasucho 'his/her/their airplanes' (3-vehicle.PL airplanes), $g$ achidi tamoco / cuco 'his/her/their dog / canoe (3-pet $\operatorname{dog}[\mathrm{BF}] /$ canoe[BF]), b-egué dutué 'your squash’ (2s-haul. squash), y-ajné yiguidé 'my dress’ (1s-belonging dress). Another less frequently used classifier-like element is aca 'plant', as in acadie uvai 'grapes' (lit.: plants grape) to be found in the Bible translation (see also b-acadie guejna 'your corn plants'). The word accompanying the classifier should normally be in the "base" form, as in the above examples, but the informants' behavior seems to oscillate.

### 2.4.3. Personal and possessive pronouns

The paradigm of personal pronouns is reported in table 4 in § 2.5.2, together with the personal prefixes used with nouns (to convey the meaning of possession) and verbs. The following table reports the paradigm of what might be regarded as possessive pronouns; wherever full and basic form differ, both are shown (in that order). The masculine 1s

[^9]exhibits some oscillation between the nasal and non-nasal variant. It will not escape the reader's attention that the word in table 3 is the same as the classifier -ajne 'belonging, possession, property' introduced in the preceding section. It is thus fair to say that, although in the relevant cases it may be regarded, functionally speaking, as a pronoun, from the morphological point of view it is definitely a noun:

|  | MS | MP | FS | FP |
| :--- | :--- | :--- | :--- | :--- |
| mine | $\tilde{n} /$ yajne $(i) /-e c$ | $\tilde{n} /$ yajneone/-echo | $\tilde{n} /$ yajne | $\tilde{n} /$ yajnenie/-ei |
| yours | bajne(i)/-ec | bajneone/-echo | bajne | bajnenie/-ei |
| his/hers/theirs | gajne(i)/-ec | gajneone/-echo | gajne | gajnenie/-ei |
| ours | yocajne(i)/-ec | yocajneone/-echo | yocajne | yocajnenie/-ei |
| yours | uacajne(i)/-ec | uacajneone/-echo | uacajne | uacajnenie/-ei |

Table 3. Possessive pronouns

### 2.4.4. Numerals

The native numerals reach up to 'four': chojmara 'one', gare 'two', gadioc 'three', gagajni 'four'. Possibly under Western influence, convenient counting systems were developed. One of these, reported in Barrios et al. (1995), is such that chejná ñi-manai / ñi-manane / ayorei (lit.: 'it completes a person / 1s-hand’ / 1s-hand.PL’) respectively stand for 'five', 'ten' and 'twenty', with intermediate cases as needed. For instance: gadioc ñimanai 'eight', chejná ayore gadiogode 'sixty' (gadiogode is the plural of gadioc; numerals may inflect as required). The last example shows that the system has a vigesimal basis (lit.: it terminates person [=20] three); it is thus unlikely that it was entirely developed after Western example. Higham et al. (2000) report a partly different system: for instance, gare iji ti or gare iji tiode/tidie means 'seven' (interestingly, although $t i$ is an adverb meaning 'over there' - glossed as 'alli' in Barrios et al. - it may itself inflect for gender and plural: tiode (m), tidie (f)).

### 2.4.5. Ideophones and onomatopoetic words

There is a fairly large class of ideophones, which may or may not have onomatopoetic substance. These often appear together with the auxiliary yo, bo, cho, yoco, uacoyo, which has the meaning of 'look like' when used as an independent verb. For instance: yo ta ta ta 'I tremble', bo mara mara 'you sweat', cho jmiti jmiti jmiti 'she/he/it/they blink(s)'.

### 2.5 Morphology

### 2.5.1. General

Ayoreo is remarkable, as compared to many languages of the area, for its relatively simple morphological structure. The morphophonological processes involved in inflection and derivation appear to be sufficiently regular. Nouns and adjectives inflect for number (singular and plural); the latter, in addition, also for gender. Nouns belong to one of two genders, masculine and feminine. Natural gender appears to apply in the case of human beings; the only exception so far found is (dac)asute 'chief', which is feminine although it refers to a male role. ${ }^{14}$ Gender assignment in the remaining nouns is somewhat opaque, despite some tendencies: vegetals seem to be predominantly feminine and animals predominantly masculine (there are however exceptions).

Although Ayoreo is a definitely fusional language, there is a remarkable shortage of derivational processes. This undoubtedly affects, as already noted, the reduced number of adjectives, adverbs and abstract nouns. One prominent derivational affix is $-(s)$ ôri, which derives nouns from verbs (ajna 'to follow', ajnasôri 'follower'; imo 'to see', imosôri 'witness'), from nouns (idai 'village’, idaisôri 'village inhabitant'; acadi’ 'pupil', acadisôri 'teacher') and even from what looks like a pronoun (gajne 'his/her/their', gajnesôri 'owner'). ${ }^{15}$ What all these derivatives have in common is the fact that they refer to human beings. This yields, in particular, nomina agentis, although this is just one of the possibilities. The declension of these words is very regular: e.g., FF gajnesôri (MS), gajnesôrone (MP), gajnetó (FS), gajnetodie (FP); BF gajnesôr (MS), gajnesôño (MP), gajnetó (FS), gajnetoi (FP).

It is important to realize that the starting point of any inflectional and derivational operation is the base-form. For instance, gachisôri 'owner of pet/vehicle' is based on gachidi 'pet/vehicle', with BF gachit; from the latter, one derives in the most regular way gachisôri (M) / gachitó (F). See also: charidi 'resting place, sit’, BF charit, charisôri / (F)

[^10]charitó 'one who sits'; garani 'origin', BF garât, garasôri / (F) garató 'creator'; guejnai 'completed, destroyed', BF guejnac, guejna-ngôri (or guejnasôri) / (F) guejnató 'destroyer'; achêrai 'grabbed, attacked', BF achêrac, acherangôri 'tempest, strong wind' (no feminine in this case).

This is even more evident in compound formation. Ayoreo is relatively rich in compounds. When the first member consists of a noun, it regularly appears in the baseform: ayore-ñungôri 'killer' (< FF ayorei, BF ayore 'person' + ñungôri 'killer'); cucarâtedo 'cave, crevice in a rock' (< FF cucarani, BF cucarât 'mountain, hill' + edo 'eye'); uchaquepie 'toilet' (< FF uchai, BF uchac 'excrement' + pie 'container'); yotepioi ‘alcoholic beverage', cf. Sp. ‘aguardiente’ (< FF yodi, BF yot 'water’ + pioi 'fire’); gueabuja 'cloud' (< FF guei, BF gue 'rain' + abuja 'beard'). This may occasionally produce an adjectival compound, as in: cuchairisi 'transparent' (< FF cuchai, BF cucha 'thing' + irisi 'resin').

Compounds may also combine different parts of speech; the following examples illustrate some of the patterns. $\mathrm{V}+\mathrm{N}$ : aquesupidi or ichopidi 'wound' (<aquesu 'to cut' or icho 'to shoot (an arrow, a bullet, a stone)' + pidi 'place'); N+Adv: guijnatajei 'room' (< FF guijnai, BF guijna 'house' + (t)ajei 'inside').

Unlike other languages of Amazonia, Ayoreo nouns do not exhibit 'nominal tense' markers (more properly called: 'temporal stage' markers), although the language described by Chomé allegedly presented them. Chomé's view was possibly based on the wrong interpretation of the contrast between 'full', 'base' and 'indeterminate' form (cf. below). Sušnik (1963) also hints at this grammatical feature, but the present author could not elicit anything of the sort. As noted by Higham et al. (2000), however, Ayoreo nouns may be accompanied by some sort of aspectual marker of habituality. To the knowledge of the present author, this appears to be an unprecedented observation, definitely worth of further study, which contradicts Nordlinger \& Sadler's (2004) observation concerning the universal absence of aspect-oriented nominal markers. Among the examples quoted by Higham et al., one finds: oide, PL oidedie (F) 'what is carried or used', oide-be, PL oidebedie (BF oide-be, PL oide-bei) 'what is customarily carried or used'; uru, PL uruode (M) 'word', uru-bei, PL uru-beode (BF uru-bec, PL uru-becho) 'what is customarily said'; aquiningai, PL aquiningane (M) 'meeting place', aquininga-mei, aquininga-meone (BF
aquininga-mec, PL aquininga-mecho) 'customary meeting place'. The consulted informants indicated that this suffix is highly productive: iguidebe 'customary dress', acadisôrimei 'usual teacher', mochapibei 'usual/preferred bed', dajebec 'habitual path', pibosebei 'what one usually eats, favorite food', yicharidebei 'my place (where I usually sit)', urôsobei 'habitual pain'. Obviously, not all words may be thus augmented, as e.g. *tiebe 'habitual river'. However, some of the initially rejected examples were subsequently accepted on afterthought, such as ?tamocobei 'the dog that one often encounters'.

### 2.5.2. Person markers and independent pronouns

Three sets of person markers, differing slightly among themselves, are used in the following functions: (i) as independent personal pronouns; (ii) as personal prefixes attached to verbs; (iii) as possessive prefixes attached to nouns:

|  | Personal pronouns | Personal prefixes | Possessive prefixes |
| :--- | :---: | :---: | :---: |
| 1 s | $u y u / y u$ | $y V-/ \tilde{n} V-$ | $y V-/ / \tilde{n} V-$ |
| 2 s | $u w a / u a$ | $b a-/ m a-$ | $b a-/ b V-/ / m a-/ m V-$ |
| $3 \mathrm{~s}(/ \mathrm{p})$ | [M or F demonstrative] | $c h V-$ | $i-/ g a-/ g V-/ / d a-/ d V-$ |
| 1 p | uyoc $/ y o c$ | $y V-/ \tilde{n} V-$ | $y V-/ \tilde{n} V-$ |
| 2 p | uwac $/ u a c$ | uaca- | uaca-/uac $V-/ u a q u V-$ |
| 3 p | ore | (ore) | ore $/$ or $V$ |

Table 4. Personal pronouns and affixes

The longer forms of the personal pronouns are only used for emphasis, as in uwa a u jne! 'it will be you!' (lit.: you MOD COP afterwards). The 1 s , 2 s and 1 p possessive and personal prefixes have alternative allomorphs for nasal harmony, as indicated in the table. The ortographic form of the 2 p prefix depends on the nature of the following vowel.
'V' stands for any of the five Ayoreo vowels, whose actual manifestation depends on specific conditions, slightly different for nouns and verbs (cf. the behavior of personal prefixes in $\S 2.5 .5$ ). When the noun's root begins with a consonant, the default vowel is $/ \mathrm{i} /$ for all persons except $2 \mathrm{~s}, 2 \mathrm{p}$ and the participant-oriented $3 \mathrm{~s} / \mathrm{p} d a$-, which retain $/ \mathrm{a} /$. When the root begins with a vowel - as is often the case - a series of fairly regular morphophonemic processes apply: root-initial $/ \mathrm{u} /$ is ovewritten by $/ \mathrm{a} /$ of the 2 s and
participant-oriented prefixes and preserved elsewhere; root-initial /i/ yields /e/ in the $2 \mathrm{~s} / \mathrm{p}$ and participant-oriented prefixes and is preserved elsewhere; root-initial /e o/ are retained in all persons. This suggests the following strength hierarchy: $|\mathrm{e}, \mathrm{o}>\mathrm{a}>\mathrm{i}>\mathrm{u}|$. Here are the relevant examples:
(4) a. CONSONANT-INITIAL ROOT: yiboti, baboti, (uté / ore) iboti, yoquiboti, uacaboti 'my, your(sg), her/his/their, our, your(pl) food'
b. ROOT-INITIAL /i/: yidai, bedai, (uté / ore) idai, yoquidai, uaquedai 'my, your(sg) etc. camp / village / town'
c. ROOT-INITIAL/e/: yejo, bejo, ejo, yoquejo, uaquejo 'my, your(sg) etc. mother-in-law'
d. ROOT-INITIAL /a/: yacote, bacote, (uté / ore) acoté, yocacote, uacacote 'my, your(sg) etc. spouse'
e. ROOT-INITIAL /o/: yojí, bojí, (uté / ore) ojí, yocojí, uacojí 'my, your(sg) etc. bow'
f. ROOT-InITIAL /u/: yujnari, bajnari, (uté / ore) ujnari, yocujnari, uacujnari 'my, your(sg) etc. louse'

The third person pronouns and affixes present peculiar features. Ayoreo lacks a dedicated prefix for the 3 p in verbs. This is also typical of other languages in the area, although Chamacoco differs in this respect. When needed, the 3 p pronoun may be placed before the $3 \mathrm{~s} / \mathrm{p}$ verb form in order to disambiguate (cf. chamata 'she/he/they gather(s)' vs. ore chamata 'they gather'). With nouns, instead, the personal pronouns obligatorily make up the distinction between 3 s vs. 3 p (this is the reason of the parenthesis in " $3 \mathrm{~s}(/ \mathrm{p})$ " in table 4). Note, however, that the function of the 3 s pronoun is fulfilled by the demonstrative - as inflected for gender: uté (m), uaté ( F ) - showing that this is a later integration into the paradigm.

Of particular interest, within the $3 \mathrm{~s} / \mathrm{p}$ possessive prefixes, is the contrast between neutral $i-/ g a-/ g V$ - and participant-oriented $d a-/ d V$ - (or $n a-/ n V$ - in nasal harmony words). The latter forms (glossed as 3.RFL, i.e. "3.reflexive") are used whenever one of the thirdperson participants to the situation is referred to. ${ }^{16}$ As (5c) shows, what matters is not coreference with the clause's subject, but rather with one of the situation's participants, as hinted at by 'own' in the English translations:
$\begin{array}{lllll}\text { (5) a. uje } & \text { que } & \begin{array}{l}\text { ore ajengome } \\ \text { COMP }\end{array} & \begin{array}{l}\text { d-ayode }\end{array} & \begin{array}{l}\text { d-atedie ore } \\ \text { 3p }\end{array}\end{array}$

[^11]'.. for they are not ashamed of their own fathers and mothers.' (IP)
b. Jate chimo d-achidi // gachidi.

Jate sees 3.rFL-pet 3-pet
'Jate saw his own pet // her/his/their pet [i.e. someone else's]' (field-notes)
c. Ore asut-abia s-u ani-ami Iyequei d-ay-abi.

3p chief-dIM.fS DIM-COP PHAT-DIM Iyequei 3.RFL-father-DIM
'Their young chief was, well, Iyequei's own father.' (SAM)

### 2.5.3. Elatives and diminutives

Elatives and diminutives are very frequently employed.
The most commonly used elative is -pis/-pus, often accompanied by a final vowel which, just as the suffix-internal vowel, depends on harmonic principles (the details will not be provided here). This elative suffix may be used with verbs, adjectives and nouns: ch-ejna-pusu da-ruode (3.terminate-ELAT 3-words) 'he/she/they speak(s) loudly/clearly', ñ-ejna-ngo-pusu yoc-uruode 'we speak loudly', yi-pota-pisa (1s.want-ELAT) 'I strongly desire', u-pusu (3.be- ELAT) 'definitely is/are', to-pisi (3.die-ELAT) 'he/she/they finally die(s)', ajningarangui-pise (angry-ELAT) 'very angry, fierce', ueradi-pis (good-ELAT) 'very good ${ }^{1 .}{ }^{17}$ When the noun or adjective is in the plural, the elative precedes the inflection marker, so that the elative is transparent to the gender features governed by the root: yoc-uru-pis-ode (1p-word-ELAT-MP) 'our loud/clear words' (cf. Italian final-issim-a 'very final match of a championship.FS').

With nouns, the elative may also consist of creating an adjectival phrase with datei (м) I daté (F), ostensibly related to daté 'mother': uga date 'big snake', chagurei datei 'big hunger’. In idai datei (PL idai dateode) 'town’ (lit.: village + ELAT) this construction has been lexicalized.

The diminutive / attenuative of nouns and adjectives is mostly obtained by means of the suffix -abi (MS; BF -ap), -abode (MP), -abia (FS), -abidie (FP), ostensibly connected to abi, ode (M) abia. -idie (F) ‘child, son’. For instance: BF tamoco (M) 'dog', dim. tamocabi (BF tamocap) 'little dog'; BF iyobie 'heart', dim. iyobi-abidie 'little hearts'; BF ejnaretai 'ill', dim. ejnaretabi '(the) little ill one' or ejnaretap '(the) little one is ill'. The diminutive may also apply to an adjective independently conveying the meaning of 'little', as in FF

17 The adjunction of the elative suffix brings about another piece of regularly observed morphophonological behavior: ajningarac (BF) and uerat (BF) turn into ajningarangui- and ueradi-, by voicing and vowel-harmonic copying of /i/. The adjunction of the elative morpheme to verb roots, by contrast, is straight-forward.
ajamami 'fairly little', BF ajamap 'he is fairly little' (cf. It. piccol-ino). With nasal harmony words, the diminutive changes accordingly: FF ujnoi 'wing', dim. ujnongami 'little wing'; FF jôcarai 'noise', dim. FF jôcarami, BF jôcarap 'little noise'.

Diminutives may be attached to predicates (and even to purely phatic words, as in (5c) above). They convey attenuative nuances, as in: yuru 'I wash’ vs. arur-ap (imper.) 'please wash!'; bataja 'you (sg) help' (where aja is a locative adposition inglobated into the root), at-ab-aja yu (NON-IND) 'please help me a little!'. The diminutive suggests - as one might expect - that the event or situation is characterized by some sort of reduced intensity. Interestingly, however, there is another verbal suffix, -si, referring to the physical dimension of the referent, as in tarara-si '(the) little/dear person is shivering'. This seems to be a fairly regular behavior: chududo-si jôcara-mi 'he/she/they heard a little noise'; be-si-apo udi r̂̂ (bring.NONIND-DIM-ITER down ITER) 'bring it [i.e. something little] there'. ${ }^{18}$ This in turn suggests that Ayoreo presumably exhibited, at an earlier stage, a nominal class system with verbal agreement properties.

Interestingly again, Ayoreo may present the diminutive on demonstratives: utéluaté 'this ( $\mathrm{M} / \mathrm{F}$ )', suté/suaté 'this little being/thing ( $\mathrm{M} / \mathrm{F}$ )'. In this case, as well as with the invariable copula ( $s-u$ 'DIM-COP, cf. (4b)), the diminutive shows up as a prefix. Furthermore, since what functionally works as possessive pronouns is morphologically based on a noun (see § 2.4.3), one can easily build the diminutive on them: ñajnei 'mine’, ñajniami (MS), ñajniamone (MP), ñajniamia ( FS ), ñajniamenie ( FP ) 'mine little thing(s)'.

### 2.5.4. Noun morphology

In Kelm (1964) a distinction is made between "Grundform" and "Definitivform". Higham et al. (2000) call "definite form" the latter while they do not give a specific name to the former. Since, however, the so-called "definite form" has little to do with definiteness as such (although, as will soon become clear, Ayoreo nouns also present an "indeterminate" form), ${ }^{19}$ a different terminology will be used here, in practice reversing

[^12]Kelm's terminology: "base-form" (BF) instead of "Definitivform/definite form" and "fullform" (FF) instead of "Grundform". The use of the base-form in morphological processes was illustrated in § 2.5.1; its syntactic use will be discussed in sect. 3. Note that the baseform has its own plural, different from the full-form plural (one such example, cuchabasucho, appeared in § 2.4.2 above). This prevents us from treating the base-form as the sheer root. Possibly, the base-form plural historically resulted from the inglobation of an indipendent plural particle with phrasal scope, which was subsequently fused with the regularly preceding nominal. In this way the base-form, besides retaining its status (in the singular) as the source of any morphological operation, also acquired fully independent syntactic status.

As anticipated, besides the full and base-forms Ayoreo nouns present the so-called "indeterminate" form, derived from the base-form by attaching the suffix -ric/tic/nic (MS), -tigo/rigo/nigo (MP; nasalised form -tingo etc.), -rac (FS), -rigui (FP; nasalised form ringui). The shape of the masculine suffix is morphophonologically governed and by and large predictable from the base-form. The label 'indeterminate' appears to be, in this case, well-chosen, for this form always implies a non-specific referent (cf. § 2.6.7).

Both masculine and feminine nouns and adjectives can be ordered into a number of declensional paradigms (the following notes, however, are not meant to provide exhaustive information; this author and Luca Ciucci will provide a thorough comparative systematization of the Ayoreo and Chamacoco declensional paradigms). Some general features emerge: the full-form plurals of feminine nominals end with the diphthong -ie, whereas the masculine cognates end with -e; e.g., taposi, taposode (M) 'root'; joride, joridedie ( F ) 'door'. Besides, nominals ending in $-i$ in the full-form singular are in most cases masculine, while those ending in $-e$ are in most cases feminine. The remaining

[^13]vowels are less characterizing. Finally, feminine nominals tend to inflect more regularly than masculine ones.

In normal cases, feminine nominals obtain the full-form plural by simply adding die/nie (depending on nasality) to the base-form. The base-form's plural is obtained by adding $-i$. As the following examples show, however, these simple rules are not always followed:

| 'female' | FULL-FORM <br> cheque, chequedie | BASE-FORM <br> cheque, chequei | INDETERMINATE-FORM <br> chequerac, |
| :--- | :--- | :--- | :--- |
| 'eye' | edo, edodie | edo, edoi | edorac, edorigui |
| 'gun' | poca, pocadie | poca, poca | pocarac, pocarigui |
| 'girl' | gapua, gapudie <br> poría, poridie | gapu, gapui <br> pore, pori | gapurac, gapurigui |
| tree' | pojnac, pojningui |  |  |

Masculine nouns present a more variegated picture. Incidentally, they show quite clearly that the base-form plays a role in the formation of the full-form plural, an observation that is in general difficult to detect in feminine nouns. It is also worth noting that, in a number of cases, the indeterminate-form selects somehow arbitrarily the nasal or the non-nasal allomorph:

|  | FULL-FORM | BASE-FORM | INDETERMINATE-FORM |
| :--- | :--- | :--- | :--- |
| 'male of animal' | choqui, choquiode <br> choqui, choquio <br> choquiric, choquirigo |  |  |
| 'pampa' | garai, garayode | garai, garayo | garanic, garaningo |
| 'father' | daye, dayode | dai, dayo | danic, daningo |
| 'trench' | erui, erugode | eruc, erucho | erutic, erutigo |
| 'spoken about' | edoi, edogode | edoc, edocho | edotic, edotigo |
| 'prisoner' | (p)isai, (p)isagode | (p)isac, (p)isacho | (p)isatic, (p)isatigo |
| 'bag' | guipei, guipeode | guipec, guipecho | guipetic, guipetigo |
| 'pupil' | acadǐ', acadigode | acadic, acadicho | acaditic, acaditigo |
| 'neck' | etabi, etabidode | etabit, etabicho | etabitic, etabitigo |
| 'pillow' | ugutadi, ugutadode | ugutat, ugutacho | ugutatic, ugutatigo |
| 'day' | diri, dirode | dir, diño | dinic, diningo |
| 'soul' | ajepisi, ajepisode | ajepis, ajepiso | ajepitic, ajepitigo |
| 'bank near water' | edogai, edogade | edogai, edogayo | edoganic, edoganigo |
| 'thing' | cuchai, cuchade | cucha, cucha | cucharic, cucharigo |

The full-form plural often consists of the suffix -ode as added to the base-form. Since, however, the base-form of masculine nouns often ends in a consonant (sometimes a glottal
stop, as in acadi'), this may entail some morphophonemic change, typically consisting in voicing (etabi, erui, acadí', edoi, (p)isai, ugutadi) and occasionally in deletion (guipei). In most words ending in -ai, however, with vowel- (cucha) or possibly glide-final base-form (edogai), the suffix itself undergoes partial deletion, unless one postulates different allomorphs for the plural (-ode/-de). As for the base-form plural, its form is most plausibly -io (sometimes -yo with palatal glide), with the front vowel often causing palatalization of the preceding consonant (cf. diño, etabicho, erucho, edocho, (p)isacho, ugutacho, guipecho). Root-final /s/, however, does not palatalize (ajepiso), possibly because the front vowel of -io is concealed by (or absorbed into) the stridency of the preceding /s/. Finally, some words present a plainly irregular base-form plural (cucha).

Nasal harmony nominals differ minimally from non-nasal ones. Here follow a few indicative examples, showing that the $-d$ - of full-form plurals turns into $-n$-:

FULL-FORM BASE-FORM INDETERMINATE-FORM

## FEMININE

'ear' angorone, angoronenie angorone, angoronei angoronerac,
angoroneringui
$\left.\begin{array}{llll}\text { 'jar' } & \begin{array}{l}\text { cojna, cojnanie } \\ \text { gajño, gajñonie }\end{array} & \begin{array}{l}\text { cojna, cojnai } \\ \text { gajño, gajñoi }\end{array} & \begin{array}{l}\text { cojnarac, cojnaringui } \\ \text { gajñorac, gajñoringui }\end{array} \\ \text { 'swamp, lake' } & \text { MASCULINE } & \text { jnani, jnanione } & \text { jnani, jnanio }\end{array}\right]$ jnanitic, jnanitigo
guiguijnarigo
Adjectives follow the same pattern of nouns of the corresponding inflectional classes, although only a subset of these are exploited by adjectives. They inflect for gender in addition to number. The pattern exhibited by edoi / edogue seems to be fairly frequent:

|  |  | FULL-FORM | BASE-FORM | INDETERMINATE-FORM |
| :---: | :---: | :--- | :--- | :--- |
| 'spoken about' (M) | edoi, edogode <br> edoc, edocho <br> edogue, edoguedie | edotic, edotigo <br> edoguerac, edoguei |  |  |
| edoguerigui | (F) | edi, |  |  |
| 'nice, good' | (M) | ueradi, ueradode | uerat, ueracho | ueratic, ueratigo |
| ueraderigui | (F) | uerade, ueradedie | uerade, ueradei | ueraderac, |


|  | (F) querua, querudie | queru, querui | querurac, querurigui |
| :--- | :--- | :---: | :--- | :--- |

(F) gajnarengue, gajnarenguenie gajnarengue, gajnarenguei gajnarerac, gajnareringui

This obviously also applies to nouns inflecting for gender, like:

| '(real) person' (M) ayorei, ayoreode | ayore, ayoreyo <br> ayore, ayorei | ayoreric, ayorerigo <br> ayorerac, ayorerigui |
| ---: | :--- | :--- |

Nouns often appear with the appropriate possessive prefix, unless they belong to the class of non-possessable nouns (typically animals and vegetables). Table 4 in § 2.5.2 shows the possessive prefixes paradigm; see the comments therein, also with respect to the contrast between the $3 \mathrm{~s} / \mathrm{p}$ neutral prefix $i-/ g a-/ g V$ - and the participant-oriented prefix $d a$ $/ d V$-. The $3 \mathrm{~s} / \mathrm{p}$ neutral prefix exhibits a great deal of idiosyncrasy, for it is not possible to predict which form should be used with a given word. It should also be noted that some nouns, as reported by Higham et al. (2000), obligatorily begin with $i-/ g a-/ g V$ - in the citation-form. In the opinion of this author, the latter words should be considered as inherently possessed (or inalienable) nouns; cf. iguide '(her/his/their) dress', in short: '(3.)dress'; gachidi '(3.)pet, vehicle'. Obviously, if the possessor is not the $3 \mathrm{~s} / \mathrm{p}$ person, the inflection will take care of this: e.g. yiguide 'my dress', yocachidi 'our pet, vehicle'. Some nouns have alternative forms, namely a $3 \mathrm{~s} / \mathrm{p}$ possessed form (e.g., iguijnai ' 3 .house') and a generic non-possessed form (e.g., guiguijnai 'house').

Many Ayoreo nouns may appear in what one might call "generic" (i.e. generalizing) form - by definition non-possessed or at most possessed by a non specified owner whereby (in a lexically idiosyncratic fashion) either $d V c$ - or $p$ - (and sometimes $g a-/ g V$-) are attached as a sort of prefix. These, as well as the unpredictably alternating $3 \mathrm{~s} / \mathrm{p}$ possessive prefixes (i-/ga-/gV-), are possibly the relics of a classifier system that might have existed in the past. Consider for instance: dac-asuté 'chief', doc-ojí 'bow', diqu-iyoi 'blood', duc-ode 'grave' as opposed to asuté, ojí etc. which tend to occur (although not invariably) with the appropriate possessive prefixes (e.g., beyoi 'your.2s blood’). Consider also p-ibosode 'food.PL [in general]' vs. y-ibosode, 'my food.PL', p-ipesudi 'what is done'
vs. $y$-ipesu 'I do'. Compared with the items beginning with $d V c$-, those beginning with $p$ are much more wide-spread in the lexicon. Although they are not particularly frequent in spontaneous speech, they appear to be relatively pervasive in some of the descriptive texts collected in SCPA, ${ }^{20}$ where various aspects of the Ayoreo material culture are described in the most impersonal way. Among the words reported there, one finds for instance: pagurome 'the fact of using' (cf. y-agurome 'I use'), piyac 'what is taken' (cf. y-iya 'I take'), paquesuc 'what is cut' (cf. y-aquesu 'I cut'), pichó 'the fact of throwing [typically an arrow]' (cf. y-ichó 'I throw'), p-isapidi 'grasping place' (cf. y-isa 'I grasp' + pidi 'place'). The preceding examples also show that from virtually every verbal root a noun may be obtained; besides, the derived noun may often have an intrinsically passive meaning. However, this by no means applies to all $p$-initial words: cf. the adjectival stative predicates pepuja 'bitter' or pioc 'hot', which are neither passive nor derived from a verb.

Although the morphological divide between nouns and verbs is quite sharp, a few nouns may be used with plainly predicative function. They should thus be considered nominal predicates: a not uncommon feature in the languages of the area (see the Tupi languages). This is another hint that Ayoreo must have departed from a mould sharing many basic resemblances with the Amazonian languages at large. For instance, the concept 'to work' is preferably expressed by 1 s yisagode, 2 s basagode, $3 \mathrm{~s} / \mathrm{p}$ isagode, 1 p yoquisagode, 2 p uacasagode (lit.: 'what is grabbed.PL by me, you, etc.']). Similarly, 'to win (X)' may be expressed by the base-form of yui, namely: (X) yic, bec, yuc, yoquicho, uaquecho, yucho (lit.: (X is/are) my victim(s) etc.); note that here, unlike in the true verb paradigm, one has the choice between 3s and 3p: (X) yuc 'he/she wins (X)' (his/her victim), ( $X$ ) yucho 'they win ( X )' (their victims). See also: ore uruode 'they are speaking' (lit.: their words), ore pijnane 'they are shouting' (lit.: their shouts). But at least in some cases this is simply due to the singular vs. plural contrast: $(X)$ yucho, for instance, besides referring to the (necessarily plural) killings of a plurality of agents, can also refer to the plural killings of a single agent.

[^14]
### 2.5.5. Verb morphology

Verbs have an exceptionally simple paradigm. In practice, there is only one tense, so that Ayoreo may be pointed out as a tense-less language. There is, however, an additional form (here called Non-Indicative) conveying modal meaning, which will be illustrated at the end of this section.

As for temporal reference, the speaker may optionally add - as is often the case - the relevant adverbs to convey the temporal location of the event. This may be any temporal adverb, such as dirica 'yesterday / in the near past', dirome 'tomorrow / in the near future', or some apparently more specialized ones, such as que and jne. The last two are always placed at the end of the clause and convey the meaning of, respectively, past and future. Although they play the role of clause operators, in the opinion of the present author they should not be intended as properly integrated in the tense paradigm, for their use is not compulsory. Whenever the context is explicit enough, they are dispensed with (most typically whenever there is another temporal adverb). They should rather be intended as temporal adverbs themselves, approximately with the meaning of 'then (in the past) / before', 'then (in the future) / after'. Ayoreo verbs also lack aspectual morphology. The only marker approaching this kind of meaning is qué 'still', showing up in contexts where the progressive periphrasis would preferably be used in Castillan. Besides its different syntactic position (just before the verb rather than clause-finally), 'aspectual' qué is distinguished from past-reference que by its strong emphasis, orthographically marked by a stress. It is thus a marker of emphasis; its progressive-like meaning is reminiscent of similar phenomena occurring in some Bantu languages (see also German gerade). ${ }^{21}$ Further details concerning verb usage will be provided in sect. 3. The rest of this section will provide a morphological outlook of the Ayoreo verb.

Verb declension is remarkably simple and regular (Ciucci 2007/08,a). Table 5 provides the paradigm. As it happens, the two plural persons present suffixes in addition to prefixes. Both prefixes and suffixes may exhibit nasalized variants, depending on the person. As already noted, the 3 p may be expressed by simply inserting the 3 p independent

[^15]pronoun ore before the $3 \mathrm{~s} / \mathrm{p}$. The following table reports the main features, to be illustrated in the ensuing discussion. The "standard" paradigm will be considered first; the "mobile syllable" paradigm will be illustrated later on.

| Person |  | Standard | paradigm | Mobile | syllable | paradigm |
| :--- | ---: | :--- | :--- | ---: | :--- | :--- |
| 1 s | $y V / \tilde{n} V-$ | ROOT |  | $y V / \tilde{n} V-$ | ROOT |  |
| 2 s | $b a / m a-$ | ROOT |  | $b a / m a-$ | ROOT |  |
| $3 \mathrm{~s} / \mathrm{p}$ | $c h V-$ | ROOT |  | $c h V-$ | ROOT |  |
| 1 p | $y V / \tilde{n} V-$ | ROOT | -go/ngo | $y V / \tilde{n} V-$ | ROOT | -co $(-$-jo, $\ldots)$ |
| 2 p | uaca- | ROOT | - -yo/ño | uaca- | ROOT | -cho $(-s o, \ldots)$ |

Table 5. Verbal affixes.

The morphophonemic behavior of the prefix vowel is as follows. The 2 s and 2 p vowel is /a/, unless there is a root-initial vowel different from /i a $u$ /, namely /e o/; when this happens, the prefix-vowel is in most cases overwritten by the root-vowel, which also shows up in $1 \mathrm{~s}, 3 \mathrm{~s} / \mathrm{p}$ and 1 p , for these persons are always transparent to the root-vowel (unless the $3 \mathrm{~s} / \mathrm{p}$ exhibits irregularity). If, however, the root begins with a consonant (a rather infrequent case), the default prefix-vowel of the $1 \mathrm{~s}, 3 \mathrm{~s} / \mathrm{p}$ and 1 p prefixes is $/ \mathrm{i} /$.

In practice, whenever the root begins with a vowel, that vowel will color, so to say, the entire paradigm, sometimes giving rise to minimal pairs (ch-o-ru 'climbs' vs. ch-u-ru 'washes'; ch-i-se 'finds' vs. ch-a-se 'removes'). Extending somehow the usual sense of this label, one might call such vowel "thematic", for it seems to determine the conjugation class. The following examples illustrate the situation with roots beginning with /a/, /e/ or /o/:
a. y-a-ca, b-a-ca, ch-a-ca, y-a-ca-go, uac-a-ca-yo 'to plant'
b. y-e-do, b-e-do, ch-e-do, y-e-do-go, uaqu-e-do-yo 'to criticize'
c. ñ-0-jne, b-o-jne, ch-o-jne, ñ-o-jne-ngo, uac-o-jne-ño 'to spread'

When the "thematic vowel" is $/ \mathrm{i} /$ or $/ \mathrm{u} /$, the $/ \mathrm{a} /$ of the 2 s - and 2 p -prefix overwrites it, thus suggesting that the (non-thematic) /a/ of the latter prefixes has a special status and, in addition, that the high vowels /i $\mathrm{u} /$ are somewhat weaker. In terms of strength, one might thus propose the hierarchy Ie o>a>iul(slightly different from the one valid for the possessive prefixes, as described in § 2.5.2):
a. y-u-ga, b-a-ga, ch-u-ga, y-u-ga-go, uac-a-ga-yo 'to sew'
b. y-i-go, b-a-go, ch-i-go, y-i-go-go, uac-a-go-yo 'to say'.

Nasal roots trigger the insertion of the appropriate affixes, as in the following examples. One should observe, however, that the nasalization rule is applied far more systematically with suffixes than with prefixes, as already noted by Sušnik (1963); this is shown in some of the examples below, as directly observed by the present author, but should possibly extend to all such cases. The different strength of application of nasalization in the two directions, also to be noted in nominals (cf. § 2.1.3), suggests that the rightward spread is the most salient of the two. Nevertheless, as shown by (8d-e), the rightward spread of nasalization undergoes the effect of phonotactic rules, for it may be interrupted by an intervening barrier (namely, a stop; cf. § 2.1.3):
(8) a. $\tilde{\mathbf{n}}-\mathrm{a}-\mathrm{ño}, \mathbf{m}-\mathrm{a}-$ ño, ch-a-ño, $\tilde{\mathbf{n}}-\mathrm{a}$-ño-ngo, uac-a-ño-ño 'to follow'
b. $\tilde{\mathbf{n}} / \mathbf{y}$-i-jno, $\mathbf{m} / \mathbf{b}-\mathrm{a}-\mathrm{jno}$, ch-i-jno, $\tilde{\mathbf{n}} / \mathbf{y}$-i-jno-ngo, uac-a-jno-ño 'to warn'
c. $\tilde{\mathbf{n}} / \mathbf{y}$-i-ngo, $\mathbf{m} / \mathbf{b}-\mathrm{a}-\mathrm{ngo}$, ch-i-ngo, $\tilde{\mathbf{n}} / \mathbf{y}$-i-ngo-ngo, uac-a-ngo-ño 'to point out'
d. $\tilde{\mathbf{n}}$-i-terêta, $\mathbf{m}$-a-terêta, ch-a-terêta, $\tilde{\mathbf{n}}$-i-terêta-go, uac-a-terêta-yo 'to lie'
e. $\tilde{\mathbf{n}}$-i-mata, m-a-mata, ch-i-mata, $\tilde{\mathbf{n}}$-i-mata-go, uac-a-mata-yo 'to join together'.

With very few exceptions, the irregularities of the inflectional paradigm lie in the third person. This is good reason to take it as the base-form, since the remaining persons are in most cases easily predictable from the third, also with respect to vowel 'color'. Some verbs present $/ \mathrm{t} /$ instead of $/ \mathrm{t} /$ / in the prefix, as in $y$-o-ria, b-o-ria, $t$-o-ria 'to steal'. Other verbs have a $\varnothing$-prefix: y-i-todo, b-a-todo, $\varnothing$-todo 'to fear'. The verbs with third person $\varnothing$-prefix mostly present $/ \mathrm{i} /$ as 'thematic vowel', which enables one, in most cases, to recover the complete paradigm. Some of the $\varnothing$-prefix verbs present unpredictable devoicing of the root-initial consonant, as in: y-i-bo, b-a-bo, $\phi$-po 'to cry' or $\tilde{n}-\boldsymbol{i}-\boldsymbol{n g} \boldsymbol{a n a}, m$ -a-ngana, $\emptyset$-cana 'to play'. In still other cases, there is consonant mutation involving /r/ and a nasal (one out of $/ \mathrm{n} /$ or $/ \mathfrak{n} /$ ): $\tilde{n}$-i-rijni, m-a-rijni, $\varnothing$-nijni 'to get up' or $\tilde{n}-\mathrm{-i}$-rarâ-re, m-a-rarâ-re, ф-ñarâ-re 'to speak'. Needless to say, some verbs show irregularities beyond
the third person, but such cases are very rare (cf. yi(ji), babo/bo, jno, yicoi, uacaboyoi 'to go'). ${ }^{22}$

The plural suffixes deserve a comment. As table 5 shows, the 1 p-suffix carries functional load, for otherwise it would be impossible to distinguish 1 s from 1 p. This is ostensibly not the case for the 2 p , since its prefix differs from the 2 s-prefix. Interestingly, in Chamacoco the situation is somehow reversed: the only plural suffix sits on the 2 p and its presence is precisely required by the need to disambiguate 2 s from 2 p , for these two persons share the same prefix. This suggests that in Ancient Zamuco - the distant predecessor of both Ayoreo and Chamacoco - the personal prefixes were the same for singular and plural, so that the suffixes played a crucial role in disambiguation. ${ }^{23}$ One might however wonder why did not Ayoreo lose the 2 p-suffix (just as Chamacoco lost the 1 psuffix), considering that synchronically it is not functionally motivated. The answer lies in the peculiar phenomenon of 'mobile syllables'.

As it happens, a good share of Ayoreo verbs present a root-final syllable which is deleted in the plural persons. The list includes, in descending order of frequency: -re, -se, -que, -te, -gu, -si, -ru, -di, -ra, -ro, -su. When this happens, however, the plural suffixes take on a specific shape, namely -co and -cho instead of -go/ngo and -yo/no (note that nasal harmony is in this case neutralized, although some mobile-syllables verbs do belong to the nasalized set). The specific allomorph of the plural suffixes is then itself a marker, pointing out that the root-final syllable of the singular persons has been deleted. Considering that in most cases, for any given root, only one of the various mobile syllables is lexically exploited, the native speaker is almost always able to reconstruct the complete root from either one of the plural persons. The few cases where the speaker might be in doubt - namely, those where two mobile syllables may be at stake - are easily disambiguated by

[^16]context redundancy. ${ }^{24}$ In the following examples, (a-b) are standard cases, repeated here for comparison, while (c-e) are instances of mobile-syllable verbs. Note that nasal harmony applies to the suffix in (b) but not in (d):
(9) a. y-u-je, b-a-je, ch-u-je, y-u-je-go, uac-a-je-yo 'to hit, kill'
b. $\tilde{\mathbf{n}}$-ô-ra, m-ô-ra, t-ô-ra, ñ-ô-ra-ngo, uac-ô-ra-ño 'to throw'.
c. y-o-ja-re, b-o-ja-re, ch-o-ja-re, y-o-ja-co, uac-o-ja-cho 'to sniff'
d. $\tilde{\mathbf{n}}$-ê-ra, m-ê-ra, t-ê-ra, $\tilde{\mathbf{n}}$-ê-co, uaqu-ê-cho 'to sell'
e. y-i-bi-te, b-a-bi-te, t-i-bi-te, y-i-bi-co, uac-a-bi-cho 'to shout'

Note that $-r a$ is a mobile syllable in (d), whereas it is definitely part of the root ôra in (b). In other words, one and the same syllable may or may not be mobile. With -re, -se and -que substitution is almost the rule, with $-t e,-g u,-s i$ is highly probable, in the remaining cases it is rather an exception. Note further that the root of têra in (d) should best be considered to be $\hat{e} r a$ rather than simply $\hat{e}$, as one would conclude if the mobile syllable were not part of the root. Should one adopt the latter option, one should admit alternative allomorphs for the root of some verbs (e.g., êra in the singular, $\hat{e}$ in the plural).

The declension of ( $10, a-b$ ) shows another relevant fact (hinted at in table 5): the 2 p-suffix is not -cho but -so, evidently to keep trace of the mobile-syllable's consonant. Something similar is to be observed with other mobile syllables: $-d i$ leaves /i/ as a trace in (c), -si does the same in (d) and in addition leaves a sibilant in the 2 p-syffix, as in (a-b):
(10) a. y-i-ga-se, b-a-ga-se, ch-i-ga-se, y-i-ga-co, uac-a-ga-so 'to chew'
b. y-a-se, b-a-se, ch-a-se, y-a-co, uac-a-so 'to remove'
c. y-i-bi-di, b-a-bi-di, t-i-bi-di, y-i-bi-coi, uac-a-bi-choi 'to call'
d. y-i-ga-si, b-a-ga-si, ch-i-ga-si, y-i-ga-coi, uac-a-ga-soi 'to scratch'

This suggests a plausible explanation for the mobile-syllables phenomenon. Presumably, the plural-suffix substitution mechanism arose as the result of phonetic fusion, whereby the root-final syllable was integrated with the following suffix, sometimes leaving tangible traces of its original shape. These phonological rules have subsequently undergone a great deal of opacization: this

[^17]is for instance the case with the -jo allomorph of the 1 p-suffix ( $y$-i-ri-que, $b-a-r i-$ $\boldsymbol{q u e}, \phi-d i-q u \boldsymbol{e}, y-i-r i-j \boldsymbol{j}$, uac-a-ri-cho 'to walk'), whose appearance only suggests that the mobile syllable begins with a velar consonant, although it does not specify which one among [kg].

To complete the picture, one should add that the Ayoreo verbs fairly often inglobate, at the end of the root, one out of a set of morphemes which, in contradistinction to the mobile syllables, still preserve an autonomous meaning as independent lexemes, although the exact contribution to the verb's meaning is often upredictable. The most frequent ones are -(o)me, -(i)ji, -(a)ja, -ga(r)i, -(r)i, obviously related to the adpositions ome, iji and aja and the adverbs gai and rî. To distinguish them from the mobile syllables, they will be here called "lexical suffixes". Their behavior is peculiar, inasmuch as they follow the plural suffixes, showing that their inglobation into the root is relatively recent. Note that both series of suffixes (standard as in (a-c) and non-standard as in (d)) are involved:
(11) a. ñ-î-ra-me, m-â-ra-me, ch-î-ra-me, ñ-î-ra-ngo-me, uac-â-ra-ño-me 'to loose'
b. ñ-i-jnocha-me, m-a-jnocha-me, ch-i-jnocha-me, $\tilde{n}$-i-jnocha-ngo-me, uac-a-jnocha-ño-me 'to bury'
c. y-u-cu-gai, b-a-cu-gai, ch-u-cu-gai, y-u-cu-go-gai, uac-a-cu-yo-gai 'to mess up'
d. y-u-cajninga-ro-me, m-a-cajninga-ro-me, ch-u-cajninga-ro-me, y-u-cajninga-co-me, uac-a-cajninga-cho-me 'to run to and fro'

The nasalized suffixes in (a-b) are triggered by the root, for in (d) the mere adjunction of -me to the root does not induce the spread of nasalization. This shows that the default direction of nasalization-spread is indeed rightward and, in addition, that the lexical suffixes are not fully integrated into the word they adjoin to. In practice, they behave like clitics, partly retaining their own independent lexical status.

Summing up the observations so far, the overall scheme of the Indicative is as follows:

PREFIX - THEM. VOWEL - ROOT (with/without MOBILE SYLL.) - PLURAL SUFFIX - (LEXICAL
SYLL.)

As pointed out at the beginning of this section, the Ayoreo verb also exhibits a Nonindicative. This has a defective paradigm, for it only presents 2 s and 2 p . It is standardly used as imperative-injunctive, but it is also used in other types of non-declarative sentence, notably in the protasis of hypothetical sentences (cf. § 2.6.9). It is thus preferable not to call it Imperative, although at first sight it looks like one. Except for a small number of irregular verbs (cf. be! 'carry (it)!' from the irregular ñirî, marî, dî, ñiringo, uacariño 'to carry', or bo! 'go!' from the irregular yi(ji), babo/bo, jno, yicoi, uacaboyoi 'to go'), the paradigm of the Non-indicative is straightforward: $a$ - is prefixed to the root of the 2 s and 2 p. One might speculate that this morpheme is ultimately related to the $a$ particle conveying modal-epistemic meaning, regularly used in exclamative and interrogative sentences (in the latter case, alternating with $e$ ).

| Person |  |  | Ex: chirô 'deletes' | Ex: chirôre 'comes near' |
| :---: | :---: | :---: | :---: | :---: |
| 2s | a- | ROOT | arô | arôre |
| 2p | a- | ROOT -yo/ño/cho | arôño | arôcho |

Table 6. Non-indicative.

It should be observed that the older speakers - especially on the Bolivian side - often drop the first person prefix (both singular and plural) in present- and past-referring contexts. Younger speakers do not seem to follow this behavior. By contrast, the second person prefix (both singular and plural) is often dropped in future-referring contexts. In all such cases only the thematic vowel is left behind.

As a final remark, one should note that a number of Ayoreo verbs present a syntagmatic structure, whereby the predicate is followed - not necessarily with strict adjacency - by an invariable adverbial particle. For instance: yujuse gui(r)o 'I take care of', yiji udi 'I carry', yacâre $g a(r) i$ 'I thank'. $G a(r) i$ ('over, above'), in particular, is frequently used to build syntagmatic verbs.

### 2.6 Syntax

### 2.6.1. General features. Word order

The Ayoreo syntax is relatively simple. Unlike several native American languages, Ayoreo does not exhibit 'switch reference'. The default word-order is SVO, although it may be altered for pragmatic reasons. In genitival constructions, the order is determinant + determined (or modifier + head). Thus, Ayoreo is in this respect like English: namely, it exhibits symptoms of diachronic change, for the basic word-order and the determinant + determined order do not converge.

Demonstrative adjectives normally follow the noun they refer to (cf. gapua uaté 'that girl'); the same happens with demonstrative pronouns when used as the subject of a nominal predicate (cf. uerate uté 'he is good', lit.: good.MS.BF that.MS).

There is no case inflection. Indirect objects are expressed with the help of adpositions. Since, however, there are very few of them, one has some reason to surmise that the language might have had a case system at some earlier stage. The contrast between full and base-form might be seen as a remnant of it. In § 2.5.1 (as well as 2.5.2 as far as plural formation is concerned) the use of the base-form in morphological processes was illustrated. The distinction between base and full-form, however, is also syntactically relevant. Under specific conditions, the base-form is used in nominal predication (cf § 2.6.3) and in adjectival phrases (cf § 2.6.4). In all other situations, the full-form is used. Thus, one finds the full-form in any argumental - direct or indirect - position, while the base-form occurs in predicative position under certain conditions (even the case of adjectival phrases may be so interpreted, considering the predicative nature of adjectives).

Ayoreo makes abundant usage of pragmatic inference as far as the main arguments are concerned. Either the subject or the object may be left unexpressed whenever the context allows one to recover the salient information. This is especially true of third-person
pronouns. In all of the following sentences the direct object is recoverable through the context; in (c-d), in addition, the name of one participant is redundantly repeated. What clearly stands out in all these examples is the absence of those anaphoric mechanisms which would be obligatory in Indo-European languages:
(12) a. Ore chijna oriechoqui aja San Pedro. Eduguéjnai chigaru
3p brings thief LoC San Pedro chief ties
aja gui-guíjna cutade enga e ore mo. LOC 3-house pole COORD already 3P sleeps
'They brought the thief to San Pedro. The chief tied him to the house's pole and (then)
they went to bed'. (QCCB)
b. Eduguéjnai tibite enga chojnínga: -¡Pédro a, ajnime umuñurai chief shouts COORD says Pedro EPST take bull te a!- Jécute Pèdro chayó iji yui ujéta chijnime. this EPST then Pedro runs Loc there COMP takes 'The chief shouted loudly: -Pedro, get hold of that bull!- Then Pedro ran there in order to get hold of $i t$. ' (QCCB)
c. Diga e jnusina uje ujopie-raque Dupade enga then already remembers COMP powerful-INDET God COORD catecári Dupade.
speaks to God
'Finally he remembered that God is very powerful and prayed him'. (QCCB)
d. Jécute Sérgio chisiome aroi tome Ramon enga Ramon chijna then Sergio gives skin ADPOS Ramon CoordRamon brings aja Riberalta.
Loc Riberalta
'Then Sergio gave the skin to Ramon and he brought it yo Riberalta'. (QCCB)
2.6.2. Clause types: Declarative, injunctive, interrogative.

The following is an example of declarative sentence from a narration collected by the present author (the speaker is Dijaide, a well-known and respected wise man living in Tobité):
(13) Chise udire ore gapudie nga ore chipota pioi
finds those.F 3P girls COORD 3P lights fire
' $\ldots$ (he) finds them, the girls, and they lit a fire'. ${ }^{25}$ (DIJ)

[^18]In the above example the subject is implicit. In (14), by contrast, it is spelled out, but it is in postverbal position for pragmatic reasons, for the event is presented as new and focalized (jnese is an invariable quantifier adjective):

## (14) $\begin{array}{lll}\text { Chuje } \\ \text { hits }\end{array} \begin{aligned} & \text { ore ajerodie } \\ & \text { 3p sexes }\end{aligned} \quad \begin{aligned} & \text { jnese } \\ & \text { all }\end{aligned} \begin{aligned} & \text { ajnorai } \\ & \text { ray }\end{aligned} \quad \begin{aligned} & \text { ute } \\ & \text { this }\end{aligned}$

'...it hits all of their genital areas, that lightning'. (DIJ)
Sentence (12b) above provides the example of an injunctive sentence, characterized by the presence of the Non-Indicative and by the modal-epistemic marker $a$. Interrogative sentences are a more intriguing case. Below are a few examples:

```
(15)a. ¿Ja chaquesu poridie iji diri jnese?
    MOD cuts trees LOC day all
    'Did he cut trees all day long?' (QCCB)
    b. &Je gosi chigaru oriechoqui te e?
        MOD who ties thief that MOD
    `Who did tie that thief?'(QCCB)
    c. ¿Je gosode uje ore chimo?
    MOD who.PL COMP 3P sees
    'Whom were the ones that saw it' (QCCB)
    d. ¿Ore chicáji rique e?
    3P enters INTER MOD
    'Where did they go into?' (QCCB)
```

Sentence (a) is an example of yes/no question. It includes the modal-epistemic marker $j a$ [ha], which alternates with $a, e$ and $j e$ in this function. It is not possible, for the time being, to point out the difference, if any, among these markers (it possibly depends on mere phonotactic reasons). Sentences (b-d) are wh-questions. One thing that immediately strikes the imagination is the relative shortage of such words in Ayoreo. The word gosi (MP gosode, FS goto, FP gotodie), apart from its role as a wh-word, is also used in other functions: especially in the plural, it means 'those who / the people', and is standardly used to designate specific groups of people (e.g., Uechaigosode the Ayoreo living at the other side'). Particularly striking is the case of the interrogative word cho ric, or cho rique with euphonic vocoid (where cho is the 3 s of the auxiliary verb yo, bo, cho; cf. § 2.4.5), which may receive several readings depending on the context, among which:
(16) a. ¿Cho rique chungúperejnanie uje ore chimo? INTER birds COMP 3P see
'How many birds did they see?' (QCCB)
b. ¿Oriechoqui cho rique iji erámi?
thief INTER LOC open space/jungle
'How did the thief get into the jungle?' (QCCB)
c. Uje cojñoi pota chácaja ajei ¿je cho rique e? COMP stranger wants enter inside MOD INTER MOD
'When the stranger wanted to get inside, what did it happen?' (QCCB)
d. ¿Ijocayasóri cho ring-ome e?
pilot INTER-ADPOS MOD [NB: cho ringome $=$ cho rique + ome $]$
'What did the pilot say (to him)?' (QCCB)
e. ¿Cho rique je jetiga acaji jne i-daidatei?

INTER MOD COMP stay_in.NONINDIC FUT 3-town
'(Until) when will (it be that) you stay in his town? (field-notes)
Almost equally ambiguous is the wh-word gotique, which may mean 'why' and 'what', sometimes preserving its ambiguity even in context, as in (a) below. It is worth underlining that in most interrogative expressions the -ric/tic/nic suffix of the indeterminate shows up, and in locative expressions it even obtains independent lexical status, as in (b) below or in (15d) above:

'Why was don Felipe afraid / what was don Felipe afraid of?' (QCCB)
b. ¿Oriechoqui déji rique e?
thief stays-INDET MOD
'Where was the thief?' (QCCB)
A remarkable feature of Ayoreo interrogative sentences consists in the use of "verbal nouns", i.e. nominal forms instead of inflected verbs. Below are some examples:

```
(18)a. ¿Ore imó-rique gotique e?
    3p see-INDET INTER MOD
    `What did they see?' (QCCB)
    b. ¿Je isa-tique a?
        MOD grasp-INDET MOD
    `What did he/she/they take/find?' (QCCB)
    c. ¿Ajiri-tique e?
        observe-INDET MOD
        'What did he observe?' (QCCB)
    d. ¿Gosode dayé ichode?
        who.PL father shoot.PL
        'Which animals did the father hit?' (QCCB)
```

The nominal nature of these forms is particularly evident in (d), where the plural ichode is used (in a clearly genitival structure); but the very fact of adjoining the indeterminate suffix as in (a-c), thus expressing the referential vagueness inherent in interrogatives, would perhaps be a sufficient proof of this. In addition to this, one should observe that
ajiri in (c) should more exactly be translated as 'sight / what is seen'; the verbal root proper for 'observe' is ajire. Not infrequently, the meaning is ambivalent, oscillating between eventual and referential: (a) and (b) could also be translated as 'Which were the things that he saw?', 'Which was the thing that he found?'. Incidentally, the choice between singular and plural in (a-b), as well as the identity of the perceiver in (b), depends on context's knowledge; the form in itself does not necessarily show this, although the plural might be used (ajiritigo a? 'which things did he see?'). Note that the use of the nominal forms is not compulsory: an informant provided for (a) the alternative version ¿Ore chimo gotique e? Even more importantly, it is not always possible to use the verbal noun for any given verb; the same informant categorically refused such form in other sentences. It seems, then, that this way of building interrogative sentences is not entirely productive; presumably, the verbal noun is a recessive form, only available for a subset of the Ayoreo verbs. However, when this is the case, it is possibly the only and at any rate the by-far preferred way of building a question; besides, the speakers do not show the least hesitation in getting the interpretation appropriate to the given context, even when the expression might appear fairly ambiguous.

### 2.6.3. Copula and existential constructions; nominal/adjectival predication

The copula is in most cases left implicit, as in: yi-boti asi-pise 'my food is very hot (piquant)' (lit.: 1s-food hot-ELAT); godoque yu 'I am lean', godoc ute/uate 'he/she is lean', godocho yoc 'we are lean', godocho ore 'they are lean' (for reasons that will soon become clear, the predicatively used adjective must be in the base-form; frequently, it does not even inflect for number, as in godoque yoc 'we are lean'). Copula suppression was also evident in some of the interrogative sentences seen in the preceding section, e.g. in (18). For reasons of emphasis, the invariable copula ( $t$ )u may be used, as in ;Oriechoqui tu! 'it is a thief!'. Note that (t)u does not inflect for person: Uyu / ua / (ute/uate/ore)... u 'it is me / you / he/she/they...'. When the copula or an existential verb overtly appears, the nominal predicate takes on the full- or indeterminate-form.

Existential constructions are based on the third person form of the predicate yugusiji, bagusiji, deji, yugucoji, uacagusoji 'be there / stay / exist' or on the defective predicate cuse 'there is / exists'; cf. Emi cuse 'there is wind' and:

| (19) Leonárdo | chiroque | d-abi | ujetiga chajire | gotique uje | deji |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Leonardo | sends | 3.RFL-son COMP | observe INTER | COMP | there_is |
| ujuya <br> trap | ajei. (QCCB) |  |  |  |  |
| 'Leonard | o sends his ow | son to see what | at is inside the trap |  |  |

Negative existential sentences are built by means of the defective verb ijnoc, which inglobates the negation: Ijnoque yodi 'there is no water'.

When the copula is omitted, as is frequently the case, a major feature of Ayoreo syntax emerges. In such contexts, the nominal predicate appears in the base-form. This applies to both adjectives, as in (a-b), and nouns, as in (c-d). It will not go unnoticed that this predicative use of the base-form reduces somehow the distance between verbs and nouns. Here again one can detect an areal feature, which aligns Ayoreo with the many Amerindian languages showing a more or less radical omnipredicative tendency (in the sense of Launey 2004). ${ }^{26}$ In the following examples, base-forms are shown in italics:
(20) a. Cucoi ajamap. Cojñoi queru-pis.
boat small stranger big-ELAT
'The boat was small and the stranger very big'. (QCCB)
b. Enga ejnaretaque Santiago que, mu e ninguira. COORD ill Santiago PAST but already improves 'Santiago had been ill, but was already beginning to feel better'. (QCCB)
c. ¡Que ucaratode gotique! ¡Mu ajemicho! ¡Ajningarangui-pise que! NEG snoring_sounds INTER but roaring_sounds brave-ELAT PAST 'What are you telling me about snoring! It is a roaring! And it is a very fierce animal!'
(QCCB)
d. ¡Carataque que, don Pedro a! jaguar PAST don Pedro MOD 'It was a jaguar, don Pedro!'. (QCCB)

If, however, a copular verb is used, then (as already mentioned) the full-form appears, as shown by underlining in the examples below. Note that in (b) the word for alligator actually, a particular type of it - first appears in base-form in the clause without copula, and then in full-form in the clause with overt copula. Similarly in (c), an example stemming from a sari, ${ }^{27}$ the full and the base-form alternate:
(21) a. Jnani catad-abi deji enga i-pisi tu Tiritãi.

[^19]man small-DIM there_is COORD name-ELAT COP Tiritai 'There was a very tiny man, whose nickname was Tiritai'. (QCCB)

$\begin{array}{llll}\text { b. ¿Cajire } & \text { to! } \\ \text { look } \\ \text { too }\end{array} \begin{aligned} & \text { Arócojna-quedejna! alligator-different }\end{aligned} \quad \begin{aligned} & \text { ¡Arócojna-quedejnai } \\ & \text { alligator-different }\end{aligned} \begin{aligned} & \text { deji } \\ & \text { there_is }\end{aligned} \begin{gathered}\text { ne! } \\ \text { there }\end{gathered}$ 'Look there! It is an alligator! There is an alligator right there!'. (QCCB)
c. Ditai tu yu nga cuchape yu eeehhh killing_weapon COP 1 s COORD big 1s EXCL 'I am the killing weapon and I am powerful!!!'. (Fischermann 1988)
2.6.4. Nouns modified by adjectives

The internal structure of adjectival phrases is the other instance where the base-form finds its syntactic justification. In most cases, only the last member of such phrases appears in full-form, while the preceding member(s) appear(s) in the base-form. In addition, and in contrast to predicative nominal phrases - cf. example (20c) - the preceding member(s) only appear(s) in singular form even when the whole phrase has plural reference. In the examples to follow, base-forms appear in italics, while full-forms are underlined:
(22) a. Chayo enga cheru pite uñai iji yodi.
runs COORD climbs pole other LOC water
'He ran and climbed up another pole in the water'. (QCCB)
b. Diga chujé uga sijnai ome da-quesei.
then hits snake poisonous ADPOS 3.RFL-knife
'Then he killed the poisonous snake with his knife'. (QCCB)
c. Leoncio chica-ji cojñoque quedejnai enga tibite.

Leoncio goes-LOC gringo different COORD shouts
'Leoncio went to the gringo's place and shouted'. (QCCB)
d. Chimo carataque gare querújnane iji ta.
sees jaguar.SG two.SG big.PL LOC LOC
'He saw two big jaguars right there'. (QCCB)
e. Ore chudute dara quedéjnane.

3P hear voice.SG different.PL
‘They heard strange voices'. (QCCB)
Note the noun + adjective order. The phrase querujna caratade would mean '(they are) big, the jaguars'. It is also worth noting that numerals take part to this syntactic mechanism, thus behaving as normal adjectives: for instance, in (d) gare 'two' shows up in base-form, for the inflection can only sit on the last adjectival element. In another part of the same text, however, one finds carataque gareode ore chajna 'two jaguars were following him', where gareode is the full-form plural. Demonstrative adjectives, by contrast, do not take part to the described syntactic mechanism and thus independently
inflect for gender and plural as needed: querujna poridie uside 'they are big, these trees' (lit.: big.FS.BF trees.FP.FF those.FP).

Occasional violations of the described behavior may be observed, although this syntactic strategy seems to be followed rather consistently. The following interpretation may be put forth: in normal cases, adjectival phrases consist of the creation of a compound-like construction, whereby the first element(s) take(s) on the base-form just like in fully-fledged Ayoreo compounds (cf. § 2.5.1). ${ }^{28}$ This accounts for the lack of inflection (most dramatically, of the plural marking), which only appears on the very last element of the phrase.

As a first approximation, one might propose that any occurrence of the base-form involves some kind of adjunction, as in the three situations listed below:
(i) Adjunction of a nominal (noun or adjective) into another noun: see COMPOUND FORMATION. ${ }^{29}$
(ii) Adjunction of a noun+adjective compound-like structure into the Specifier of a Determiner Phrase, following suggestions by Heycock \& Zamparelli (2005): see NOUNS + ADJECTIVE(S) PHRASES.

This makes a lot of sense in a language with no articles like Ayoreo, for the syntactic movement described in this section might be required precisely in order to provide a referential interpretation to the nominal. In practice, the whole nominal phrase happens to be telescoped into a sort of compound, where the last, inflection-carrying element takes on the referential burden of the whole noun phrase. Demonstratives - which do not take part to this morphosyntactic mechanism - provide additional evidence. Since they are intrinsically referential elements, they do not need to be involved in any kind of movement; indeed, they invariably follow the entire adjectival phrase, presumably occupying the Head of the Determiner phrase. Unsurprisingly, they always present inflection, agreeing in gender and number with the whole nominal phrase (as a matter of fact, they do not even seem to have a base-form of their own).

[^20](iii) Adjunction of a nominal into the 'Predication Head', here exploiting suggestions by Bowers (1993): see PREDICATIVE NOMINALS in copula-less clauses.

In this connection, one might propose that Ayoreo nominals come out of the lexicon as predicates (in the shape of base-form). This allows them to be directly used in predicative position. In order for them to be used as arguments, they need to receive an inflectional morpheme (full- or indeterminate-form). The latter situation occurs when the copula overtly appears, for then the sort of adjunction described in (iii) cannot take place, and the nominals show up with the appropriate inflectional affixes (as suggested under (ii) above).

One might object that even the base-form has its own inflection, for it presents its own plural as distinct from the full- and indeterminate-form plurals (cf. 20c). However, as suggested in § 2.5.4, the base-form plural might be the result of a historical process of inglobation of an independent sentential plurality marker. Whatever the case, the only situation where the base-form plurals occur is to be found in contexts where a predicatively used nominal has plural reference; in all other cases, the uninflected, predicatively-oriented form occurs.

The intrinsically predicative nature of Ayoreo nominals directly accounts for the use of the base-form in predicative position and in the non-final member(s) of compounds. In the latter case, the predicative load rests entirely on the first element (or elements) - i.e., the determinant - and indeed this shows up in base form. Noun + adjective(s) phrases, however, seem to pose a problem. One would expect the adjective, which should carry the predicative load, to appear in base-form before the noun, but this is exactly the reverse of what happens. Perhaps, then, the Ayoreo noun+adjective(s) phrases should be read differently from the analogous structures of other languages, such as the Indo-European ones: uga sijnai in (22b) should possibly be interpreted as 'the poisonous one which is a snake', rather than 'the snake which is poisonous'.
2.6.5. Possessive and genitival constructions; attributive phrases.

The use of possessive markers was implicitly illustrated in (5), § 2.5 .2 , where the behavior of the possessive prefixes was discussed. Due to their affixal nature, they obviously do not follow the adjectival phrase's syntax. As for the possessive pronoun, its paradigm was shown in table 5.

Since Ayoreo lacks the verb 'to have', the corresponding possessive sentences are built by means of the existential copulas deji and cuse (cf. § 2.6.3): yi-guijnai deji 'I have a house' (lit.: 1s-house there is), abi cuse 'he/she/they has/have a son' (lit.: son there is).

Genitival constructions are built by mere juxtaposition of the two nouns, with determinant + determined order. In contrast to adjectival phrases, both nouns appear in full-form: buricai / buricade gajnesôri 'horse's / horses' owner', cuchabasui diringai 'airplane's arrival'. This also applies to multiple genitival relations, as in: cabayudie ijnanie irisode '(the) cows' udders' milk' (lit.: cows udders milk.PL), Dupade uruode atatasorone unai 'one of announcers of God's words', i.e. 'one of the prophets' (lit.: God words announcers other). The genitival relation is quite often reinforced by means of a possessive marker, as in: Dijaide acoté i-guijnai 'Dijaide's spouse's house' (lit.: 3house), Herodes i-toringai 'Herodes's death’ (lit.: 3-death), Judíode angaranone ore asutedie 'Jews' priests’ chiefs’ (lit.: Jews priests 3p chiefs), iji Judéa gosode ore uniri 'in the land of the people of Judea' (lit.: Judea people 3p land).

Note, however, that with toponyms and geographical names the determinant follows the determined: uniri Judéa 'land of Judea', guidai Belen '(the) town of Betlehem'. One wonders whether this is due to Castillan influence.
2.6.6. Reflexive and reciprocal constructions

The reflexive pronouns are identical to the independent pronouns (cf. table 5), except for third-person, to which no dedicated independent singular pronoun corresponds (ore is the 3 p pronoun). For both singular and plural the reflexive pronoun is $r e$; in addition, but only for 3 p, one can employ rac. This is congruent with the universal tendency, whereby the third person is the best candidate, in the reflexive series, for departing from the independent pronouns. As an illustration, consider: 1s yurusare yu, 2s barusare ua, 3s/p churusare re, 1p yurusaco yoc, 2 p uacarusacho uac, 3 p churusare rac 'to embellish oneself'. Consider also: ñecare yu, becare ua, checare re 'to transform oneself'; yuque re 'he/she/they kill(s) himself/herself/themselves', yuque re 'they kill themselves'.

As an alternative, with particular verbs one may use the inherently possessed word 1s yibai, 2s babai, 3s/p gai/dabai, 1p yoquibai, 2p uacabai 'my, your etc. body'. Thus:
yuru yibai 'I wash myself', baru babai 'you wash yourself', yaco yibai 'I cover myself', chaco dabai 'he/she/they cover(s) himself/herself/themselves'.

The reciprocal pronoun is the invariable ñane, which is used in all relevant context, without distinguishing between symmetric and asymmetric predicates. As examples of the former, consider: Cojñone ayoreode je câra ome ñane 'Gringos and Ayoreos differ from each other', Ore chacariji ñane ejode 'they sit near each other' (lit.: each other's side). As examples of the latter, consider instead: Chequedie ore chuje nane 'the women were fighting each other' (lit.: women 3P hit RECP), Ore taquiriji nane gai 'They inspect each other's lice'.

### 2.6.7. Argument types

As already observed, Ayoreo does not have case morphology. Indirect objects are marked by adpositions, which in most cases precede the noun they govern. In practice, however, the following three do most of the job: $(t) o m e,(t) i j i$ and $(t) a j a$. The last two are locative adpositions; the first one may be used to mark dative (a), instrument (b), cause (c), purpose (d) or manner (e). Note, however, that the dative relationship may also be conveyed by the locatives $i j i$ and $a j a$, as shown by examples (32) and (39b):

| (23) a. | Sérgio | chingo | ai | aroi | tome |  | n. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sérgio | shows | jaguar | skin | S |  | Ramon |
|  |  | she | agu |  | Ramon |  | CCB) |

b. Mu oriechoqui chejñu enuei ome da-matarane. But thief unties rope ADPOS 3.RFL-teeth 'But the thief cut the knot with his teeth'. (QCCB)
c. Enga nína re ome aroi uje querújna. COORD rejoyce REFL ADPOS skin COMP big 'And he rejoyed himself for the skin because it was big'. (QCCB)
d. Têra pei ujetiga doi bisidode ome. sells piece COMP goes remedies ADPOS 'He sold a piece so that he could buy medicine with'. (QCCB)
e. Ore chacate ore ome Dupade uruode. 3p teach 3p ADPOS god words 'They were teaching them along God's words'. (NTM 1982)
f. Angureti-gai iji Dupade que cho Guido angureti-gai go. faith-LOC LOC God NEG seems Guido faith-LOC POL 'Her faith in God is not like Guido's faith in God'. (QCCB)
g. Ore chichaga da-gataidie aja jnumi.

3P bends 3.RFL-knees LOC earth
'They knelt on the ground'. (QCCB)
h. Enga ore chijnoque Víctor aja señóra Emília i-guijnai. COORD 3P carries Víctor towards señora Emília 3-house ‘And they carried Víctor to Señora Emília’s house’. (QCCB)

Unsurprisingly, given the shortage of devices to specify the arguments' syntactic roles, Ayoreo has no way to build passive sentences. Passive interpretation is merely conveyed by morphological devices (cf. § 2.5.4).

In addition to the three adpositions illustrated in (23), there are a number of locative adpositions to convey the relevant positional relations, among which the following (as shown by underlining): ute chacaja daguijnai ajei 'he enters into [lit.: inside] his own house', uate chicaji daguijnai yui 'she goes towards her own house', putugutonai deji poria udi / guiguijnai iquei 'the cat is under the tree / in front of the house'. In the last examples, as well as in (d) above, the adpositions show up as postpositions. A number of them may also be used as adverbs, and this also applies to $i j i$ and $a j a$ :
(24) a. Ore chague iji gaté ujetiga ore tangari-pise.

3p stops LOC above COMP 3p listen-Elat 'They stood up so that they could listen well'. (QCCB)
$\begin{array}{lllll}\text { b. } & \begin{array}{l}\text { Chuningame } \\ \text { gets_surprised }\end{array} & \begin{array}{l}\text { mu eti } \\ \text { but }\end{array} & \begin{array}{l}\text { uyujnai } \\ \text { storm }\end{array} & \begin{array}{l}\text { chubuchu } \\ \text { blows }\end{array} \\ \text { aja quedejnane } \\ \text { LOC different.PL }\end{array}$ 'All of a sudden, a storm blew in every direction'. (QCCB)

It is worth noting that $i j i$ and aja are often inglobated into the verb, as in putugutonai choja poría 'the cat jumps onto the tree'. Similar instances are to be found in other examples presented so far (e.g., (15d) and (22c)). However, in at least some cases the adposition is detachable, as in : chataja ore 'he/she/they helped them', chata cuchade aja ore 'he/she/they helped them (with) things'.

As mentioned above, Ayoreo nouns can appear in the indeterminate-form, which is used whenever the speaker refers to a non-specific argument. The contrast between (26a) and (26b) is particularly revealing:

Jirãque ore chise burica-rigo. suddenly 3p meet horse-INDET.PL 'Suddenly they met (some) horses.' (QCCB)
(26) a. María pota nona atai/*ata-tic uté uje chise dirica M wants accompanies rich/rich-INDET that COMP meets yesterday 'María wants to marry that richman whom she met yesterday.'
b. María pota nona *atai/ata-tique mu cama chimó

M wants accompanies rich/rich-INDET but not_yet sees 'María wants to marry a richman, but she has not yet met him.' (field-notes)
Diga e jnusina uje ujopie-raque Dupade. suddelnly. already remembers COMP spiritual_power-INDET God 'Suddenly he got to remember that God is a powerful spirit'. (QCCB)

The indeterminate-form is particularly frequent, for obvious semantic reasons, in negated and future-referring clauses, where the referents often are, on pragmatic grounds, non-specific. ${ }^{30}$ The following examples illustrate the former case:
(28) a. Mu que etotigue-rique cuse muñi Dupade chataja. but NEG strength-INDET there_is but God helps 'He feels rather weak (lit.: has no strength), but God helps him'. (QCCB)
b. Dire uñai enga Pablo chucúe dajne lima.
day other COORD Pablo seeks 3 whetstone Mu que chiraja joga-tique. but NEG knows place-INDET
'On the next day Pablo looked for his whetstone, but he could not find it anywhere'. (QCCB)

### 2.6.8. Negation

Ayoreo has two types of negations: one (que) is used for declarative "realis" sentences (present- or past-oriented), the other ( $c a$ ) for imperative and "irrealis" sentences (future- or potential/hypothetical-oriented). The two types thus differ in terms of modal import. It is tempting to speculate that $c a$ results from the 'realis' negative que plus $a$, the modal particle to be found in exclamative and interrogative sentences.

As examples of "realis" negation, consider the following sentences. As (c-d) show, que is often accompanied by the reinforcing polarity item go in clause-final position, which is also to be found in (23f):
(29)a. Mu umuñurai que chayo aja dosa-tique. but bull NEG runs LOC side-INDET
'But the bull did not run towards the side (of the field)'. (QCCB)
b. ¿Que tongome yu ujetiga yi-pesu cucha-rique! -- chojninga. NEG possible 1 COMP 1-do thing-INDET says
'I cannot do anything! - he said' (lit.: it is not possible for me to do anything).
(QCCB)
c. Mu Sérgio que chuninga ore go.

[^21]but Sérgio NEG notices 3P POL 'But Sérgio did not notice them at all'. (QCCB)
d. Que yame go. Que cuchiso go. Que uñec u-po go. NEG monkey POL NEG animal POL NEG other COP-also POL 'It was no monkey, no animal, nothing of the sort'. (QCCB)

As examples of "irrealis" negation, consider instead the following, where (a) presents a negative imperative clause, (b) a final clause, (c) an epistemic clause, (d) a future-referring clause. What all these examples share is the fact that the event referred to is not considered to be a matter of fact, for the future course of events might prevent it from happening:
(30)a. José a, David ape disi ejo a, ca o ba-yugu ua.

Joseph MOD David son child new MOD NEG AUX.NON.IND 2-preoccupation
2
Enga ca etaque bajma Maria. Enga ca aya.
COORD NEG refuse.NONIND fiancée Mary COORD NEG give_up.Non.Ind 'Joseph! the new-born child is a son of David, do not worry! And do not despise
your
fiancée Mary! And do not give up!'. (NTM 1982)
b. Gaidi u gu ujetiga ca ore chedo iji erami. desire COP only COMP NEG 3P criticizes LOC world 'His only desire is that people do not go around gossiping about her'. (NTM 1982)
c. ¿Ja ca Galilea gosode u udore ore a?. MOD NEG Galilea people COP those3P MOD 'Aren't they people of Galilea, those there?'. (NTM 1982)
d. Mu ata-pisa-ja ba-rogode uyoque enga ca yitodogo but help.NON.Ind-ELAT-LOC 2-servants 1P COORD NEG fear 'Do help us, your servants, and we shall not fear'. (NTM 1982)

In addition, Ayoreo presents a few synthetic negative words, like the adverb cama 'not yet' and the negative existential ijnoc 'there is not'. Higham et al. (2000) report the suffix -jma which can be added to some nouns or adjectives to yield the opposite meaning (e.g., imoi 'what is seen', imojma 'what is not seen'). This morpheme appears however to be lexically restricted and non-productive.

By contrast, Ayoreo lacks the negative counterparts of quantifier pronouns. To convey the meaning of 'nobody' one should employ the negative que/ca followed (not necessarily in adjacence) by ayorei 'person', or uñai 'other', or uñec (F uñárac) 'somebody'.

### 2.6.9. Modality and evidentiality

As already pointed out, the Non-Indicative is typically used in imperative sentences, including negated imperatives as (30a). It is also used, however, in clauses conveying
some sort of "irrealis" meaning, such as hypothetical clauses (31) or even clauses with plain future-reference (37e):

$$
\begin{array}{llllll}
\text { Ujétiga } & \text { asiome } & \text { enga } & \text { yiji ore } & \text { tome } & \text { poca }  \tag{31}\\
\text { Comp } & \text { give.Non.IND Coorda } \\
\text { Come } & \text { l.buy } & \text { ADPOS weapon big } \\
\text { ome } & \text { ua } & \text { iji } & \text { Riberalta } & \text { jne.-- } & \text { chojnínga. }
\end{array}
$$

The most frequent means to express modal meanings, especially when counterfactuality is at stake (as in the following two sentences), consists however in attaching the suffix rasi/rase/rasa to the verb (the actual shape depends on vowel-harmonic principles). In (37a), below, one can find a further use of this marker in a clause with conative reading:

$$
\begin{equation*}
 \tag{32}
\end{equation*}
$$

A ca dijidi-rase mu socase ore tôria.
MOD NEG rotten-MOD but suddenly 3P steal
'And even though it (your goods) would not waste away, somebody would suddenly steal it'. (NTM 1982)

Higham et al. hint at a suffix which, depending on the verb it attaches to, can take on several shapes (-ipie, -pie, -pia, -pu, -pua). It is lexically restricted: not all verbs allow it. It conveys a meaning of distrust or uncertainty about the truth of what is talked about. The informants consulted did not show active master of this evidently recessive marker.

In the domain of evidentiality, one should quote the marker chi, which indicates that the speaker did not directly witness the event (second-hand knowledge), although it does not imply lack of credibility of the reported event. It is very frequently used in narratives, often repeated at relatively short textual distances to enhance the attitude of the speaker with respect to the content of the narrative. The following is the beginning of a narrative collected by the present author:


[^22]
## COORD EVID EVID grizzler EMPH father

'Once upon a time Ugobedai was, so they say, a person; his name was Ugobedai; and, so they say, they called him Ugobedai precisely because he was, so they say, the father of a grizzler'.

The etymology of chi is obscure. It is tempting to regard it as the shortening of the third-person form of some verb of saying, only retaining the initial third-person affix plus the thematic vowel. A possible candidate is chingo '(they) say / show'.

Considering the absolute lack of aspectual and temporal markers in verb declension, one might wish to claim that Ayoreo is, in Bhat's (1999) terms, a mood-prominent language. Support to this claim stems from: (i) the existence of two modally-sensitive negations ("realis" que, "irrealis" ca); (ii) the frequent use of modal markers, with special regard to imperative and interrogative sentences (cf. (j)a, (j)e); (iii) the abundant use of evidential chi in narratives; (iv) the availability of mood-oriented devices in verbs declension (Non-Indicative, -rasi/rase/rasa suffix). See § 2.6.11 for a further piece of evidence.

### 2.6.10. Phrase and clause coordination

Nouns and phrase coordination is obtained by mere juxtaposition. The recapitulating plural pronoun is almost compulsory in such cases:
a. Tito, cojñoi ore chisôre.

Tito gringo $3 \mathrm{P} \quad$ goes for a walk
'Tito and a gringo were going hunting'. (QCCB)
 'At that point the man and (his) two sons saw (it)'. (QCCB)

Clause coordination is essentially based on the coordinative conjunction enga (often shortened as $n g a$ ) and the adversative conjunction $m u$. The latter is often used as Cast. pero, except that its syntactic position may differ, for it does not need to introduce the clause, as in the following example. Several examples in this chapter present instances of this connector, showing the rather wide range of uses it may cover (20b-c; 23b; 24b; 26b; 28a-b; 29a; 29c; 30d; 33; 37a):


The coordinative conjunction enga also has a distinctive behavior. Although it is often right where one would expect it to be, it is occasionally placed at the end of a clause, as in (e-f) below. This particular phenomenon will be further discussed in the next section. Example (c) shows a fairly frequent way of introducing a sentence in a narrative, by means of a coordinated temporal localizer (lit.: '(it was) another day and...'); in the translation, the coordinator is best left out (cf. also (28b)). Finally, in (d) enga seems to convey an emphatic meaning, close to Cast. hasta:
(37)a. Daye chicho<po>rase rî, mu chicho ejoi enga chicho Tito father shoots<also>MOD ITER but shoots side COORD shoots Tito 'The father tried to shoot once more, but he missed the target and hit Tito'. (QCCB)
b. Enga e ore chicá<po>ji cucoi te rî. COORD already 3 P returns<also>LOC boat that ITER
'And so they returned once more to the boat'. (QCCB)
c. Dire uñai enga que ore chise oriechoqui. day other COORD NEG 3P finds thief
'On the next day they did not find the thief'. (QCCB)
d. Eduguéjnai chojnínga. --iÍsenga cuchabasui chaquesu enga umuñurai!
chief says certainly airplane cuts/crosses COORD bull
'The chief said: -- The airplane will definitely hit that bull!'. (QCCB)
e. Isenga a ca ajé cucha-rique jne enga.
certainly MOD NEG hit.NON.IND thing-INDET then COORD
'I am sure you are not going to find anything (while hunting)'. (QCCB)
f. Y-ujode ayoreo uaque a uje e uac-angureta-yo Dupade 1 s-similar.PL ayoreo 2P MOD COMP already 2P-believe-2P God enga II Dupade e cho d-abi-ji uaque. COORD God already seems 3.RFL-son-LOC 2P
'My brothers Ayoreo, since you now believe in God, God now considers your as his sons'. (IP)

### 2.6.11. Subordination and para-hypotaxis.

It is not possible to present here a complete treatment of all types of subordination. The few examples that follow are merely suggestive. One thing that immediately stands out is the relative shortage of subordinating connectives, with the consequence that the few existing ones appear to be rather polyvalent. For instance, in (38) uje (sometimes reduced to $j e$ ) introduces relative (a-b), temporal (c) and causal clauses (d), while ujetiga (sometimes reduced to jetiga, jeta or eti) introduces both hypothetical (31-32) and final clauses (e). The division of labor between uje and ujetiga is reminiscent of the divide opposing the two negations ("realis" que / "irrealis" ca) and thus lends further support to
the claim that Ayoreo is a mood-prominent language. Furthermore, the scarsity of complementizers invites the speculation that Ayoreo might have had an intensive use of converbal structures at previous stages, so that the development of finite-verb subordinate clauses might have been a relatively recent evolution. This is consistent with what was noted above, in § 2.6.2, concerning the availability of the so-called 'verbal noun' in interrogative sentences:


It is worth noting that in relative clauses the complementizer - not a real pronoun may be dispensed with, as shown by:

| (39) a. | Ajna ne <br> bring.Non.Ind Loc | cuchade <br> things | udojo <br> those | (uje) <br> (COMP) | chisiome <br> gives | ua. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2s |  |  |  |  |  |  |

'Bring me here what he gave you'. (Field-notes)

$$
\begin{array}{llll}
\text { b. Ajna } & \text { uaté, } & \text { aja ua } \tilde{n} \text {-amini! } \\
\text { follow.Non.Ind } & \text { that.F } & \text { Loc } 2 \mathrm{~s} & 1 \text { s-point_out } \\
\text { 'Follow the woman (that) I pointed out to you!'. (Field-notes) }
\end{array}
$$

Declarative clauses equally lack any complementizer, as in yojninga e jno 'I say that she/he/they shall go' (lit. I say: "Now she/he/they shall go"), chojninga e yico 'she/he/they say that we shall go' ${ }^{32}$ By contrast, clause-final maringa plays the role of concessive connective:
ujetiga adute cucha ajmacaca-rique maringa

[^23]```
COMP 2P.listen.NONIND thing ill_fated-INDET although
je ca atodo cucha ajmacacarode
MOD NEG fear.IMP thing ill_fated.PL
'Even though you might hear threats, do not be afraid of them'. (IP)
```

A distinctive feature of Ayoreo syntax is the use of para-hypotactic structures, which lend further support to the hypothesis that subordination is a relatively recent development. This phenomenon may be observed whenever the first position in the sentence is occupied by the dependent clause, as in (31), (32), (37f). In all these examples, the clause introduced by uje or ujetiga ends with (e)nga, which creates a sort of paratactic bridge towards the main clause. This is also to be observed in (40), where maringa (which ostensibly includes enga) is strategically placed at the boundary between dependent and main clause. Actually, the bridging role of enga is also evident in sentences beginning with a temporal circumstantial - like dire uñai enga in (28b) and (37c) - as well as, occasionally, in sentences beginning with a discourse marker:

| (41) Jebasa nga | ayoreode | cojñone | ore todo | ujno(jo) | yoc- |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| orachade. |  |  |  |  |  |  |
| $\quad$ however COORD | persons | gringos | 3P | 3.fear | those | 1P- |
| weapons |  |  |  |  |  |  |

'However the Ayoreos and the gringos were afraid of those, our weapons'. (SAM)

## Text

The following text stems from the recording of the memories of the old chief Samane, kindly made available to the author by APCOB-Bolivia (Santa Cruz de la Sierra), an ONG directed by Jürgen Riester. The recording is part of the project: "Recuperar la Memoria Oral de los Indígenas".
Samane narrates the crucial encounter with the gringos, when both sides first decided to put down the weapons; subsequently, he recalls previous episodes, where he showed his courage. The transcription contains a few cuts: in three cases, they entirely (or almost entirely) correspond to brief interruptions by another speaker, in two other cases, however, even the native speakers consulted did not manage to fully understand the recording.

Yoqui-tododie u ore i-bocadie, que ore ch-amurasepocadie nga, 1P-fears COP 3P 3-fire_weapons NEG 3P 3-put down fire_weapons COORD yi-todo-go ore chi ajinga-raque ore ch-ajura da-bocadie. 1P-fear-1P 3P EVID angry-INDET.F 3P 3-remains_with 3.RFL-fire_weapons 'We were afraid of their rifles, they did not put the rifles down; we were afraid of them, so the story goes, somewhat angry (their weapon), they remained with their own rifles.'

Mu ujeta ore ch-amuraseda-bocadie nga quepitode ore. but COMP 3P 3-put_down 3.RFL-fire_weapons COORD NEG fears 3P 'But in order for them to put down their own rifles, they should not have fear.'

Yoqui-tododie $u$ nanique ore i-bocadie. 1P-fears COP time_back 3P 3-fire_weapons 'In those days, their rifles were our (cause for) fear.'

|  |  |  | ñone | ore todo | ujno(jo) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COORD | pe | gring | 3P |  |  | 'Therefore, the Ayoreos and the gringos were afraid of those weapons of ours.'

[...] Orech-amata pocadie nga ore chi ch-arite ejoi. [...] 3P 3-join weapons COORD 3P EVID put_down side 'They collected the weapons and, so the story goes, put them down at their side.'

Ayoreode choyoc-orachade jîrei iji de, pocadie jîrei iji de. persons AUX 1P-weapons much LOC LOC fire_weapons much LOC LOC 'The Ayoreos, we had a lot of weapons there, a lot of weapons there.'

```
Nga y-aca-go-i te quenejnai.
COORD 1P-sit_down-1 P-LOC LOC different
```

'We sat down a little farther.'

'They said, the gringos, that is was good; when their weapons were far from them and the rifles equally far from us, the gringos said "Bonito", because, so the story goes, our weapons were far from us.',
[... another speaker says a few words, then Samane goes on]
Ejê cojñone ore ajeode u udore.
yes gringos 3 P inside.PL COP those
'Yes, these were the gringos' thoughts.'
Chiore todo yoque gu ujeta y-uje-go ore iji taningai gu. EVID 3P 3.fear 1P ASRT COMP 1P-hit-1P 3P LOC beginning ASRT 'Apparently, at the beginning they were definitely afraid that we would hit them.'
[... another speaker says a few words, then Samane goes on]
Nga uerate. Ch-uje uyoque to nanique mu ch-icadigui. COORD good 3-hit 1P also time_back but 3 -forget
'It is good. They also hit us in those old days, but they forgot about it.'

right- LoC there COORD Ipeâi COP victim
'At that time, I too hit one of the gringos; I threw (an arrow) in the forehead, exactly there. And it was Ipeâi's victim.'
[NB: according to the Ayoreo's traditional habits, the actual killer could attribute his victim as a present to another warrior]
[...] y-uje uñai to nanique nga je adiu. [...] 1s-hit other also time_back COORD MOD so COP 'I also hit another one in those old days, so it was.'

| Que | y-icho-rase mu ch-isa | chi | nga | je |
| :--- | :--- | :--- | :--- | :--- |
| NEG | 1s-throw-mod but | 3-grasp | EVID | COORD | 'I would not have shot, but he made a grasping movement, so the story goes, and I obviously had to shoot.'

Nga anire, anire u ude. Que y-ira-pisi. Jucané, Jucané u. COORD PHAT PHAT COP that NEG 1s-know-ELAT " " COP 'And, how can I say, so it was. I did not quite realize it. Jucané, it was Jucané.'

Chich-icho-rase cojñone mu oji d-aquesui de nga. EVID 3-throw-MOD gringos but bow 3.RFL-cut(N) LOC COORD 'He atempted to shoot the gringos, but his bow broke down right there.'

Cojñone ore ch-iqueta re. Je ch-ayo doji udi mu d-aquesui igarode.
gringos 3P 3-save REFL MOD 3-run bow down but 3.RFL-cut(N) strings
'So the gringos saved themselves. He had already put his bow in tension, but the strings fell apart.'
[... another speaker says a few words, then Samane goes on]
Ejê [hesitation] y-i-co ñane nga taningane.
yes 1P-go-1P RECIP COORD beginnings
'Yes, we met each other at the beginning.'

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[^0]:    *The preliminary version of this chapter was greatly improved by comments from various people. First and foremost, I have to thank Maxine Morarie: she is one of the very few non-Ayoreo who can speak the language fluently. Maxine spent a large part of her life as a missionary in the Tobité community. She was (and is) very generous in offering me advices stemming from her immense practical knowledge of the language. Although she is not a professional linguist, she has a deep understanding of these matters; in fact, she is among the authors of Higham et al. (2000). It is always a pleasure to discuss linguistic details with her. Isabelle Combès corrected several inaccuracies in the first part of the paper, where historical matters are mentioned. The reader who wishes to know more about that had better read her book! Livio Gaeta provided many useful hints, especially (unsurprisingly!) in the domain of morphology. Last, but not least, I would like to aknowledge the hidden contribution of Luca Ciucci, whose preliminary explorations in the Ayoreo morphology, conducted under my supervision, paved the way for a number of observations reported here.
    I should add here that since I did not adopt all the suggestions I received, none of the people mentioned above should be considered responsible for any remaining flaw. None of their suggestions, however, was dismissed: I now have a substantial list of data for further check with native speakers.
    ${ }^{1}$ Roca Ortiz (2008) describes the dynamics of the Ayoreo settlement in S.Cruz, including the difficult relationship (especially at the beginning) with the other inhabitants of the city.

[^1]:    ${ }^{2}$ The traditional clans are seven; the partners should belong to different clans, possibly from different Ayoreo bands.
    ${ }^{3}$ This is a Guarani word meaning 'those living in the wild', i.e. 'savages'; one should thus be aware that some of these denominations are not real ethnonyms, but rather derogatory terms used in some areas and unknown elsewhere.

[^2]:    ${ }^{4}$ Chomé also wrote a dictionary, often mentioned in his grammar. Unfortunately, the manuscript (preserved in La Paz) has not yet been published.
    ${ }^{5}$ In the course of this chapter, the following abbreviations will be used: $\mathrm{BF}=$ base-form, $\mathrm{FF}=$ full-form; M $=$ masculine, $\mathrm{F}=$ feminine, $\mathrm{SG}=$ singular, $\mathrm{PL}=$ plural, $\mathrm{MS}, \mathrm{MP}, \mathrm{FS}, \mathrm{FP}=$ masculine singular etc.; $1 \mathrm{~s}, 2 \mathrm{~s}, 1 \mathrm{p}$, $2 p=$ first person singular etc., $3 \mathrm{~s} / \mathrm{p}=$ third person singular/plural.

[^3]:    ${ }^{6}$ This suggestion was already put forth by Guido Boggiani, who left beautiful photographic testimonies of his visits to Gran Chaco. Curiously, in Ayoreo the very word for 'dog' (tamocoi) is a loanword from Chiquitano, which is hardly surprising for traditionally they did not have dogs. In Chamacoco one finds instead pohoch (dog male) and poytiita (dog female).

[^4]:    ${ }^{7}$ One further information to be gathered from Fischermann concerns the fact that Ayoreo and Chamacoco are the only two groups living in the Chaco whose feather ornaments could compete with those produced by typically Amazonian populations. Nice examples can be seen in the collection of Museo Barbero in Asunción, Paraguay. One thus cannot exclude that the Zamucos were themselves Amazonian populations who emigrated to the Chaco for unknown reasons.

[^5]:    ${ }^{8}$ Morarie (1980) is an updated version of Johnson (1955). Alain Fabre kindly provided a photocopy of Colegio (1971) and Morarie (1980); his help is greatfully aknowledged.
    ${ }^{9}$ The New Testament translation is by and large due to Maxine Morarie, with the collaboration of Janet Briggs.

[^6]:    ${ }^{10}$ The label "preaspirated nasals", by contrast, appears to be inappropriate, for the initial frication presents clear nasal cues; besides, the very label "preaspirated" lends itself to contrasting interpretations, as stressed by Silverman (2003).

[^7]:    ${ }^{11}$ Alternatively, one might consider it as a mere positional allophone; note, however, that the prevailing type of alternation, in analogous cases, is between $/ \mathrm{k} /$ and $/ \mathrm{g} /$.

[^8]:    ${ }^{12}$ Whenever reference is made to FF or BF, the data stem from Higham et al. (2000), possibly with orthographic reinterpretation by the present author. For instance, the final [e] of the base-form is regularly dropped here, due to its purely allophonic character; e.g., dir rather than dire in example (3a).

[^9]:    ${ }^{13}$ Fabre (2007b) mentions the Ayoreo classifiers in his study on the possessive systems of the Chaco languages.

[^10]:    ${ }^{14}$ It would perhaps be too farfetched to say that this may be seen as the residue of a matriarchal structure in the Ayoreo society. It is in any case a fact that the women's role in the traditional society was nonnegligible. Another possible example of deviation from natural gender, as suggested by Fischermann (1988), is guedé 'sun', which is feminine; the reason for this claim is that in the Ayoreo mythology the sun is a man.
    ${ }^{15}$ Actually, as noted in $\S 2.4 .3$, the possessive pronoun is in fact a noun, so gajnesôri is ultimately no exception.

[^11]:    ${ }^{16}$ According to Maxine Morarie (pers. communication), the participant-oriented forms cannot be used in subject position.

[^12]:    ${ }^{18}$ The double iterative is a frequently used expression; in most cases, rather than conveying an actual meaning of iteration, it is a pragmatically-oriented asseverative marker.
    ${ }^{19}$ Since Ayoreo does not have articles, one might wish to claim that whenever the indeterminate suffix is not used, this is in itself an indication of determinateness, thus providing support to the traditional terminology. One should however consider that: (i) referential indeterminateness does not necessarily entail the use of the indeterminate suffix, although its presence is indeed an indication of

[^13]:    indeterminateness; (ii) the demonstrative $t e$ is rather frequently used after a noun (even proper names) - as in sentence (37b) - in a way that is reminiscent of the incipient determinate article in Late Latin, equally derived from redundantly repeated demonstratives. Both points thus indicate that the mere absence of the indeterminate suffix should not be rigidly interpreted as a sort of $\varnothing$-marker of determinateness. Moreover, and crucially, there is not just one counterpart of the indeterminate-form, but rather two (the full and the base-form), so that it would be arbitrary to single out the base-form (Kelm's Definitivform) as the only determinate counterpart.

[^14]:    ${ }^{20}$ The interested reader should be warned that the texts reported in SCPA are unfortunately plagued with errors.

[^15]:    ${ }^{21}$ The syntactic position of emphatic qué is however dangerously identical to that of negative que (cf. § 2.6.8). Perceiving the contrast between these two words is no easy matter, for the phonetic difference is often rather subtle and the context may be misleading.

[^16]:    ${ }^{22}$ Interestingly, a good share of irregular Ayoreo verbs have an almost exact cognate in Chamacoco, thus showing the deep relationship between the two extant Zamuco languages. See the list reported in § 1.4.
    ${ }^{23}$ Actually, the story is a bit more complicated than this, for Chamacoco presents the inclusive / exclusive split in 1 p . Considering the typological tendencies in the area, one might speculate that Ayoreo lost this contrast. The alternative, namely that Chamacoco acquired it, seems less plausible.

[^17]:    ${ }^{24}$ Although this bares resemblance with what Eisenberg (1998) calls 'morphologische Reste', as in Gm Garten vs. Gärtchen, in the opinion of the present author the Ayoreo mobile syllables should be understood as part of the root. The latter underwent phonetic fusion with the plural suffixes, as a step in the transition from the agglutinative to the fusional type.

[^18]:    ${ }^{25}$ Interestingly, the speaker produced chapota instead of pota as the $3 \mathrm{~s} / \mathrm{p}$ form of the verb 'to want', thus regularizing it by means of the standard prefix $\operatorname{ch}(V)$ - (although he used $-a$ - instead of $-i$ - as thematic vowel). Possibly this unusual behavior is related to the idiomatic meaning of yipota pioi 'to lit a fire'.

[^19]:    ${ }^{26}$ Additional evidence to this effect is offered by the fact that the elative -pis may be attached to both nouns and verbs (cf. § 2.5.3).
    ${ }^{27}$ A sari is a magic formula, often protected by severe tabues, used for curing illnesses, cursing enemies etc.

[^20]:    ${ }_{29}^{28}$ A similar situation is to be observed in a totally unrelated language like Mòoré (Gur).
    ${ }^{29}$ As far as compounds are concerned, the adjunction can also involve a verb; in such a case, the baseform does not play any role, given the intrinsically predicative nature of such lexemes..

[^21]:    ${ }^{30}$ Since the latter case is pervasive, it is understandable that Chomé mistakingly identified the indeterminate-form with the 'future-stage' morpheme he had got to familiarize with while learning Guarani. There are indeed excellent reasons to assert that what Chomé called "regimen presente / pasado / futuro" should in fact be identified, respectively, with the base, the full and the indeterminate-form of Modern Ayoreo.

[^22]:    ${ }^{31}$ Note that the concept for 'buy' - a non traditional activity - consists of an idiomatic expression of nontransparent meaning (yiji ore(die) (ome) 'I go figure(s)'; the adposition ome is often omitted).

[^23]:    ${ }^{32}$ The sentential adverb $e$ is present in several of the examples presented above. Although it is standardly translated as 'already', its actual meaning is more nuanced. It should not be confused, at any rate, with a complementizer.

